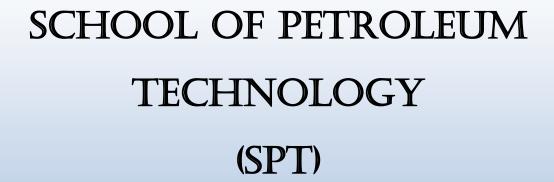


SELF EVALUATION REPORT VOLUME - II Pandit Deendayal Petroleum University

Contents

School of Petroleum Technology	03
School of Petroleum Management	71
School of Liberal Studies	
School of Technology	165
Declaration from the Head of the University	268
Annexures	

PDPU 2/269



PDPU 3/269

1. Name of the Institute

School of Petroleum Technology (SPT), Constituent school of Pandit Deendayal Petroleum University (PDPU)

2. Year of establishment of the private University:

2007

3. Is the Department part of a School/Faculty of the university?

Yes. The Institution, School of Petroleum Technology (SPT), is a constituent of Pandit Deendayal Petroleum .University (PDPU).

4. Names of programs offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.).

Undergraduate Programs:

• B.Tech. in Petroleum Engineering

Post graduate Programs:

• M.Tech. in Petroleum Engineering

Ph.D Program:

- Full Time
- Part-Time

5. Interdisciplinary programs and departments involved:

NA

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr.	MoU with	Objectives	Short details of	Date of
No.			progress	Signing
1	Mewborne	• Promote Education and	Students internship	10.01.11
	School of	research on Shale Gas	program completed	
	Petroleum &		successfully	

PDPU 4/269

Self Evaluation Report – Volume II				
	Geological		Joint research seminars	
	Engineering,		conducted	
	University of			
	Oklahoma			
2	University of	• Consultation on	Students exchange 05.11.09	
	Tulsa	curriculum and course	program completed	
		content	successfully	
		• Opportunities for Joint		
		research		
		• Exchange of		
		undergraduate students		
		• Faculty participation in		
		seminars and academic		
		meetings		
		• Exchange of academic		
		materials, publications and		
		other information		
		• Joint quality assurance and		
		benchmarking		
3	Georgia	• Opportunities for Joint	Joint research projects 21.11.2009	
	Institute of	research and educational	completed	
	Technology	activities	Students exchange	
		• Exchange of	program completed	
		undergraduate students	successfully	
4	University of	• Opportunities for Joint	Students internship 20.11.2009	
	Houston,	research	program completed	
	Houston,	• Exchange of	successfully	
	USA	undergraduate students		

Sr. No.	MoU with	Objectives	Date of Signing
1	ONGC Energy Centre, New Delhi	Collaboration for Geothermal Energy Exploration & Exploitation	18.06.2015
2	Hazira LNG Pvt. Ltd., Ahmedabad	Shell Total Chair Professor ship	06.01.11

PDPU 5/269

Self Evaluation Report - Volume II To establish academic & research Institute of Seismology 3 collaboration, share infrastructure 10.01.11 Research, Raisan facility/labs Hazira LNG Pvt. Ltd.. 4 Shell-Petroskills Workshop 05.07.11 Ahmedabad Cooperation, collaboration, faculty Cairn India Ltd., development, reciprocal facilitation, 15.07.11 5 Gurgaon Guest Lectures, internships, projects etc.

(i). Rural Internship

SPT UG students undergo a compulsory 3 week Rural Internship program at the end of the first year. The main objective of Rural Internship is to strengthen understanding on concepts of rural development with specific reference to the Indian context. Students are exposed to grassroots realities, in the rural setting, with a focus on participation in interventions by NGOs. This helps in making them understand and appreciate broader contexts of other stakeholders, like government agencies, donors and local self-governance institutions, while participating in existing field projects. This helps in the holistic development of a student and also makes them aware of the harsh climates and adversities they might be facing on the job.

The idea behind this program is to develop a sensitized workforce in energy sector who are socially concerned and willing to positively contribute to the society. The program enables the students to understand about the rural socio-economic scenario and also helps them in facing challenging issues in existing systems and suggests possible solutions. It also helps to enhance other skills of students. i.e. observation skill, analytical skill, decision making skill, communication skill.

(ii). Industrial Orientation

SPT UG students undergo a 3 week industrial orientation program at the end of the second year which exposes students to various operations of oil and gas industry for enhancing their understanding about application of science and engineering principles studied in first two years of B. Tech program. The program is aimed at exposing students to upstream, midstream and downstream operations of oil and gas sector.

(iii). Industrial Training

PDPU 6/269

SPT students are required to undergo 6 to 8 weeks of Industrial Training in the non teaching period of the Third year of the B.Tech Program as partial requirement for the award of the degree. This training can be carried out either in Industry, at an R&D organization, or Schools of Technology/Departments of Universities. The objective of the training is to make the students industry ready and give them an experience of the real industrial scenarios and practices. An effective training/internship enables the students to prepare for interviews in line with the industry expectations. It also prepares them well to enter the industry at the end of their B.Tech program and grooms them as per industry standards.

(iv). International Exposure program

but also enriches their linguistic and cultural knowledge. In terms of linguistic and cultural awareness, students emerge with a greater level of sensitivity and patience. This in turn leads them to move from a fundamental understanding of the theoretical concepts to a more sophisticated interpretation and application based approach. Secondly, most students adapt to the practical challenges they encounter by finding mechanisms to help them cope with their new surroundings. Many students have shown concern about adjusting in the countries they planned to visit. Students also have some misconceptions about the nature of the people and the overall cultural

aspects of the region. The exposure program helps the students to soak in the real

essence of the cultural aspects in person and enables them to grow technically as well

The International Exposure program enables students to not only develop technically

7. Details of programs discontinued, if any, with reasons

Nil

as spiritually.

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

An academic year consists of two semesters. The autumn semester generally starts from July to November & the spring semester generally starts from December to April. The student registers for course(s) during a given semester, on the basis of the program as prescribed in the Curriculum. Examinations of the students, who clear minimum attendance criteria i.e. 80%, are conducted in the in the at the end of the semester. Students, who do not fulfill the criteria, are not

PDPU 7/269

permitted to take the end-semester examination in that course. They are permitted to take reexamination in subsequent semester.

The percentage allocation for evaluating a Theory course will generally remain as 30% for Mid Semester examination, 60% for End Semester and 10% for the Internal Assessment like Quiz, Class Assignments. The percentage allocation for evaluating a Practical course will generally remain as 50% for the Laboratory Work and 50% for the Laboratory related Examination. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

Each course is assigned a numerical weightage termed as credits for that particular course. A letter grade is awarded to students as the final evaluation in each course, and each letter grade carries numerical points, known as grade points. Based on the grades and their numerical equivalents, Semester Performance Index (SPI) and Cumulative Performance Index (CPI) of the student are calculated at the end of each semester: SPI and CPI are calculated up to the second decimal.

Choice Based Credit System (CBCS) is a flexible system of learning that permits students to,

- Choose electives from a wide range of elective courses offered by the University departments
- ~ Adopt an inter-disciplinary approach in learning
- ~ Make best use of the expertise of available faculty.

9. Participation of the department in the courses offered by other departments

- Earth Science is offered to Civil Engineering Dept, and is taught by SPT Faculties.
- Research Methodology is offered to all other engineering dept, and is taught by SPT Faculties.
- Based on Choice Based Credit System, SPT is offering a bouquet of courses to all other engineering dept. Following are few examples of courses offered by SPT to other depts.:
 - ~ Formation Damage and well simulation
 - ~ Enhanced Oil Recovery
 - Reservoir Modelling and Simulation
 - Industrial Instrumentation & Control

PDPU 8/269

- Petroleum Production Engineering
- ~ Process Dynamics & Control

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

No. of sanctioned Faculties

	Teaching Faculty			Non-	
Positions	Professor	Associate professor	Assistant Professor/ Lecturer	teaching staff	Technical staff
Sanctioned by the University	02	05	17	22	04

Available Faculties:

Prof.	Asso. Prof.	Asst. Prof./Lect.	Adjunct Faculty	Total
Nil	3	7	3	13

9 faculties from School of Technology and School of Liberal Studies are conducting classes for various courses on engineering, humanities, science and mathematics and man-making courses of SPT.

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D./ M. Phil. Students guided for the last 4 years
Dr. Anirbid Sircar	Ph.D, PGDBA	Associate Professor	Geophysics, Petroleum Exploration & Tomography	19	2 Ph.D (Completed) 5 Ph.D (Ongoing) 14 M.Tech. (Completed)
Dr. Uttam Bhui	Ph.D,	Associate	Geochemistry &	16	2 Ph.D

PDPU 9/269

		Professor	Petrology		(Completed)
					2 Ph.D (Ongoing)
					3 M.Tech
					(Completed)
D 41:101	DI D	Associate) () () () () () () () () () (10	4 M.Tech
Dr. Ashish Sarkar	Ph.D	Professor	Micropaleontology	19	(Completed)
Dr.		Assistant	Delegatele er 0-		3 M.Tech
Bhawanisingh	Ph.D	Assistant	Paleontology &	12	(Completed)
Desai		Professor	Ichnology		1 Ph.D (Ongoing)
Dr. N Madhavan	Ph.D	Assistant	Environmental	20	Nil
Dr. N Madnavan	PII.D	Professor	Chemistry	20	N1I
Ms. Shreya	M Took	Lecturer	Chemical Process	4	2 M.Tech
Sahajpal	Sahajpal M.Tech	Lecturer	& Plant Design	4	(Completed)
Mr. R	M.Tech	Lecturer	Petroleum Refinery	7	Nil
Balasubramanian	Wi. Tech	Lecturer	& Petrochemicals	,	INII
Mr. Manan Shah	M.Tech	Lecturer	Chemical &		Nil
Wii. Wanan Shan			Petroleum Engg		1111
Mr. Maunish	M.Tech	Lecturer	Thermal Engg	4	Nil
Shah	IVI. I CCII	Lecturer	Thermai Lingg	7	INII
Ms. Vaishali	M.Tech	Lecturer	Petroleum Engg	1	Nil
Sharma	171.10011	Lecturer	Tetroleum Engg	1	
		Adjunct	Chemical Engg &		
Mr. R K Jain	B.Tech	Faculty	Artificial Lift	40	Nil
		racuity	Techniques		
Mr. S S P Singh	B.Tech	Adjunct	Petroleum Engg &	42	Nil
	D.TCCII	Faculty	Stimulation	12	1111
Mr. G S Negi	M.Tech	Adjunct	Chemistry &	34	Nil
1411. O D 140g1	IVI. I ech	Faculty	Petroleum Engg	Э т	1411

PDPU 10/269

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

While the School has adequate number of full time scholarly faculty, role and importance of visiting and guest faculty cannot be undermined. In order to bring in the latest and best professional inputs for SPT students, professionals of various disciplines from industrial and business organizations are invited to supplement course deliveries at the school.

SPT currently has 3 adjunct faculty roped in from leading industries.

VISITING FACULTY				
Name	Qualification	Specialization	No. of years of experience	
Prof. Subhash	Ph.D	Chemical Engg & Petroleum	40	
Shah	FII.D	Engg	40	
Mr. Hiren Patel	M.Tech.	Mechanical Engg &	6	
wii. Hileli Falei	IVI. I ecii.	Petroleum Engg	O	
	AΓ	DJUNCT FACULTY		
Mr. R K Jain	R K Jain B.Tech	Chemical Engg & Artificial	40	
Wii. K K Jain		Lift Techniques	40	
Mr. S S P Singh	B.Tech	Petroleum Engg &	42	
Mr. 5 5 P Shigh B. Tech		Stimulation	42	
Mr. G S Negi	M.Tech	Chemistry & Petroleum	34	
WII. O 5 Negi	WI. I CCII	Engg	J≒	

SPT every year conducts specialized courses on Offshore Drilling & Completions Reservoir Modeling & Simulation in collaboration with PetroSkills.

SPT regularly conducts Expert Lectures and on an average 15-20 hrs are earmarked for the Expert Lectures from Industries & Institutes of fame to guide our students & sensitize them for industry and research needs. Some of them are given below:

Seminar/Invited talk	Topic	Month & Year
Mr. Rajan Desai, International Coordinator,	How HTRI Xchanger Suite	31 st July, 2015
HTRI, India	Educational can be useful to	
	bridge Academia with	
	Industry	

PDPU 11/269

Sen Evaluation	nopore volume n	
Dr. Subhash Shah, Ph.D., P.E., Stephenson	Drilling and Well	13 th February,
Chair Professor, Mewbourne School of	Completion	2015
Petroleum and Geological Engineering,		
University of Oklahoma		
Dr. Subhash Shah, Ph.D., P.E., Stephenson	Shale Gas Development	17 th February,
Chair Professor, Mewbourne School of		2015
Petroleum and Geological Engineering,		
University of Oklahoma		
Mr. Dilip Lote, AGM-HSE, Gujarat Gas	Process Safety in Oil & Gas	23 rd April, 2015
	Industry	
Expert Lecture by Mr. Sanjib Baruah, Oil &	Petroleum Business	11 th September,
Gas Consultant	Challenges and Building	2015
	Organizational Capabilities	
1st "Distinguished Speakers Lecture Series"	India Towards Energy	14 th March, 2014
by Mr. Amit Khera, Partner at Mc. Kinsey,	Independence 2030	
New Delhi, India		
2 nd "Distinguished Speakers Lecture Series"	Global Industry: Local Talent	18 th Aug, 2014
by Mrs. Kiran Majumdar Shaw, CMD,		
Biocon Ltd and Mr. Amitava Saha, Head –		
HR, Biocon, Ltd, Bengaluru.		
Honorary Lecture South & East Asia with	Geophysical Issues and	21 st August, 2010
'Shell' by Dr. Deva Ghosh, Research	Challenges in Southeast Asia	
Advisor, PETRONAS	with Emphasis on Malay	
AUVISOI, I ETRONAS	Basin	

13. Percentage of classes taken by temporary faculty – program-wise information

Program	Percentage of classes taken by temporary faculty
Petroleum Engg	NIL

14. Program-wise Student Teacher Ratios

Program	Student Teacher Ratios
Petroleum Engg	23:1

PDPU 12/269

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	Sanctioned	Filled	Actual
Number of technical staff	4	4	4
Number of administrative staff	22	3	3

16. Research thrust areas as recognized by major funding agencies

- Focus on Shale gas studies which includes rock typing, petrophysical analysis, reservoir modelling, resource estimation, fracture network analysis, flow pattern determination, hydraulic fracturing etc.
- Geothermal exploration and exploitation: Understanding the hot reservoirs using integrated geological, geophysical and reservoir studies, prospect analysis, risking and ranking of prospects, stochastic resource estimation.
- Extraction of thermal energies from Low Enthalpy reservoirs and utilization of the same for power generation, domestic and Industrial uses for heating and cooling application.
- Understanding potential of Deltaic depositional system using ichnofabric indices for measuring recorded extent of animal-sediment relation and its effect on petrophysical properties in Kachchh Basin. Comparative studies of ichnofabric between different lithofacies. Vertical sequence normalization of ichnofabric indices to percent of total thickness.
- High resolution Sequence stratigraphic framework of the carbonate sediments of the Western India.
- Application of tracer studies in evaluating heterogeneous permeability in bioturbated reservoirs.

PDPU 13/269

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

R & D Project (Ongoing)					
Sr. No.	Principal Investigator	Title of the Projects		Duration	Amount Sanctioned (Rs.)
1.	Dr. Bhawanisingh G. Desai	Ichnofabric analysis, Event Stratigraphy and Depositional Environment of the Cretaceous sediments of Western India	DST	3 Years	27,00,000
2.	Dr. Anirbid Sircar Ms. Shreya Sahajpal Mr. Manan Shah	Geothermal Energy Exploration & Exploitation	GoG	3 Years	2,00,00,000
3.	Dr. Bhawanisingh G. Desai	Middle Jurassic-Cretaceous Belemnite fauna at Southern and Northern Tethyan margin: Biogeographic patterns, stratigraphic distribution and Key correlative levels.	DST-RFBR International Bilateral Program	2 Years	24,00,000 (Indian side)

18. Inter-institutional collaborative projects and associated grants received (a) National collaboration (b) International collaboration

C. No	Principal	Notional Callaboration Project/Details	Grant Received
Sr. No. Investigator/Co-PI National Col		National Collaboration Project/Details	(in Rs.)
	PI: Dr. Bhawanisingh	Permeability Characterization and Modeling	
1	Desai	of Tight Gas Sandstone Reservoirs	2,50,00,000
	Co PI: Dr. Anirbid Sircar	Collaboration: Georgia Tech & PDPU	

PDPU 14/269

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

			Project		Amount
Sr.	Principal	Title of Duciosts	Sanctioned	Duration	Sanctioned
No.	Investigator	Title of Projects		Duration	
			By		(Rs.)
		R & D Project (Completed)			
		Ichnofabric Mapping of the Mundhan and			
	Dr. Bhawanisingh	Guneri			
1	Desai Desai	section with special Reference to (Umian-	DST	3 Years	14,41,600
	Desai	Mundhanian Kutch Stages), Kachchh,			
		Gujarat			
	Dr. Bhawanisingh	Ichnology of the Jurrasic rocks of the Jara			
2	Desai	dome, Western Mainland, Kachchh, India	DST	3 Years	12,07,000
	Dr. Bhawanisingh	Permeability Characterization and			
3	Desai/	Modelling of Tight	GSPC	1.5 Years	2,50,00,000
	Dr. Anirbid Sircar	Gas Sandstone Reservoirs			
4	Dr. Bijaya Behera	Creation of Corporate Database	DoP	1 Year	1,00,00,000
	Di. Bijaya Benera	Management System	Doi	1 1001	1,00,00,000
5	Dr Bijay Behera	Prefeasibility study for 1MW Geothermal	GoG	1 Year	45,00,000
3	Di Bijay Benera	Power Generation in Gujarat, India	000	1 1001	43,00,000
	•	R & D Project (Ongoing)			
	Dr. Bhawanisingh	Ichnofabric analysis, Event Stratigraphy			
6	Desai	and Depositional Environment of the	DST	3 Years	27,00,000
	Desai	Cretaceous sediments of Western India			
	Dr. Anirbid Sircar				
7	Ms. Shreya	Geothermal Energy Exploration &	GoG	3 Years	2,00,00,000
,	Sahajpal	Exploitation	000	3 Tears	
Mr. Manan Shah					
		Middle Jurassic-Cretaceous Belemnite	DST-		
8	Dr. Bhawanisingh	fauna at Southern and Northern Tethyan	RFBR		24,00,000
	Desai Desai	margin: Biogeographic patterns,	Internation	2 Years	(Indian
	Desai	stratigraphic distribution and Key	al Bilateral		side)
		correlative levels.	Program		
<u> </u>	1				

PDPU 15/269

20. Research facility / centre with

- state recognition
- national recognition
- international recognition
 - Centre of Excellence for Geothermal Energy (CEGE) was set up in 2013 by SPT. Government of Gujarat is funding CEGE for demonstrative research project on Geothermal Energy harnessing in Gujarat. The objective of the project is exploration and exploitation of Geothermal Energy resources in Gujarat in order to generate 1 MW of electrical energy. CEGE has been actively and systematically investigating about the possibility of g
 - eothermal exploration in Gujarat. This project is one of its kind in India and such an extensive study has not been taken to the exploitation phase till now. CEGE team also had an interaction with officials at Ministry of New and Renewable Energy (MNRE) to discuss the status and future plans for the project. MNRE has shown a keen interest in the project and have proposed to declare the project as a Pilot Scale Research Project of National Importance. MNRE has also extended their full support to CEGE both technically and financially. CEGE has also submitted two proposals to MNRE for Pilot Projects at Dholera and Unai, Gujarat. CEGE is also in the process of signing an MoU with MNRE.
 - The project is also being acknowledged by GSI, India and ONGC Energy Centre (OEC). CEGE also conducts frequent workshops, and discussion sessions with experts across the world for developing roadmaps and strategies for carrying the project further. CEGE has also signed an MoU with ONGC Energy Centre (OEC) in June 2015.
 - Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has given recognition to Pandit Deendayal Petroleum University (PDPU), Gandhinagar as Scientific and Industrial Research Organization (SIRO) and Income Tax Exemption under 35i(ii).

21. Special research laboratories sponsored by / created by industry or corporate Bodies

• *Drilling & Stimulation Centre*: SPT is setting up a Drilling & Stimulation Centre. Funding has been received from Department of Petroleum, Government of Gujarat for setting up the centre. Seven experiments on Cement Stability have been developed and an experiment on Proppant Conductivity is planned till date. Indent for the same has been submitted to the purchase committee of PDPU. This centre will cater the needs of teaching, research and the laboratory facilities can also be shared with researchers across the community.

PDPU 16/269

- Biofuels Lab: SPT is setting up a Biofuels Lab with following objectives and focus areas
 Objectives:
 - To design and develop energy efficient, environment friendly and industrially viable techniques for biofuel production.
 - ~ To develop characterization and world class testing facility.
 - ~ Research & Consultancy

Focus Areas:

- ~ Understanding the stability of biodiesel by ten different kinetic processes
- ~ Application of the same in commercial vehicles & industrial uses
- ~ Process optimization studies for biofuel production techniques.
- ~ To develop new/alternate catalyst and new co-solvent for efficient biofuel production.
- ~ To identify non-edible oil and other raw material sources for biodiesel production.
- ~ Use of Fish viscera (Talapia) as a raw material for biodiesel production.

22. Publications:

- Number of papers published in peer reviewed journals/conferences (National / International):
 87
- Monographs: 0
- Chapters in Books: 2
- Edited Books: Nil
- Books with ISBN with details of publishers: Nil
- Citation Index:

Sr. No.	Faculty Name	Grade	Citation Index
1	Dr. Anirbid Sircar	Director SPT	46
2	Dr. Ashish Sarkar	Associate Professor	125
3	Dr. Uttam Bhui	Associate Professor	92
4	Dr. Bhawanisingh Desai	Assistant Professor	161
5	Ms. Shreya Sahajpal	Lecturer	2

- Impact Factor range / average: 0.46-4.0 (range)
- h-index:

Sr. No.	Faculty Name	Grade	H Index
1	Dr. Anirbid Sircar	Director SPT	3

PDPU 17/269

2	Dr. Ashish Sarkar	Associate Professor	3
3	Dr. Uttam Bhui	Associate Professor	5
4	Dr. Bhawanisingh Desai	Assistant Professor	7
5	Ms. Shreya Sahajpal	Lecturer	1

Book Chapters

- Sircar, A. and Patel, H. 2014, Petroleum Reserve & Resource Estimation: Stochastic Approach, Advances in Petroleum Engg: Refining, Ch 8, Stadium Press LLC, USA, Dec, 2014
- 2. Shah, N., Sircar, A., Misra, P., 2014, Hydrocarbon Production Optimization: Theory & Practices, Advances in Petroleum Engg: Petrochemical, Stadium Press LLC, USA, Dec, 2014

Publications

- 1. Vaidya, D., Shah, M., Sircar, A., Sahajpal, S., Dhale, S. (2015), Geothermal Energy: Exploration Efforts In India, International Journal of Latest Research in Science and Technology, Volume 4, Issue 4, July-August 2015, ISSN:2278-5299, 61-69.
- Gupta, A. and Sircar, A. (2015), Flow Assurance and Comparison of Modeling for Onshore Crude Oil Trunk Line Using SCADA Results, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Vol. IV, Issue VI, July 2015, ISSN 2278-2540, Impact Factor: 2.115, 52-60.
- 3. Sahajpal, S., Sircar, A., Singh, A., Vaidya, D., Shah, M., Dhale, S., (2015), Geothermal Exploration in Gujarat: Case Study from Unai, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Vol. IV, Issue V, June 2015, ISSN 2278-2540, Impact Factor: 2.115, 38-49.
- 4. Desai, B. G., & Saklani, R. D., (2015), Palaeocommunity Dynamics and Behavioral Analysis of Conichnus: Bhuj Formation (Lower Cretaceous), Kachchh-India, Ichnos: An International Journal for Plant and Animal Traces, 22:1, 43-55, DOI: 10.1080/10420940.2014.995377.
- Ariketi, R., Behera, B. K., Bhui, U. K., (2015), Shale Gas in India: Opportunities & Challenges, International Journal of Scientific Research, Vol. 4, Issue 3, ISSN 2277-8179, DOI: 10.15373/22778179, 320-325.
- 6. Gupta, A. and Sircar, A. (2015) Need of Flow Assurance for Crude Oil Pipelines: A Review. International Journal of Multidisciplinary Science and Engg, Vol 6, Issue2, Feb 2015, ISSN: 2045-7057, 43-49 Impact Factor: 0.46.

PDPU 18/269

- 7. Desai, B. G., (2015) Ichnological Analysis of the Pleistocene Dwarka Formation, Gulf of Kutch; Tracemakers Behaviours and Reworked Issues, Geodinamica Acta, Taylor & Francis (In press)
- 8. Anto, R., Rajshree, Sircar A., Sahajpal, S., "Crude Characterization on Rheometer for Flow Assurance", *International Journal of Scientific Research (IJSR)*, Vol. 4, Issue 9, Sept 2015, ISSN 2277-8179, 206-209.
- 9. Ariketi, R., Bhui, U. K., Chandra, S., and Biswal, S. (2015) Evaluation of Organic Richness and Thermal Maturity of Cambay Shale Formation for Shale Oil/Gas Exploration-A study from Ankleshwar area, Cambay Basin, India. Marine and Petroleum Geology (under Review)
- Sircar, A., Shah, M., Sahajpal, S., Vaidya, D., Dhale, S., Chaudhary, A., (2015), Geothermal Exploration in Gujarat: Case Study from Dholera, Geothermal Energy, Springer (under Review).
- 11. Jain, S and Desai, B. G. (2014), Biochronostratigraphic Implications of the Discovery of Late Bathonian Indonesian Ammonite *Macrocephalites* Cf. *Mantataranus* Boehm [M] from the Core of Jara Dome, Kachchh, Western India, Journal of Paleontological Society of Indi, 59(2), 169-180.
- 12. Desai, B. G. and Saklani, R. D. (2014), Ichnofabric Analysis of the Tithonian Shallow Marine Sediments (Bhadasar Formation) Jaisalmer Basin, India, Journal of Earth System Science, 123(6), 1413-1431.
- 13. Brahma, J. and Sircar, A., (2014), Estimation of the Effect of Anisotropy on Young's Moduli and Poisson's Ratios of Sedimentary Rocks Using Core Samples in Western and Central Part of Tripura, India, International Journal of Geoscience, Vol.5, No.2, 184-195. (*The paper has been downloaded 1432 times*).
- 14. Singh Anil and Sircar A, (2014), Sources and Measurement of Velocity Anisotropy of Cambay Shale, Cambay Basin, India, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Volume III, Issue V, 169-179.
- 15. Thander B, Sircar A and Karmakar, G P, (2014), Hydrocarbon Resource Estimation: Application of Monte Carlo Simulation, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Volume III, Issue IV, 30-47
- 16. Thander, B., Sircar, A., and Karmakar, G. P., (2014), Hydrocarbon Resource Estimation: A Stochastic Approach, Journal of Exploration and Production Technology, Springer, DOI: 10.1007/s13202-014-0144-8.

PDPU 19/269

- 17. Sircar, A. and Brahma, J. (2013), Estimation of Thompsen's Parameters in Western and Central Part of Tripura, India, Progress in Science and Engineering Research Journal, 10, Issue November-December, 17-27.
- 18. Brahma, J., Sircar, A. and Karmakar G. P., (2013), Pre-drill Pore Pressure Prediction Using Seismic Velocities Data on Flank and Synclinal Part of Atharamura Anticline in Eastern Tripura, India, Journal of Exploration and Production Technology, Springer, Vol.3, DOI 10.1007/s13202-013-0055-0, 93-103
- 19. Desai, B.G., (2013), Ichnological Analysis of Transgressive Marine Tongue in Prograding Deltaic System: Evidences from Ukra Hill Member, Western Kachchh, India, Journal of Geological Society of India, 83, 143-152.
- Gangwar, P. and Sircar, A., (2013), Evaluation of Cambay Shale, Cambay Basin, India, Using Geo-mechanical Properties, Journal of Exploration and Production Technology, Springer, Vol. 3, DOI 10.1007/s13202-13-0074-x, 223-232
- 21. Sharma, T., Sangwai, J. and Kumar S, J., (2013), Oil-water IFT Alteration Under Rotational Effect in Enhanced Oil Recovery Process, The Journal of Petrotech. Vol. 8, Issue 8, 59-65 (Best Paper: Petrotech IITM-ICDT 2012)
- 22. Brahma, J., Sircar, A. and Karmakar G. P., (2013), Hydrocarbon Prospectivity in Central Part of Tripura, India, Using an Integrated Approach, Journal of Geography and Geology, Canadian Center of Science and Education, Canada, Vol. 5, No.3, 116-134.
- 23. Desai, B.G. and Saklani, R., (2012), Significance of Ichnogenus Balanoglossites Mägdefrau, 1932 from Lower Cretaceous Guneri Member [Bhuj Formation] of Guneri Dome, Kachchh, India, Swiss Journal of Paleontology, 131(2): 255-263
- 24. Desai, B.G., (2012), Trace Fossils from Kaladongar Formation Exposed in Kuarbeyt, Patcham Island, Kachchh Basin, India. Journal of Paleontological Society of India, 57(1): 53-59
- 25. Ramachandran, K., Babu, V., Behera, B.K. and Harinarayana, T., (2012), Source Rock Analysis, Thermal Maturation and Hydrocarbon Generation Using Rock-eval Pyrolysis in Parts of Krishna–Godavari Basin, India, Journal of Petroleum Exploration & Production Technology, Springer, Volume 3, Issue 1, 11-20
- 26. Khan, Z.A., Behera, B.K., Kumar, V. and Sims, P., (2012), Solving the Challenges of Time, Temperature and Pressure, World Oil, May 2012, 75-78

PDPU 20/269

- 27. Devi, K.L., Sircar, A. and Karmakar, G.P., (2012), Hydrocarbon Potential Evaluation of Lower Cambay Shale and Olpad Formation in Cambay Basin, India: A Review, International Journal Of Geology, Earth and Environmental Sciences, 2 (3), 137-146.
- 28. Sarkar, A., (2011), Bearing on Last Glacial Maxima (LGM) on Sediment Accumulation in Parts of Arabian Sea, Journal of Geological Society of India, 11, 98-99.
- 29. Patel, S.J. and Desai, B.G., (2011), A Report on Benthic Foraminifera in Intertidal Region of Mandvi Coast, Kachchh, Gujarat, Gondwana Geological Magazine, 26(1): 45-48
- 30. Dutta, U., Bhui, U.K., Sengupta, P., Sanyal, S. and Mukhopadhyay, D., (2011), Magmatic and Metamorphic Imprints in 2.9 Ga Old Chromitites from the Sittampundi Layered Complex, Tamil Nadu, India, Ore Geology Review, 40: 90-107.
- 31. Madhavan, N., (2011), An Update on Recent Natural and Manmade Disasters In Japan, Asian Journal of Water Environment And Pollution, 8(3): 95-105.
- 32. Bhonde, U.A. and Desai, B.G., (2011), Discontunity Surface and Event Stratigraphy of Okha Shell Limestone Member: Implications for Holocene Sea Level Changes, Western India, Journal of Earth System Sciences, 120(4): 723-734.
- 33. S. Babu and A. Sircar, (2011), S. Babu and A. Sircar, (2011), A comparative study of predicted and actual pore pressures in Tripura, India, Journal of Petroleum and Alternate fuel, Vol.2(9), 150-160.
- 34. Desai, B.G., Shukla, R. and Saklani, R., (2010), Ichnology of the Early Cambrian Tal Group, Nigalidhar Syncline, Lesser Himalaya, India. . Ichnos- An International Journal for Plant & Animal Traces, 17(4): 233-245
- 35. Desai, B.G., (2010), Biogenic Sedimentary Structures Produced by *Architectonicalaevigata* (Gastropod: *Architectonicidae*), Mandvi Intertidal Zone, Gulf of Kachchh, India, e-Journal Earth Science India, Vol. 3 (IV), 242-247
- 36. H. Patel, A. Sircar, S. Seth, R. Jadwani, (2011), Application of Genetic Algorithm in Hydrocarbon Resource Estimation, Journal of Petroleum Gas and Engineering, Vol.2(4), 83-92.
- 37. Sengupta, P., Dutta, U., Bhui, U.K. and Mukhopadhyay, D., (2009), Genesis of Wollastonite and Grandite- Rich Skarns in a Suite of Marble-Calc-Silicate Rocks from Sittampundi, Tamil Nadu: Constraints on the P-T-fluid Regime in Parts of the Pan-African Mobile Belt of South India, Mineralogy and Petrology, 95: 179-200.

PDPU 21/269

- 38. Sengupta, P., Bhui, U.K., Braun, I., Dutta, U. and Mukhopadhyay, D., (2009), Chemical Substitutions and Physical Conditions of Formation of Högbomite in the Sittampundi Layered Anorthosite Complex, South India, American Mineralogist, 94: 1520-1534.
- 39. Patel, S.J., Desai, B.G. and Shukla, R., (2009), Paleoecological Significance of the Trace Fossils of DhosaOolite Member (Jumara formation), Jhura Dome, Mainland Kachchh, Western India, Journal Geological Society of India, 74: 601-614.
- 40. Patel, S.J. and Desai, B.G., (2009), Animal-Sediment Relationship of the Crustaceans and Polychaetes in the Intertidal Zone Around Mandvi, Gulf of Kachchh, Western India, Journal of Geological Society of India, 74: 233-259.
- 41. Desai, B.G. and Patel, S.J., (2009), Upper Callovian-Middle Oxfordian Belemnite Assemblage from Jara Dome, Western Kachchh, India, Journal of Geological Society of India, 74: 343-356
- 42. Das, K., Yokoyama, K., Chakraborty, P. P. and Sarkar, A., (2009), Basal Tuffs and Contemporaneity of the Chattisgarh and Khariar Basins Based on New Dates and Geochemistry, Journal of Geology, 117(1): 88-102.
- 43. Chakraborty, P. P., Sarkar, A., Das, K. and Das, P., (2009), Alluvial Fan to Storm-Dominated Shelf Transition in the Mesoproterozoic Singhora Group, Chattisgarh Supergroup, Central India, Precambrian Research., 170(1-2): 88-106.
- 44. Patel, S.J., Desai, B.G., Vaidya, A. and Shukla, R., (2008), Middle Jurassic Trace Fossils from Habo Dome, Mainland Kachchh, Western India, Journal of Geological Society of India, 71: 345-362.
- 45. Patel, S.J., Bhatt, N.Y. and Desai, B.G., (2008), Asteriacites quinquefolius Asteroid trace maker from the Bhuj Formation (Lower Cretaceous) of the Mainland Kachchh, Western India. Journal Geological Society of India, 71: 129-132
- 46. Desai, B.G., Patel, S.J., Shukla, R. and Surve, D., (2008), Analysis of Ichnoguilds and Their Significance in Interpreting Ichnological Events: A Study from Jhuran Formation (Upper Jurassic), Western Kachchh, India. Journal of Geological Society of India, 72: 458-466
- 47. Desai, B.G. and Patel, S.J., (2008), Trace Fossil Assemblages (Ichnocoenoses) of the Tectonically Uplifted Holocene Shorelines, Kachchh, Western India, Journal of Geological Society of India, 71: 527-540
- 48. Sircar, A., and Sahajpal, S., (2015), Geothermal Investigation in Cambay Basin, Gujarat, India, 2nd Annual International Conference on Earth and Environmental Sciences, June 2015, ATINER, Athens, Greece. (*The Paper was adjudged as the Best Paper of the conference*)

PDPU 22/269

- 49. Sircar, A., Sahajpal, S., Singh, A., Vaidya, D., Shah, M., Dhale, S., (2015), Exploration of Geothermal Resources in Gujarat, India, International Conference on Geothermal Energy: Exploration & Exploitation, May 2015, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat.
- 50. Desai, B. G., (2015), Ichnofabric Analysis of Shallow Marine *Zoophycos* Dominated Beds From the Middle Jurassic Sediments of Kuchch Basin, Western India, 15th International Ichnofabric Workshop, May 2015 Kochi, Japan.
- 51. Desai, B. G., (2015), Conichus Ichnofabric from Early Cretacoues Bhuj Formation: Insight Into Inter Burrow Relation & Behavioural Analysis of Trace Markers, 15th International Ichnofabric Workshop at Kochi, Japan.
- 52. Bhui, U. K., Goyal, R., Kumar, M., Chaturvedi, A., Singh, G., Singh, V., Mishra, M., Sanyal, S., (2015), Swelling Nature of Clay Minerals: Implications During Production from Petroleum Reservoirs, National Seminar on "Petroleum in India: Present and future", 20-21st March 2015, Department of Geology, University of Calcutta, Kolkata, India.
- 53. Sarkar, A., & Ogle, N. (2015). Late Quaternary Climatic Record from ODP Site 705 in the Northern Indian Ocean, 11th Applied Isotope Geochemistry Conference, AIG-11, BRGM, Procedia Earth and Planetary Science (In Press)
- 54. Bhui, U. K., Desai, A. (2015), Swelling Study of Smectites (Montmorillonites): Implications During Low-Saline Water Flooding (LSWF) in Petroleum Reservoirs, 11th Biennial International Conference and Exposition, Society of Petroleum Geophysicists, Jaipur, 4-6th December 2015 (Accepted for Presentation)
- 55. Sanyal, S., Sinha, U., Bhui, U. K., (2015), Spectroscopic Studies of Petroleum Crudes: Implications for Crude Quality and Enhanced Oil Recovery (EOR), 11th Biennial International Conference and Exposition, Society of Petroleum Geophysicists, Jaipur, 4-6th December 2015 (Accepted for Presentation)
- 56. Bhui, U. K., Pal S. K., Dutta, S. (2014), Nature of Deposition and Flow Assurance of Waxy Crudes: Study Based on Oils from Cambay Basin Reservoirs, India, Third International Conference on Petroleum Science and Technology 2014 (ICPST-2014), IIT-Madras, 3rd 5th November 2014.
- 57. Sharma, D., Kumar A. S., Sarkar P., and Bhui, U. K., (2014), Waxy Crude Oils from Cambay Basin, India: A Rheological Study, Third International Conference on Petroleum Science and Technology 2014 (ICPST-2014), IIT-Madras, 3rd 5th November' 2014. (3rd Best Paper Award)

PDPU 23/269

- 58. Talukdar, M., Sengupta, P., Sanyal S., and Bhui, U. K., (2014), Chemical Alteration of Neoarchaean Chromitite in Early Palaeoproterozoic Subduction Zone: A Case Study from Sittampundi Layered Magmatic Complex, South India, International Seminar on "Magmatism, tectonism and Mineralization (MTM, 2014), Department of Geology, Kumaun University, Nainital, 27 -29th March, 2014
- 59. Sharma, T., Sangwai, J. S., and Kumar, G. S., (2014), Effect of Nanoparticle on Interfacial Tension (IFT) and Temperature Stability of Surfactant Stabilized Oil in Water Emulsions, PETROTECH Conference, Jan 2014, Greater Noida, India.
- 60. Sircar, A., Effects of Elastic Anisotropy in Shale Gas Exploitation: Study on Cambay, Cambay Basin, 1st Annual International Conference on Earth and Environmental Sciences, ATINER, Athens, Greece, 14th -17th July 2014.
- 61. Bhui, U.K., (2013), Chromite Layering from Kondapalle Layered Magmatic Complex: Indication of Cr-saturation During Several Stages of Magmatic Differentiation, National Seminar on Synergy of Geochemistry, Geology, Geophysics Towards Natural and Energy Resources, Environment and Health, University of Pune, Pune.
- 62. Desai, B.G., (2013), Complex Interactions Among Trace Fossils in Tidally Affected Marine Sequences: Dwarka Formation (Pleistocene), Gulf Of Kachchh, India. XII International Ichnofabric Workshop, Canakkale, Turkey.
- 63. Sarkar, A., (2013), Stable Carbon and Oxygen Isotopes in Red Boles: A Clue to Understand its Formation Mechanism, 10th Applied Isotope Geochemistry Conference, Budapest, Hungary.
- 64. Sarkar S. and Sarkar, A., (2013), Planktonic Foraminiferal Dynamics in the Eastern Arabian Sea as a Proxy of the South-west Monsoonal Activity in Indian Sub-continent During the Last Millennium, 10th Applied Isotope Geochemistry Conference, Budapest, Hungary.
- 65. A. Sircar, (2013), Anisotropic Analysis and Fracture Behavior Propagation Within Cambay Shale for Shale Gas Exploration, Shale Gas Conference, Indian Infrastructure, New Delhi, September, 11, 2013.
- 66. Agarwal, G., Sagar, R., Srinivas, D. and Behera, B.K., (2012), Rock Type Classification and Saturation Modeling in a Heterogeneous Low-Permeability Reservoir from Offshore India, International Petroleum Technology Conference, Bangkok, Thailand, 1893-1904.
- 67. Bhui, U.K., (2012), Petrogenesis of Cheomite Deposits of the Indian High-grade Terrains: Implications on Early Precambrian Crust-mantle Processes, International Workshop on

PDPU 24/269

- Magmatic Ore Deposits 'Recent developments in the Chromitite-Platinum group of elements and Ni-Cu-sulfides, Cr, Ti and V ore fields' Bengaluru, India.
- 68. Babu, V., (2012), Possible Lower Cretaceous Shale Gas Play, Offshore Krishna-Godavari Basin, Western India, International Conference on CO₂ Injection for EOR & Geological Sequestration, NGRI, Heydrabad, India.
- 69. Desai, B.G., (2012), Ichnostratigraphy and Ichnological Events of Mesozoic Sediments of Western Kachchh, India, National Level Field Workshop and Brainstorming Sessions on Geology of Kachchh Basin, Western India, Bhuj, Kachchh.
- 70. Desai, B.G. and Vartak, A., (2012), Cretaceous Belemnites Biostratigraphy of Kachchh and South India: Implications for Migration Routes, Paleogeography and Sea Level changes, National Level Field Workshop and Brainstorming Sessions on Geology of Kachchh Basin, Western India, Bhuj, Kachchh.
- 71. Sarkar, A., (2012), Hydrocarbon Potential of the Source Rocks in Parts of Upper Assam as Deciphered from Rock-Eval analysis, 34th International Geological Congress, Brisbane, Australia, 3407.
- 72. Sircar, A., (2012), Geomechanical Properties of Cambay Shale, Cambay Basin, Gujarat, International Workshop on Exploration and Exploitation of Shale Gas, NGRI, Hyderabad, 16.
- 73. Madhavan, N., (2012), Natural Concentration of Fluoride and Arsenic in Drinking Water, India, Water Safety Conference-2012, Kampala, Uganda.
- 74. Sarkar, A., (2011), High Resolution Quaternary Climatic Record from ODP Site 705 at the Mascaren Plateau in the Indian Ocean, XXIII Indian Colloquium on Micropaleontology and Stratigraphy, Bangalore University, Bengaluru.
- 75. Sarkar, A., (2011), Role of Radionuclides in Understanding the Sediment Accumulation/Erosion Behaviour, International Symposium on Global Bioevents in the Earth History, Banglore University, Bengaluru.
- 76. Sarkar, A., (2011), 8.2 Ka Climatic Cooling Event Deciphered from Equatorial Arabian Sea, European Geosciences Union (EGU) General Assembly 2011, Vienna, Austria
- 77. Desai, B.G., (2011), Ichnofabric Analysis of the Kuldhar Member Bathonian-Callovian, Jaisalmer Rajasthan, National Conference on Geology, Mineral and Groundwater Resources of India, Aurangabad.
- 78. Desai, B.G., (2011), Belemnite Biostratigraphy of Callovian-Oxfordian Sediments of Western India., National Conference on Geology, Mineral and Groundwater Resources of India, Aurangabad.

PDPU 25/269

- 79. Karmakar, G.P., Pandey, B. and Sircar, A., (2011), Hazards in Shale Gas Exploration and Exploitation Activities, 34th International Conference of Safety in Mine Research Institutes, India Habitat Centre, New Delhi.
- 80. Babu, V., (2010), Formation Evaluation with an Emphasis on Shaly-Sand Analysis Using Matlab, International Conference GIA-2010, IIT-B, Mumbai.
- 81. Sarkar, A., (2010), Source Rock Evaluation vis-a-vis Hydrocarbon Potential in Parts of Upper Assam Basin, National Seminar on Geology, Genesis, & Resource Analysis of Metallic, Non-Metallic, & Energy Minerals (Coals, Petroleum & Atomic Minerals), Udaipur, Rajasthan.
- 82. Bhui, U.K., (2010), Chromitite Suite of Rocks from Kondapalle Complex, Eastern Ghats Belt, India An Estimation of Subsolidus Re-equilibration, National Seminar on Geology, Genesis, & Resource Analysis of Metallic, Non-Metallic, & Energy Minerals (Coals, Petroleum & Atomic Minerals), Udaipur, Rajasthan.
- 83. Sarkar, A., (2009), Glaciation vis-a-vis Sedimentation: A Case Study from Off the Western Indian Coast, XXII Indian Colloquium on Micropaleontology and Stratigraphy, National College, Tiruchchirapalli, 14-15.
- 84. Sarkar, A., (2009), Centennial Scale Monsoonal Fluctuations in Parts of Eastern Arabian Sea During the Last Millennium, Deciphered from Planktonic Foraminiferal Assemblages, International Conference on Geoscience for Global Development, Dhaka, Bangladesh, 132.
- 85. Surve, D. and Desai, B.G., (2008), Ichnology and Sequence Stratigraphy of the Callovian & Oxfordian Sequence of the Jara Dome, Western India, Indian Association. Sedimentology, Aligarh.
- 86. Sarkar, S., Sarkar, A., Sanyal, P. and Bhattacharya, S.K., (2008), Formation Mechanism of Bole Beds of Deccan Traps, Gujarat, India, 33 International Geological Congress, Oslo, Norway, 169.
- 87. Sarkar, A., (2008), Effect of Last Glacial Maxima (LGM) on Sediment Accumulation in Parts of Arabian Sea, 33 rd International Geological Congress, Oslo, Norway, 92.

23. Details of patents and income generated

Students from 2013 batch – Deep Joshi, Bhagya Bhardwaj and Harshil Saradva, filed a
patent on "Pneumatically Operated Mechanical Bit using a Rotary Steerable
System". The patent has been provisionally accepted. Indian Patent Application No. is

PDPU 26/269

3733/MUM/2013. This is a unique work of its kind to improve the efficiency of the rotary system. This patent is a significant contribution to the prevalent Drilling technologies.

24. Areas of consultancy and income generated

Year	Amount (Rs)	Scheme	Sponsoring Agency	Faculties Involved
2011-12	25,00,000	Young Hydrocarbon Professionals	Larsen & Toubro Ltd.	Dr. Bhawanisingh Desai, Dr. Anirbid Sircar & Dr. G P Karmakar
2012-13	45,00,000	Prefeasibility study of 1 MW Geothermal Energy	Gujarat Power Corporation Ltd. (GPCL)	Dr. Bijay Behera
2013-14	2,50,000	Shale gas Property Evaluation of Crew Energy , Canada	Gujarat State Fertilizer Corporation (GSFC)	Dr. Anirbid Sircar
2014-15	7,50,000	Evaluation of five onshore marginal fields, Godavari onshore, India	KEI-Ross, Rajahmundry	Dr. Anirbid Sircar & Mr. Anshul Gupta

25. Faculty selected nationally/internationally to visit other laboratories / institutions/ industries in India and abroad

S.No	Faculty Name	laboratories / institutions	Year
1	Dr. J Brahma	University of Oklahoma	2015
2	Mr. Vinay Babu	University of Houston	2013
3	Dr. B K Behera	University of Oklahoma	2012
4	Dr. B G Desai	. B G Desai Georgia Institute of Technology	
5	Dr. G P Karmakar	University of Houston	2010
6	Dr. Ajit Shukla	University of Oklahoma	2010

The detailed information will be made available to the visiting committee.

PDPU 27/269

26. Faculty serving in (a) National committees (b) International committees (c) Editorial Boards (d) any other (please specify)

Sr. No.	International & National Committees	Faculty Name
1	Central Advisory Board of Oil & Gas World Expo 2016	Dr. Anirbid Sircar
2	Subject Expert, UGC e-Pathshala, Jamia Milia Islamia University, Delhi	Dr. Anirbid Sircar
3	Member, Collaboration Committee, Department of Earth Science, IIT Kanpur	Dr. Anirbid Sircar
4	Jury Member for 1 st Research Poster Competition, PDPU	Dr. Anirbid Sircar
5	Advisory Committee of College of Fire Technology, Ahmedabad	Dr. Anirbid Sircar
6	Member, Faculty Selection Committee, 2014, PDPU	Dr. Anirbid Sircar
7	Member, Faculty Selection Committee, 2015, PDPU	Dr. Anirbid Sircar
8	Member, Examination Assistant Selection Committee, 2015, PDPU	Dr. Anirbid Sircar
9	Panel Member, GSPC Gas: Recruitment of Senior Engg., 2012 (Thru Internal Candidates)	Dr. Anirbid Sircar
10	Member, Preliminary Faculty Selection Committee, 2015, PDPU	Ms. Shreya Sahajpal
11	Member, Preliminary Faculty Selection Committee, 2015, PDPU	Mr. R Balasubramanian
12	Member, Preliminary Faculty Selection Committee, 2015, PDPU	Dr. B G Desai
13	Member, Committee: Campus Recruitment for Faculty Selection, 2015, PDPU	Ms. Shreya Sahajpal
14	Member, Committee: Campus Recruitment for Faculty Selection, 2015, PDPU	Mr. Anshul Gupta

Faculties on Editorial Boards/Review Boards of National & International Journals

(i). Dr. Bhawanisingh G Desai

PDPU 28/269

- Editorial Board of International Journal of Geology, Earth and Environmental Science
- Reviewer PLOS1, Palaeontologia Electronica, Current Science, Journal of Earth System Science
- Reviewer of Project Completion Reports of DST and Earth Science

(ii). Dr. Anirbid Sircar

- Editorial Board of Trends in Chemical Engg., STM Journals
- ~ Editorial Board of Recent Trends in Fluid Mechanics, STM Journals
- Reviewer, Journal of Petroleum and Gas Engineering
- ~ Reviewer, Advances in Research
- ~ Reviewer, International Journal of Geoscience, Scientific Research Publishing
- ~ Reviewer, Current Science, Indian Academy of Sciences
- ~ Reviewer, The Palaeobotanist, Lucknow

(iii). Dr. Uttam Bhui

- ~ Reviewer, Journal of the Geological Society of India
- ~ Reviewer, Arabian Journal of Earth Science

(iv). Dr. Ashish Sarkar

~ Reviewer, Journal of the Geological Society of India

(v). Dr. N Madhavan

~ Reviewer, Journal of Hydrology, Elsevier

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

Sr.	Faculty name	Refresher/ orientation programs, workshops, training		
No.		programs and similar programs		
1	Mr. R Balasubramanian	International Oil and Gas Pipeline Conference-2015,		
		New Delhi, India		
2	Dr. A Sircar	International Oil and Gas Pipeline Conference-2015,		
		New Delhi, India		
3	Dr. A Sircar	International Conference on Geothermal Energy:		
		Exploration & Exploitation, 2015		

PDPU 29/269

Self Evaluation	Report -	Volume	II
Jen Byanaanon	ICPUIC	VOIGILIC	11

4	Ms. Shreya Sahajpal	AMA Program on Ph.D. Thesis Research: How to		
		Write Research Proposal		
5	Ms. Shreya Sahajpal	International Conference on Geothermal Energy:		
		Exploration & Exploitation, 2015		
6	Mr. Anshul Gupta	AMA Program on Ph.D. Thesis Research: How to		
	_	Write Research Proposal		
7	Dr. Bhawanisingh G. Desai	XIIth International Ichnofabric workshop at		
		Channakale, Turkey		
8	Dr. Bhawanisingh G. Desai	XIIIth International Ichnofabric workshop at Kochi,		
		Japan		
9	Dr. Bhawanisingh G Desai	Modern Practices in Petroleum Exploration, Petrotech		
	-	Training Programm, Dehradun.		

28. Student projects

- percentage of students who have done in-house projects including interdepartmental projects
- percentage of students doing projects in collaboration with other universities/industry/institutes
- Percentage of students who have done in-house projects including interdepartmental projects: 100 %, as all the students compulsorily undertake in-house projects
- Percentage of students doing projects in collaboration with other universities/ industry/
 institutes: 30% M.Tech students have done projects in collaboration with leading industries,
 since the inception of M.Tech program at SPT

Recent research projects funded by Office of Research & Sponsored Projects (ORSP), sanctioned by Director General, PDPU for the R&D Project under Student Research Program are given below:

- 1. 'Reservoir Characterisation of Cambay Shale Cambay Basin, India in Reference to Shale Gas Exploration and Exploitation' by Kiran Bhatreja, Rajashree Saini and Rincy Anto, Final Year M.Tech. students of School of Petroleum Technology. (Project Guide Dr. Anirbid Sircar & Ms. Shreya Sahajpal) at a total cost of Rs. 2,25,000 (Rupees Two Lac Twenty Five Thousand Only).
- 'Shallow Seismic Reservoir Characterization: Implication for P-Wave Velocity and Sub-Surface Thickness Estimation' by Dharmesh Dhola, Final Year M.Tech. students of School of Petroleum Technology. (Project Guide – Dr. Bhawanisingh G. Desai) at a total cost of Rs. 1,10,000 (Rupees One Lac Ten Thousand Only).

PDPU 30/269

3. 'Optimization Of Oil Recovery Using Surfactant: Study On Cambay Basin Crude Oil' by Mitesh Gor and Rahul Yadav, Final Year M.Tech. students of School of Petroleum Technology. (Project Guide – Dr. Uttam Bhui) at a total cost of Rs. 90,000 (Rupees Ninety Thousand Only).

Recently, two projects have been completed by SPT students in collaboration with leading industries:

- A group of Final Year B.Tech students of School of Petroleum Technology carried out an R&D Project entitled 'A critical review of LNG Value Chain' in collaboration with Shell Hazira LNG & Port Pvt. Ltd. (Project Guide – Ms. Shreya Sahajpal & Dr. Anirbid Sircar)
- A group of Final Year B.Tech students of School of Petroleum Technology carried out an R&D Project entitled 'Understanding City Gas Distribution Business in Gujarat' in collaboration with GSPC Gas (Project Guide – Ms. Shreya Sahajpal & Dr. Anirbid Sircar)

29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

Faculty Awards

Dr. Anirbid Sircar

- Awarded the Best Paper Award for "Geothermal Investigation in Cambay Basin, Gujarat, India" in the 2nd Annual International Conference on Earth and Environmental Sciences, June 2015, Athens, Greece.
- Honored with 'Indira Gandhi Siromani Award' for leadership, development, innovation and industry interface in 2011.
- Guest of Honor at Engineers Wissen, 2015, Season 2, Adani Gas Ltd.

Dr. Uttam Bhui

Awarded the 3rd Best Paper Award for "Waxy Crude Oils From Cambay Basin, India: A
Rheological Study", in the Third International Conference on Petroleum Science and
Technology 2014 (ICPST-2014), November 2014, IIT-Madras, India

Dr. Ashish Sarkar

PDPU 31/269

• Awarded the 'Best Professor Award in Petroleum Engineering', awarded by Devang Mehta Foundation in 2013.

Ms. Shreya Sahajpal

- Awarded the Best Paper Award for "Geothermal Investigation in Cambay Basin, Gujarat, India" in the 2nd Annual International Conference on Earth and Environmental Sciences, June 2015, Athens, Greece.
- Invited Jury at Engineers Wissen, 2015, Season 2, Adani Gas Ltd.

Student Awards

- Saurabh Pancholi from SPT secured 3rd position in Green Campus Challenge in IIT Bombay.
- SPT students Tushar Goyal and Kirtesh Mantri secured 1st position in 'MUD CHALLENGE' organized for their research on Drilling Mud, during UPES SPE Fest 2015 by UPES SPE Student Chapter, Dehradun
- Piyush Sharma from SPT presented a poster for his research on "Mitigation of Fouling Using Helixchanger Heat Exchanger in Oil Refinery" and secured 1st position at OYCE 2014, ICT Mumbai, event of IIChE
- SPT students, Varun Pal and Navneet Raj presented a poster for their research on Stimulating Carbonate Reservoir Using Viscoelastic Surfactant and secured 1st position at ISM Petrotech Annual Fest 2014-15
- SPT students, Siddharth Pamnoor, Charmi Agarwal and Vikhyat Siyag presented a paper for their research on "Game-Changing Options: A Study Focused on Drilling with Casing and Technology-Coupling Solutions" and secured 1st position at UPES-SPE Fest 2014 at University of Petroleum and Energy Studies, Dehradun.
- SPT student Parag Bandhopadhyay won SPE Best Paper Award in SPE World Championship for his research on "Simulation on Reservoir Energy"
- SPT Students Deep Joshi, Bhagya Bhardwaj and Harshil Saradva filed a patent for their research on "Pneumatically Operated Mechanical Bit using a Rotary Steerable System".
 Patent Provisionally Accepted. Indian Patent Application No. is 3733/MUM/2013

PDPU 32/269

30. Seminars/Conferences/Workshops organized and the source of funding (national/ International) with details of outstanding participants, if any

Sr.	Name of the Workshop/Training	Month & Voor	
No.	Program/Seminar/Conference	Month & Year	
	Field Workshop on Jaisalmer Basin to understand its		
1	Hydrocarbon Potential and Linkages with Pakistan,	10 th to 16 th Jan, 2010	
	Association of Petroleum Geologist (APG-India)		
	SEG Student Chapter PDPU organized an Honorary Lecture		
2	South & East Asia with 'Shell' on "Geophysical Issues and	22 nd to 24 th Oct, 2010	
2	Challenges in Southeast Asia with Emphasis on Malay	22 10 24 001, 2010	
	Basin".		
3	SPE Student Chapter organized PETRAL Workshop for B.	22 nd to 24 th Oct, 2010	
	Tech. Petroleum Engineering Students	22 00 21 000, 2010	
4	Society of Petroleum Engineers SUBREGIONAL MEET-	7 th Dec, 2010	
•	student paper contest	, 2010	
	First lecture of Professor Kartic Khilar Memorial Lecture		
5	Series by Professor H. Scott Fogler, Professor of Chemical	13 th November, 2010	
	Engineering, University of Michigan		
6	Shale Gas: A Futurestic fuel in collaboration with Oklahoma	6 th and 7 th Jan, 2011	
	University		
7	Second Professor Kartic Khilar Memorial Lecture Series by	24 th Nov, 2011	
	Dr. Dilip Kale, Director General, ONGC Energy Centre		
8	India-US Bilateral Shale Gas Conference: A Global Energy	19 th -20 th Mar, 2012	
	Alternative	15 20 Mar, 2012	
9	Rotary Drilling Well control Training program" in	28 th to 31 st July, 2012	
	collaboration with South Asia consultancy	20 10 21 0013, 2012	
	Third Lecture of Professor KarticKhilar Memorial Lecture		
10	Series by Prof. Arun Nigavekar, Sr. Advisor and Trustee	22 nd November 2012	
	Science and Technology Park-Pune		
11	5 th Annual Convention of Petrotech Chapters	March, 2013	
12	Geothermal Energy Initiative and Development Seminar	26 th July, 2013	
13	Advancement of Petroleum Product Testing by Anton Paar	27 th and 28 th Sep, 2013	
14	2 nd HR conclave on Sustainable Growth in Oil and Gas Industry	28 th Oct, 2013	

PDPU 33/269

	Self Evaluation Report – Volume II				
	15	Fourth Professor KarticKhilar Memorial Lecture Series by	26 th November, 2013		
		Dr. Avinash Chandra, Former Director General, DGH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		Field Excursion on Jaisalmer Basin to understand its			
	16	Geological Field Excursion & Field work in Jaisalmer Basin,	4 th to 11 th Jan, 2014		
		Rajasthan, Association of Petroleum Geologist (APG-India)			
•	17	1st "Distinguished Speakers Lecture Series" by Mr. Amit	14 th March, 2014		
	17	Khera, Partner at Mc. Kinsey, New Delhi, India	14 March, 2014		
	18	Petroleum Conclave – Recent Trends in Upstream and	28 th March, 2014		
	10	Downstream,	26 Waren, 2014		
•		2 nd "Distinguished Speakers Lecture Series" by Mrs. Kiran			
	19	Majumdar Shaw, CMD, Biocon Ltd and Mr. AmitavaSaha,	18 th Aug, 2014		
		Head -HR, Biocon, Ltd, Bengaluru.			
	20	Log Interpretation workshop by IRS, Ahmedabad,	6 th September, 2014		
	21	Energy Workshop by Mr. Sanjib Baruah, Oil & Gas	11 th September, 2014		
21		Consultant	11 September, 2014		
ŀ	22	Petroleum Downstream Conclave	12 th September, 2014		
	23	Enerasia: CEO Roundtable, Shell-PDPU stall in Enerasia	26 th September, 2014		
	24	Enerasia: HR Roundtable, Shell-PDPU stall in Enerasia	27 th September, 2014		

Enerasia: Shell-PDPU stall in Enerasia

International Conference on Geothermal Energy:

Exploration & Exploitation

E-Conclave: The Paper Presentation Competition

Workshop on Introduction to HTRI

25

26

27

28

26-27-28th September,

2014

1st May, 2015

9th May, 2015

31st July, 2015

Name of the Workshop/Training	Funding Agency	Month & Year	Outstanding
Program/Seminar/Conference			Participants
International Conference on	ONGC Energy Centre	1 st May, 2015	Mr. Will Osborn,
Geothermal Energy: Exploration	(OEC) & Saket		VP, Geothermal
& Exploitation	Engineering		Resource Inc., UK;
	<i>Fund:</i> Rs. 3,10,000		Mr. George

PDPU 34/269

		Geothermal
		Consultant, USA
e Indo-US Science and	19 th -20 th Mar,	Prof. S. Chandra
chnology Forum	2012	Rai; Prof. Subhash
USSTF)		Shah; Prof. Carl
<i>nd:</i> Rs. 12,09,000		Sondergald
lahoma University	6 th and 7 th Jan,	Prof. S. Chandra
<i>nd:</i> Rs. 5,00,000	2011	Rai; Mr. Dario
		Stimbergeur; Mr.
		Prem Sawhney,
		Deep Industries;
		Dr. Avinash
		Chandra, DGH
	hnology Forum SSTF) ad: Rs. 12,09,000 ahoma University	hnology Forum 2012 SSTF) ad: Rs. 12,09,000 ahoma University 6 th and 7 th Jan,

Details of lectures from Industry Experts

- 1. Mr. Rajan Desai, International Coordinator, HTRI, India
 - How HTRI Xchanger Suite Educational can be useful to bridge Academia with Industry
- 2. Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma
 - Drilling and Well Completion
 - Shale Gas Development
- 3. Mr. Dilip Lote, AGM-HSE, Gujarat Gas
 - Process Safety in Oil & Gas Industry
- 4. Mr. Sanjib Baruah, Oil & Gas Consultant
 - Petroleum Business Challenges and Building Organizational Capabilities
- 5. Amitava Saha Head HR, Biocon
 - Global Market: Local Talent
- 6. Amit Khera, Partner, Mckinsey, India
 - India Towards Energy Independence 2030
- 7. Dr. S.K. Biswas (retd. Director KDMIPE-ONGC)
 - Oil & Gas Exploration
- 8. Dr. Rajan Chokshi, Director of Training and Business Development, Weatherford
 - Multiphase Flow Metering

PDPU 35/269

31. Code of ethics for research followed by the departments

Code of ethics for research in SPT in followed based on the following Research Ethics Principles:

- Honesty
- SPT has adopted standard Plagiarism checking tools
- Objectivity & Integrity
- Respect for Intellectual Property: Patents, copyrights, and other forms of intellectual property are acknowledged and honoured
- Protection of confidential communications, such as papers or grants submitted for publication, personnel records, and trade or military secrets.
- Research to promote social benefit and well-being as a part social responsibility
- Ethical practices for research involving animals are followed
- The strengths and culture of the participants must be respected and utilized whenever possible
- Written permission must be obtained from the partners before beginning the research projects.
- Permission from all individual participants must be obtained prior to collecting personal information.
- The confidentially of all individuals, if required must be respected
- All research results, analyses and interpretations must first be reviewed by the participants to ensure accuracy and avoid misunderstanding.
- The participants must be involved in making decisions about the publication and the distribution of all or parts of the research results

Composition of Research Advisory Board Members (RAB)

Sr. No.	Name	Designation	Affiliation
1.	Prof. Dr. H.B Raghavendra	Chairman	Pandit Deendayal Petroleum University
2.	Dr. A. V. Chainulu	Member	Department of Scientific & Industrial Research
3.	Shri R.K. Vij	Member	ONGC
4.	Dr. Chandra Rai	Member	Mewbourne School of Petroleum &

PDPU 36/269

			Geological Engineering The University
			of Oklahoma
5.	Dr. Vijay K.	Member	School of Electrical & Computer
3.	Madisetti	Member	Engineering Georgia Tech
6	Prof N.R. Dave	Invited	Dandit Daandayal Datuslayın University
6.	Prof N.R. Dave	Member	Pandit Deendayal Petroleum University
7	Prof. VC Shah	Invited	Don'dit Door doval Dotaclovan University
7.	Prof. VC Shan	Member	Pandit Deendayal Petroleum University
8.	Dr. D. C. Dotol	Member	Charotar University of Science &
8.	Dr. B. G. Patel	Member	Technology (CHARUSAT)
0	Dr. Akshai	Member	Cyclomet To should sign! University
9.	Agarwal	Member	Gujarat Technological University
10.	Dr. Bharat H.	Member	Jawaharlal Nehru Chair in International
10.	Desai	Wiember	Environment Law, JNU
11.	Sh. Kumarpal	Member	An eminent Litterateur
11.	Desai	Wiember	All eliment Litterateur
12.	Dr. T Harinarayana	Member	GERMI
13.	Dr. Avinash	Member	Petrobiz Consultant (P) Ltd
13.	Chandra	IVICIIIUCI	1 CHOULZ CONSUITAILE (F) LIU
14.	Dr. D.M. Kale	Member	ONGC Energy Centre
15.	Dr. Indrajit	Corretory	Pandit Deendayal Petroleum University
1,3.	Mukhopadhyay	Secretary	1 andit Deendayai Felioledini Oiliveisity

32. Student profile program-wise (2014-15)

Faculty of Engineering & Technology consists of SPT and SoT

Name of the	Applications	Selected in	Enroled	in SPT	
Program	Received at FoET Level	SPT	Male	Female	Pass Percentage
B.Tech.	5830	130	124	06	81%
M.Tech.	540	21	21	00	100%
Ph.D.	82	2	1	01	N.A.

33. Diversity of students (2014-15)

Name of the	% of the	% of the	% of the	% of the
program	students from	students from	students from	students from
	the same	the other	universities	other

PDPU 37/269

Self Evaluation Report - Volume II	Self Eva	luation	Report -	Vo	lume	II
------------------------------------	----------	---------	----------	----	------	----

	university	university within state	outside the state	countries
M.Tech.	8 %	74%	18 %	00
Ph.D	00	00	100 %	00

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Student Progression (2014-15)	Percentage against
	enrolled
NET	0
SET	0
GATE	8
GMAT	2

35. Student progression

The following table depicts Student Progression for all PDPU students in the last 4 years:

Name of the Programme	Student Progression	Year Wise (%)			
Trogramme	1 Togicssion	2012	2013	2014	2015
M.Tech.	PG to PhD	NIL	NIL	NIL	12
	Employed through campus selection	NIL	NIL	NIL	15
	Other than campus recruitment	25	50	88	15
MBA	Employed through campus selection	92	98	97	80
	Other than campus recruitment	NIL	NIL	NIL	17.5
	Entrepreneurs	NIL	NIL	NIL	2.5
	PG to PhD	8	2	3	NIL
B.Tech.	UG to PG	4	3.07	1.3	

PDPU 38/269

	Employed through campus selection	84.16	50.8	48	39.3
	Other than campus recruitment	NIL	NIL	NIL	2.8
B.A.	UG to PG	NA	40	45	22
(Hons.)/BBA (Hons.)/ BCom. (Hons.)	Employed through campus selection	NA	40	35	30
	Other than campus recruitment	NA	4	8	6
	PG to MPhil	NIL	7	NIL	NIL
	PG to PhD	NIL	7	8	NIL

Note: The above data is given as per available record.

36. Diversity of staff

Percentage of faculty who are gr	aduates
From the same University	15%
From other Universities within the state	15%
From Universities from other states	70%
From Universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

Nil

38. Present details of departmental infrastructural facilities with regard to (a) Library

Particulars	FoET
Number of Titles	7899
Number of Volumes	20443
National Journals	62

PDPU 39/269

Self Evaluation Report - Volume

International Journals	10
National E-Journals	0
International E-Journals	404
Database	7
CD`s	1347
Newspapers	14
Case Study	-
Others	-

(b) Internet facilities for staff and students

• Internet bandwidth: 250 mbps internet speed with 1GB band width speed is provided for entire university.

• Computers: 190

(c) Total number of class rooms

5

(d) Class rooms with ICT facility

5

(e) Students' laboratories

10

(f) Research laboratories

2

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university:
- b) from other institutions/universities:

Sr. No.	Name (other institutions/universities)	Guide
1	Rajendra Dutt Saklani	B.G. Desai

PDPU 40/269

2	Ravinder Ariketi	Uttam Bhui	
3	Anand Gupta	Anirbid Sircar	
4	R. Balasubramanian	P. Sivakumar & Anirbid Sircar	
5	Saheli Sanyal	Uttam Bhui	
6	Kriti Yadav	Anirbid Sircar	
7	Vaishali Sharma	Anirbid Sircar	
Sr. No.	Name (same institutions/universities)	Guide	
1	Manan Shah	Anirbid Sircar	

40. Number of post graduate students getting financial assistance from the university

Year	Number of M.Tech Students	Number of Ph.D. Students
2013	4	
2014	4	
2015	6	1

41. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology

Yes, a systematic process is followed for designing and development of curriculum. The focus is on factoring in all those academic areas which would prepare our students for Industry, different walks of society and life. The curricula are developed and reviewed by SPT Boards of Studies in consultation with domain experts from industry and academia. After ratification from BoS, the proposed changes/developments are presented to Faculty of Engineering & Technology (FoET). The suggestions of FoET are presented to Academic Council which is a blend of senior academia and industry experts. The broad role of the Academic Council as clearly defined in the Act and the Statutes of PDPU as follows:

- Prescribes and sanctions the number of academic programs in the University and their intake for each academic year.
- Approves curricula and syllabi for the courses and studies in various schools of the University

PDPU 41/269

- Reviews and monitor the standards of instruction, education, training and research carried on or imparted in the University;
- The new programs/curricula are formally approved by the Academic Council after detailed deliberations and the minutes of the meetings are duly recorded.

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

The school Director regularly monitors the progress of each faculty and keeps an update of the status of each course. Feedback is taken from internal as well as external faculties on the curriculum design, student performance and attendance, question paper design and industry-academia collaboration. A continuous evaluation process is followed by each faculty and they keep interacting with industry experts to include recent trends and developments in the course curriculum. If any changes/updations are suggested by any faculty member, the Director reviews the same. The proposed suggestions are presented to the Board of Studies (BoS). The Board of Studies (BoS) is headed by a Chairperson and has faculty members from each specialization, prominent external academics, and noted industry experts as members. The functions of Board of Studies are as follows:

- 1. To recommend courses of studies in the subjects.
- 2. To prescribe the detailed syllabus for each subject with related scheme of examination and credits.
- 3. To recommend and prescribe, where necessary, books for study in the subject.
- 4. To recommend programs for research and extension services.
- 5. To recommend organization of seminars, refresher courses and workshops to the Dean of the concerned Faculty.
- 6. To exercise such other duties and functions as may be assigned by the Academic Council and the concerned Faculty.
- 7. To review critically the question papers of the Mid-sem, End-sem & Re-examinations and also such other modes of evaluations regularly by every semester with reference to the learning objectives & the scope of the prescribed syllabus.
- 8. To review feedbacks received from faculty members for updation/modification of course curriculum.

PDPU 42/269

Present Members of the Board of Studies

Chairman

Dr Anirbid Sircar (Director, School of Petroleum Technology, PDPU)

Members

- i. Dr. Uttam Bhui (Faculty, School of Petroleum Technology, PDPU)
- ii. Ms Shreya Sahajpal (Faculty, School of Petroleum Technology, PDPU)
- iii. Dr. Bhawanisingh Desai (Faculty, School of Petroleum Technology, PDPU)

Experts

- i. Prof T Kumar (Director NIT, Durgapur)
- ii. Prof R A Sengupta (Professor, Chemical Engineering, MS University, Baroda)
- iii. Prof A P Vyas (Principal, Saffrony Institute of Technology, Mehsana)
- iv. Mr. Dilip Lote, AGM, HSE, GSPC Gas
- v. Mr. Rajesh Pathak, DGM, Drilling, GSPC
- vi. Mr. Peeush K. Bishnoi, Director General, GSFC University

The BoS reviews the suggestions and gives recommendations to FoET. The FoET, in turn after due deliberation recommends the matter to PDPU Academic Council for deliberation and approval.

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Formal and informal feedback is taken from students at the end of each semester. Recently a system of inserting parametric responses in e-mode has been introduced wherein confidentiality is maintained. Parameter wise aggregate feedback of a faculty is obtained in the form of a bar chart. The access to this information is available only to the faculty concerned. Student feedback is taken on a 15 point questionnaire blank, as under:

Student Feedback Questionnaire

- **Q.1** The course objective, structure and evaluation procedure have been clearly mentioned.
- **Q.2** The presentation were nicely structured and netted with practical examples to keep them lively and interesting.
- **Q.3** The lecture covered the total range of the subject starting from fundamental principle to practical application which made understanding of the subject through.

PDPU 43/269

- **Q.4** The instructions have successful in generating curiosity and developing independent thinking.
- **Q.5** The instructor has exhibited a substantial amount of knowledge on the course; attending her/his lectures has been a good learning experience.
- **Q.6** The instructor has delivered lectures with authority and excellent communication skills; her/ his lectures have been interesting to attend.
- **Q.7** The instructor has interacted in fruitful manner with the students; it has been easy to raise doubts and to get explanations.
- **Q.8** The instructor has been reachable out of the class; (S)/he could give extra attention whenever required.
- **Q.9** The instructor has been able to manage the class; decorum of the class has been nicely maintained.
- **Q.10** The instructor has taken care regarding the learning needs of the students he has successfully used different teaching aids to make course interesting.
- **Q.11** The instructor has been able to make successful use of class time and modulate the rate of instruction according the class response.
- **Q.12** The instructor has acted as a motivator and his activities, inside and outside the class, has personally motivated me.
- **Q.13** The examinations/quizzes/assignments have been designed to check up understanding of the subject; they were designed in a balanced manner comprises of fundamental, logical, descriptive and illustrative problems.
- **Q.14** Evaluation procedure has been judiciously followed and productive feedback has been given which helped me to continuously determine my strength and weakness in the subject.
- **Q.15** Overall experience in the course

Grading of each question should be between 1 and 5, if it is excellent put 5 and if it is unacceptable put 1; proportionate out your answer in a scale of 1 to 5.

The feedbacks provided by the students are shared with the faculties. Based on the feedback received the faculties try to bring changes in the teaching methodology.

PDPU 44/269

c. alumni and employers on the programs offered and how does the department utilize the feedback?

The feedback from the alumni, employers and industries are regularly invited and the school takes them positively. Such suggestions are incorporated during Board of studies meeting for curriculum design.

43. List the distinguished alumni of the department (maximum 10)

Sr.No	Name of the Alumni	Program of study at	Present designation of
		the Institute	the Alumni
1	Mr. Jatin Agarwal	M.Tech Petroleum	University of Tulsa
2	Mr. Parag Bandhopadhyay	B.Tech Petroleum	Occidental Petroleum Corporation
3	Mr. Hiren Patel	M.Tech Petroleum	AlMansoori Directional Drilling Services
4	Ms. Pullkita Rohilla	B.Tech Petroleum	Halliburton
5	Ms. Aritri Roy	B.Tech Petroleum	Schlumberger
6	Mr. Satish Kumar	B.Tech Petroleum	Schlumberger
7	Mr. Gaurav Negi	M.Tech Petroleum	Weatherford International
8	Ajeet Yadav	B.Tech Petroleum	Indian Army
9	Disha Desai	B.Tech Petroleum	Baker Hughes
10	Sandeep Bose	B.Tech Petroleum	ONGC

44. Give details of student enrichment programs (special lectures/workshops/seminar) involving external experts.

Sr.	Name of the Workshop/Training	Month & Year
No.	Program/Seminar/Conference Wolten & Y	
1	Field Workshop on Jaisalmer Basin to understand its	10 th to 16 th Jan, 2010

PDPU 45/269

	Self Evaluation Report – Volume II		
	Hydrocarbon Potential and Linkages with Pakistan,		
	Association of Petroleum Geologist (APG-India)		
	SEG Student Chapter PDPU organized an Honorary		
2	Lecture South & East Asia with 'Shell' on "Geophysical	22 nd to 24 th Oct, 2010	
2	Issues and Challenges in Southeast Asia with Emphasis	22 to 24 Oct, 2010	
	on Malay Basin".		
3	SPE Student Chapter organized PETRAL Workshop	22 nd to 24 th Oct, 2010	
3	for B. Tech. Petroleum Engineering Students	22 to 24 Oct, 2010	
4	Society of Petroleum Engineers SUBREGIONAL	7 th Dec, 2010	
-	MEET-student paper contest	7 DCC, 2010	
	First lecture of Professor Kartic Khilar Memorial		
5	Lecture Series by Professor H. Scott Fogler, Professor	13 th November, 2010	
	of Chemical Engineering, University of Michigan		
6	Shale Gas: A Futurestic fuel in collaboration with	6 th and 7 th Jan, 2011	
0	Oklahoma University	0 and 7 Jan, 2011	
	Second Professor Kartic Khilar Memorial Lecture Series		
7	by Dr. Dilip Kale, Director General, ONGC Energy	24 th Nov, 2011	
	Centre		
8	India-US Bilateral Shale Gas Conference: A Global	19 th -20 th Mar, 2012	
	Energy Alternative	1) -20 Iviai, 2012	
9	Rotary Drilling Well control Training program" in	28 th to 31 st July, 2012	
	collaboration with South Asia consultancy	28 to 31 July, 2012	
	Third Lecture of Professor KarticKhilar Memorial		
10	Lecture Series by Prof. Arun Nigavekar, Sr. Advisor	22 nd November 2012	
	and Trustee Science and Technology Park-Pune		
11	5 th Annual Convention of Petrotech Chapters	March, 2013	
12	Geothermal Energy Initiative and Development Seminar	26 th July, 2013	
13	Advancement of Petroleum Product Testing by Anton	27 th and 28 th Sep, 2013	
13	Paar	21 and 28 Sep, 2013	
14	2 nd HR conclave on Sustainable Growth in Oil and Gas	28 th Oct, 2013	
14	Industry	20 OCI, 2013	
15	Fourth Professor KarticKhilar Memorial Lecture Series	26 th November, 2013	

PDPU 46/269

	Self Evaluation Report – Volume II	
	by Dr. Avinash Chandra, Former Director General,	
	DGH	
	Geological Field Excursion & Field work in Jaisalmer	
16	Basin, Rajasthan, Association of Petroleum Geologist	4 th to 11 th Jan, 2014
	(APG-India)	
17	1 st "Distinguished Speakers Lecture Series" by Mr.	14 th March, 2014
17	Amit Khera, Partner at Mc. Kinsey, New Delhi, India	14 March, 2014
18	Petroleum Conclave – Recent Trends in Upstream and	28 th March, 2014
10	Downstream,	26 Watch, 2014
	2 nd "Distinguished Speakers Lecture Series" by Mrs.	
19	Kiran Majumdar Shaw, CMD, Biocon Ltd and Mr.	18 th Aug, 2014
	AmitavaSaha, Head –HR, Biocon, Ltd, Bengaluru.	
20	Log Interpretation workshop by IRS, Ahmedabad	6 th September, 2014
21	Energy Workshop by Mr. Sanjib Baruah, Oil & Gas	11 th September, 2014
21	Consultant	11 September, 2014
22	Petroleum Downstream Conclave	12 th September, 2014
	Enerasia: CEO Roundtable, Shell-PDPU stall in	26-27 th September,
23	Enerasia	2014
	Enerasia: HR Roundtable, Shell-PDPU stall in	26-27 th September,
24	Enerasia	2014
		26-27-28 th September,
25	Enerasia: Shell-PDPU stall in Enerasia	2014
26	International Conference on Geothermal Energy:	1 St Mar- 2015
26	Exploration & Exploitation	1 st May, 2015
27	E-Conclave: The Paper Presentation Competition	9 th May, 2015
28	Workshop on Introduction to HTRI	31 st July, 2015

Details of lectures from Industry Experts

1. Mr. Rajan Desai, International Coordinator, HTRI, India

• How HTRI Xchanger Suite Educational can be useful to bridge Academia with Industry

PDPU 47/269

2. Dr. Subhash Shah, Ph.D., P.E., Stephenson Chair Professor, Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma

- Drilling and Well Completion
- Shale Gas Development
- 3. Mr. Dilip Lote, AGM-HSE, Gujarat Gas
 - Process Safety in Oil & Gas Industry
- 4. Mr. Sanjib Baruah, Oil & Gas Consultant
 - Petroleum Business Challenges and Building Organizational Capabilities
- 5. Amitava Saha Head HR, Biocon
 - Global Market: Local Talent
- 6. Amit Khera, Partner, Mckinsey, India
 - India Towards Energy Independence 2030
- 7. Dr. S.K. Biswas (retd. Director KDMIPE-ONGC)
 - Oil & Gas Exploration
- 8. Dr. Rajan Chokshi, Director of Training and Business Development, Weatherford
 - Multiphase Flow Metering

45. List the teaching methods adopted by the faculty for different programs.

- Explanation in classroom with real life examples and case studies
- Showing course related videos in the classroom
- Project based learning
- Assignments
- Simulators for solving numerical examples.
- Supplementary Video lectures/Animations
- Field visits complimenting theory lectures
- Quizzes
- Language lab assignments
- Student Seminars
- Laboratory projects
- Expert Lectures by Industry Experts from India & Abroad

PDPU 48/269

46. How does the department ensure that program objectives are constantly met and learning outcomes are monitored by the faculty for different programs?

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his courses by the concerned instructor, based on his performance in mid-semester examination, end-semester examination, quizzes, tests, assignments, tutorials, laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

47. Highlight the participation of students and faculty in extension activities

Faculty participation in extension activities (2014-15)

ACTIVITY	FACULTY	
Website Coordinator	Ms. Shreya Sahajpal	
Academic coordinator for undergraduate and postgraduate students and Awareness programs for student admission	Dr. Anirbid Sircar - Patron Dr. Uttam Bhui - Upstream Ms. Shreya Sahajpal - Downstream	
Preparation and update of NAAC document till it is	Ms. Shreya Sahajpal - Coordinator	
submitted and reviewed	Ms. Vaishali Sharma – Faculty Support	
	Dr. Anirbid Sircar	
SPT Time Table Coordinator	Ms. Shreya Sahajpal	
	Mr. Ragunathan Balasubramanian	
	Upstream – Ms. Vaishali Sharma/Mr.	
SPT Laboratory Coordinator	Maunish Shah	
	Downstream – Prof. G S Negi	
SPT Library Coordinator	Mr. Ragunathan Balasubramanian	
Preparation and Updating of Centre of Excellence (COE) document till it is submitted and reviewed	Ms. Shreya Sahajpal	
Preparation and Updating of ISO document till it is	Mr. Ragunathan Balasubramanian	
submitted and reviewed	Ms. Shreya Sahajpal	
Student Placement Activities	Dr. Anirbid Sircar	
Student Flacement Activities	Ms. Shreya Sahajpal	

PDPU 49/269

Kartik Khilar Memorial Lecture	Dr. Ashish Sarkar
Research activities at Centre of Excellence for	Dr. Anirbid Sircar
Geothermal Energy (CEGE)	Ms. Shreya Sahajpal
Geothermal Energy (CEGE)	Mr. Manan Shah
	Mr. Maunish Shah (Coordinator)
David a great of Drilling & Stimulation Lab	Prof. G S Negi
Development of Drilling & Stimulation Lab	Prof. R K Jain
	Dr. A Sircar
	Dr. Uttam Bhui
Danal for Paviawing student papers for National &	Dr. N Madhavan
Panel for Reviewing student papers for National & International Conferences for funding	Dr. Bhawanisingh Desai
International Conferences for funding	Ms. Shreya Sahajpal
Student Feedback & Attendance	Ms. Shreya Sahajpal
Student Feedback & Attendance	Ms. Vaishali Sharma
SPT Examination Coordinator	Dr. Uttam Bhui
SPT coordinator for organizing	
Conclaves/Workshops/Conferences/Distinguished	Ms. Shreya Sahajpal
Lectures/Student Chapter Activities (Includes updating of	Mr. Manan Shah
details for all the past events organized by SPT)	
Coordinator for Shell & Petroskills courses on Reservoir	Prof. S S P Singh
Simulation and Offshore Drilling	Mr. Maunish Shah
SPT Research Coordinator (Includes updating of	W GL GL: 1
database)	Ms. Shreya Sahajpal
CDT Minney (Editor)(Co Editor)	Ms. Vaishali Sharma
SPT Mirror (Editor/Co-Editor)	Mr. Ragunathan Balasubramanian
SDT Student Chapters	Ms. Shreya Sahajpal
SPT Student Chapters	Mr. Ragunathan Balasubramanian
SPT Alumni Coordinator	Ms. Shreya Sahajpal

Faculties involved in extension activities:

Sr.	Name of the Workshop/Training	Faculties Involved	
No.	Program/Seminar/Conference		
1	Field Workshop on Jaisalmer Basin to understand its	Dr. Bhawanisingh Desai	
	Hydrocarbon Potential and Linkages with Pakistan,	Di. Bilawanishigii Desai	

PDPU 50/269

SEG Student Chapter PDPU organized an Honorary Lecture South & East Asia with 'Shell' on "Geophysical Issues and Challenges in Southeast Asia with Emphasis on Malay Basin". SPE Student Chapter organized PETRAL Workshop for B. Tech. Petroleum Engineering Students Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Anirbid S Dr. Chandra Second Professor Kartic Khilar Memorial Lecture Series by Dr. Anirbid S	gh Desai gh Desai gh
Challenges in Southeast Asia with Emphasis on Malay Basin". SPE Student Chapter organized PETRAL Workshop for B. Tech. Petroleum Engineering Students Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Uttam B Dr. Uttam B Dr. Bhawanising Dr. T P Sin Dr. Ajit Shu Dr. Ajit Shu Dr. Anirbid S Dr. Chandra	gh Desai gh Desai gh
Challenges in Southeast Asia with Emphasis on Malay Basin". SPE Student Chapter organized PETRAL Workshop for B. Tech. Petroleum Engineering Students Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Anirbid S Dr. Anirbid S Dr. Chandra	gh Desai gh Desai gh
SPE Student Chapter organized PETRAL Workshop for B. Tech. Petroleum Engineering Students Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Bhawanising Dr. T P Sin Dr. Ajit Shu Dr. Apit Shu Dr. Anirbid S Dr. Chandra	gh Desai agh
Tech. Petroleum Engineering Students Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Bhawanising Dr. Bhawanising Dr. Apit Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Anirbid S	gh Desai agh
Tech. Petroleum Engineering Students Society of Petroleum Engineers SUBREGIONAL MEET- student paper contest First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Apit Shu Dr. Anirbid S Dr. Chandra	gh Desai agh
First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Bhawanising Dr. Bhawanising Dr. T P Sin Dr. Ajit Shu Dr. Apjit Shu Dr. Anirbid S Dr. Chandra	gh ıkla
First lecture of Professor Kartic Khilar Memorial Lecture Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Apit Shu Dr. Anirbid S Dr. Chandra	gh ıkla
5 Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. T P Sin Dr. Ajit Shu Dr. Ajit Shu Dr. Anirbid S Dr. Chandra	ıkla
5 Series by Professor H. Scott Fogler, Professor of Chemical Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Anirbid S Dr. Chandra	ıkla
Engineering, University of Michigan Shale Gas: A Futurestic fuel in collaboration with Oklahoma University Dr. Anirbid S Dr. Chandra	
6 University Dr. Chandra	ircar
University Dr. Chandra	
Second Professor Kartic Khilar Memorial Lecture Series by Dr. Anirbid S	Rai
7	ircar
Dr. Dilip Kale, Director General, ONGC Energy Centre Dr. G P Karm	nakar
India-US Bilateral Shale Gas Conference: A Global Energy Dr. Anirbid S	ircar
Alternative Dr. Chandra	Rai
Rotary Drilling Well control Training program in Dr. G P Karm	nakar
collaboration with South Asia consultancy	ιακαι
Third Lecture of Professor Kartic Khilar Memorial Lecture	
10 Series by Prof. Arun Nigavekar, Sr. Advisor and Trustee Dr. Anirbid S	ircar
Science and Technology Park-Pune	
11 5 th Annual Convention of Petrotech Chapters Dr. Bhawanising	gh Desai
12 Geothermal Energy Initiative and Development Seminar Dr. B K Beh	nera
13 Advancement of Petroleum Product Testing by Anton Paar Dr. Anirbid S	ircar
Dr. Uttam B	hui
2 nd HR conclave on Sustainable Growth in Oil and Gas Dr. Anirbid S	Sircar
Industry Industry	incar
Fourth Professor KarticKhilar Memorial Lecture Series by Dr. Anirbid S	ircar
Dr. Avinash Chandra, Former Director General, DGH Dr. Ashish Sa	arkar
Field Excursion to Pavagadh, Association of Petroleum Mr. Vinay B	abu
Geologist (APG) Student Chapter Mr. Tushar Sh	narma
1st "Distinguished Speakers Lecture Series" by Mr. Amit Mr. Anshul G	รับกรจ
Khera, Partner at Mc. Kinsey, New Delhi, India	rupia

PDPU 51/269

Self Evaluation Report – Volume II					
-	18	Petroleum Conclave – Recent Trends in Upstream and	Mr. Vinay Babu		
		Downstream,	Mr. Sanjiv Kumar		
	19	2 nd "Distinguished Speakers Lecture Series" by Mrs. Kiran Majumdar Shaw, CMD, Biocon Ltd and Mr. AmitavaSaha, Head –HR, Biocon, Ltd, Bengaluru.	Mr. Anshul Gupta Ms. Shreya Sahajpal		
	20	Log Interpretation workshop by IRS, Ahmedabad,	Dr. Uttam Bhui Dr. Ashish Sarkar		
	21	Energy Workshop by Mr. Sanjib Baruah, Oil & Gas Consultant	Mr. Sanjiv Kumar		
	22	Petroleum Downstream Conclave	Ms. Shreya Sahajpal Mr. Anshul Gupta		
	23	Enerasia: CEO Roundtable, Shell-PDPU stall in Enerasia	Ms. Shreya Sahajpal Mr. Anshul Gupta Dr. Anirbid Sircar		
	24	Enerasia: HR Roundtable, Shell-PDPU stall in Enerasia	Ms. Shreya Sahajpal Dr. Anirbid Sircar		
	25	Enerasia: Shell-PDPU stall in Enerasia	Ms. Shreya Sahajpal Dr. Anirbid Sircar		
	26	International Conference on Geothermal Energy: Exploration & Exploitation	Ms. Shreya Sahajpal		
	27	E-Conclave: The Paper Presentation Competition	Mr. R Balasubramanian		
	28	Workshop on Introduction to HTRI	Ms. Shreya Sahajpal		

48. Give details of "beyond syllabus scholarly activities" of the department.

SPT believes in overall development of students beyond the scope of syllabus. SPT has various students clubs that support and facilitate beyond syllabus scholarly activities initiatives taken by students. The clubs operate as student led initiatives supported by respective subject faculty to organize discussions, workshops, debates, presentations and other exercises purposefully selecting topics and subjects beyond the syllabus.

SPT organizes various conclaves/conferences/seminars/roundtables that provide industry connect to the students. These events help students to develop holistically and keep them

PDPU 52/269

updated about the recent trends and advances in the industry. The industry professionals interact with the students and faculty on contemporary professional, industrial and academic issues. Students are encouraged to prepare and submit research papers and projects at National and International seminars and conferences.

SPT also has professional bodies and student chapters which are run by students under the guidance of faculty mentors. The student chapters organize training programs, workshops and field visits for students.

In addition to students clubs and chapters, SPT has introduced man-making and value added courses for overall personality development of students. Courses like Introduction to Research Methodology, Seminar, Group Assignment & Presentation, Earth Science & Hydrocarbon Exploration Field Work, Rural Internship, Industrial Training and Industrial Orientation are introduced to students for improving their orator skills, presentation skills and group dynamics. The main objective of these programs is to expose students to grassroots realities. This helps in the holistic development of a student and also makes them aware of the harsh climates and adversities they might be facing on the job. The idea behind these programs is to develop a sensitized workforce in energy sector who are socially concerned and willing to positively contribute to the society. It also helps to enhance other skills of students. i.e. observation skill, analytical skill, decision making skill, communication skill.

SPT through Office of Research & Sponsored Programs encourages and funds students to take up research projects in their area and also submit proposals to different funding agencies. Several training programs for the students are arranged by SPT to add value to their knowledge pool.

Professional Bodies/Student Chapters at SPT

Society of Petroleum Engineers (PDPU SPE Chapter)

The Society of Petroleum Engineers (SPE) is a not-for-profit professional organization whose mission is to collect, disseminate, and exchange technical knowledge concerning the exploration, development and production of oil and gas resources and related technologies for the public benefit and to provide opportunities for professionals to enhance their technical and professional competence.

PDPU SPE Student Chapter was founded in 2007 and since its inception, the establishment has striven expeditiously to achieve the excellence and renown that it carries today. PDPU

PDPU 53/269

SPE Student Chapter has provided exposure to students in the oil and gas industry through guest lectures, panel discussions, exhibitions and workshops. They have hosted lecturers discussing "Challenges of Reservoir Studies", "Sand Control Completion" and "Exploration to Exploitation". PDPU SPE Chapter bears a plethora of events to its credit that were appreciated by the students and allied professionals who were part of the same.

Serving as a token of distinguished performance and appreciation, PDPU SPE Student Chapter stands the only SPE student chapter in India to have bagged five Gold Standard Awards (four consecutive) from SPE International for five times. The Gold Standard is a benchmark for exceptional performance in categories of membership, planning, education, professionalism, service, support and fundraising.

Dr. Bhawanisingh Desai was the faculty sponsor of SPE-PDPU Student Chapter from 2007-2015. The present faculty sponsor of this Chapter is Mr. Raghunatham Balasubramanian.

Major Events

- Workshop on Well Construction Engineering and Decision Space Well Engineering Software by Robello Samuels, Chief Technical Advisor to Haliburton on Drilling
- Workshop for hands-on Training on Petrel G&G and Resevoir Simulation Software
- Guest Lecture on Multiphase Flow Metering by Dr. Rajan Chokshi of Weatherford.
- SPE Weekend and Petrika organized for 1st year students to provide orientation towards the oil and gas industries through quizzes and interactive sessions.

SPG/EAGE/SEG PDPU CHAPTER

Society of Petroleum Geophysicists/European Association of Geoscientists and Engineers/ Society of Exploration Geophysicists

SPG, EAGE and SEG chapters of PDPU work in collaboration to facilitate the exchange of technical ideas and practical experience. They have been the names of great renown and have been working extensively for the best interests of its student members. They have striven to acquire the excellence with which they are associated invariably when it comes to organising events and executing them efficiently.

The university chapters of these international societies help students connect to industry professionals affiliated to the field of Geophysics and Petrophysics applied to the petroleum industry. They also serve the geosciences community with events aimed at disseminating information and providing networking opportunities, all with the purpose of advancing geophysics as a study area for aspiring engineers of tomorrow.

PDPU 54/269

The faculty mentor of this chapter is Dr. Uttam Kr. Bhui who provides valuable guidance for directing chapter activities.

Major Events

- Created SEG section in Library so that students can get updated with latest issues of magazines and journal published by SEG.
- Conducted a Well Log Interpretation Workshop which hosted by professionals from the Well Logging Services of ONGC.
- Organized events like Find the Faults and a one of a kind Well Log Interpretation Competition in the annual technical meet "Urjauday-2014" along with SPE, AAPG and Petrotech Chapters.
- The new initiative this year "Learning Thursdays", which is a weekly newsletter to update students about various happenings in the industry is a huge success and has been applauded by the whole student community.

PETROTECH PDPU CHAPTER

The Petrotech chapter, being highly dedicated towards achieving excellence, has organised seminars, conventions and several other competitions where students can come up and showcase their talents. It is because of their industrious and sincere efforts that they are trusted and eulogised extensively as an important component of the School of Petroleum Technology.

Weekly discussion sessions on various matters of practical importance relating to the Energy sector are also regularly organized by Petrotech. The chapter successful hosted the Petrotech Students Meet in 2013 in PDPU which was attended by all other student chapters in India. This chapter was awarded the best student chapter of Petrotech award in 2012.

Dr. Bhawanisingh Desai was the faculty mentor of Petrotech Student Chapter from 2009-2015. The present faculty mentor of this Chapter is Mr. Raghunatham Balasubramanian.

AAPG PDPU CHAPTER

American Association Petroleum Geologists PDPU Chapter was founded in 2013. Despite being relatively new of all the extant student chapters in PDPU, AAPG has earned considerable encomium from students and faculty members. They are the fastest emerging chapter and have been creating benchmarks for other student chapters to match along.

Major Events

PDPU 55/269

- They conducted a hugely successful geological field trip to the Pavagadh Archaeological Park to study the geological formations in Pavagadh Hills.
- Geology Quiz was organized for all students which saw students racking their brains on various questions relating to the petroleum industry.

Dr. Vinay Babu was the faculty mentor of AAPG PDPU CHAPTER Student Chapter from 2013-2014. The present faculty mentor of this Chapter is Ms. Shreya Sahajpal.

Student Achievements (Beyond Syllabus Scholarly Activities)

- O SPT Students, Deep Joshi, Bhagya Bhardwaj and Harshil Saradva, filed a patent on "Pneumatically Operated Mechanical Bit using a Rotary Steerable System". The patent has been provisionally accepted. Indian Patent Application No. is 3733/MUM/2013. This is a unique work of its kind to improve the efficiency of the rotary system. This patent is a significant contribution to the prevalent Drilling technologies.
- The Society of Petroleum Engineering (SPE) student Chapter at PDPU achieved Prestigious International "GOLD STANDARD AWARD" from SPE-International for the Year 2015
- Prakhar Sarkar from SPT has been awarded the SPE STAR Scholarship award for the year 2014-15.
- SPT Team consisting of Sudarsan Sai, Abhishek Kumar, Yatharth Shukla secured 2nd position in Amazing Champions of Energy Session 3 An event organized by CAIRN Energy.
- Saurabh Pancholi from SPT secured 3rd position in Green Campus Challenge in IIT Bombay Tech Fest.
- Radhika Joshi from SPT participated in 8th International Petroleum Technology Conference (IPTC) Education Week 2014, at Kuala Lumpur Convention Centre, Malaysia
- SPT Team consisting of Naman Shah, Manan Parmar, Jaimin Prajapati secured 5th position and won a prize of Rs. 10,000 in Amazing Champions of Energy Session 2 An event organized by CAIRN Energy.
- SPT students Neil Maurya, Kashyap Chaudhary and Gogineni Sudarsan Sai represented
 PDPU for the e.Xplore program 2014-15 for Entrepreneurship in Israel.

PDPU 56/269

- SPT Team consisting of Gogineni Sudarsan Sai, Prakhar Sarkar, Abhishek Kumar Singh, Darshan Sharma and Pranshu Praleya represented SPE PDPU CHAPTER in SPE PETROBOWL 2015 at Kuala Lumpur, Malaysia.
- SPT students Tushar Goyal and Kirtesh Mantri secured 1st position in 'MUD CHALLENGE' organized during UPES SPE Fest 2015 by UPES SPE Student Chapter, Dehradun
- SPT students Shivam Pandey successfully completed NCC camp & exam for B certificate held in Ahmedabad, August 2014.
- SPT students Tushar Goyal and Kirtesh Mantri secured 1st position in 'SYMPOSIUM' competition organized during UPES SPE Fest 2015 by UPES SPE Student Chapter, Dehradun
- Shivam Pandey and Hitisha Dadlani from SPT presented and published a paper titled "BIONIC LEAF- Using Bacteria to Convert Solar Energy Directly into Liquid Fuel" in International Conference on Renewable Energy for Sustainable Environment (RESE-2015), at MCET, Coimbatore, Tamil Nadu
- Trisha Mishra, Shivani Garg and Prakhar Sarkar presented a paper on "Use of Heat Pump for Low Enthalpy Reservoirs", International Conference on Geothermal Energy: Exploration & Exploitation, 2015, PDPU
- Parth Chauhan from SPT presented a paper on "Low salinity Waterflooding" at UPES,
 Dehradun Technical Fest 2015
- Atul Khatri & Parth Chauhan from SPT published a paper on "Hydrocarbon Prospectivity of Indian Sedimentary Basins-A Review" in International Journal of Scientific Research Indian (IJSR), Vol. 4, Issue 2, February 2015, ISSN No 2277 – 8179
- o SPT students Akash Srivastava, Riddhiman Sherlekar, Sai Sudarshan presented a paper on "Geological Aspects of Enhanced Oil Recovery" at Cognizance 2015, IIT Roorkee.
- Akash Srivastava from SPT presented a paper on "Solar Pond" at NU-Tech 2015, at Nirma University.
- Navneet Raj and Varun Pal from SPT presented a paper on "Use of Nanoparticles to Enhance the Efficiency of HCl Based Stimulating Fluids" in 8th International Petroleum Technology Conference 2014, Kuala Lumpur Convention Centre.
- Piyush Sharma from SPT presented a poster and secured 1st position for poster titled,
 "Mitigation of Fouling Using Helixchanger Heat Exchanger in Oil Refinery" in Poster

PDPU 57/269

- Presentation Competition at OYCE 2014, ICT Mumbai National Technical Poster Presentation, IIChE
- SPT students, Varun Pal and Navneet Raj presented a poster and secured 1st position for poster titled "Stimulating Carbonate Reservoir Using Viscoelastic Surfactant" at ISM Petrotech Annual Fest 2014-15
- SPT students, Siddharth Pamnoor, Charmi Agarwal and Vikhyat Siyag presented a paper and secured 1st position for paper titled "Game-Changing Options: A Study Focused on Drilling with Casing and Technology-Coupling Solutions" at UPES-SPE Fest 2014 held at University of Petroleum and Energy Studies, Dehradun.
- SPT students, Abhishek Kumar Singh, Prakhar Sarkar and Darshan Sharma presented a
 paper and secured 3rd position for paper titled "Characterization of Waxy crude of Bakrol
 and Develop the Rheological Properties" in Third International Conference on Petroleum
 Science and Technology 2014 (ICPST-2014), IIT Madras, India
- Gogineni Sudarsan Sai, Abhishek Kumar Singh, and Mr. Prem Shah from SPT presented paper on "Gas hydrates: Frozen Natural Gas Repository" in International Conference on Chemical Industry (ICCI) 2014, PDPU
- Ashish Agarwal & Kiran Chadayamuri from SPT presented a paper and secured 3rd position for paper titled "Global Oil Prices: A Chapter in Indian Economy" in Abhivyakti, Urjauday 2014 at PDPU
- Gogineni Sudarsan Sai from SPT got selected in the prestigious Student Leadership Symposium (SLS) sponsored by Chevron to be held at SEG Annual Conference 17-18, October, 2015
- Yatharth Shukla, Prem Shah and Gogineni Sudarsan Sai from SPT presented paper on "Strategies to Mitigate Oil spill on Drilling Site" in Third International Conference on Petroleum Science and Technology 2014 at IIT Madras, India

Student Activities (Beyond Syllabus Scholarly Activities)

CRETUS - The Robotics Club

• Work with the objective to study the latest technological developments in automation and robotics and fabricate miniature working models. To create a forum for interaction about hardware, electronics, fabrication and programming for robotics. To develop grass root ideas about robotics usage and implementation in the Energy and the Industrial sector.

PDPU 58/269

Entrepreneurship Cell

- An entrepreneur can be regarded as a person who has the initiative skill and motivation to set up a business or enterprise of his own and who always look for high achievements. He/she is the catalyst for social change and works for the common good.
- O It is a firm belief at the Entrepreneurship Cell that original thoughts and radical ideas take shape in young minds. Students are the greatest natural resource and the Cell intends to nurture them and provide them with opportunities for excellence. It intends to pierce the corporate veil, to let the budding entrepreneurs get a feel of how the corporate world works.

Mind Ripple – the Quizzing Club

A quiz is a form of mind sport. In today's competitive world, keeping yourself updated is very important. Quiz is one of the best place for exchange of knowledge.
 In PDPU the quizzing club – Mind Ripple works with the objective of provide a platform for the students to develop interest in the quiz and related intellectual activities.

IYCN - G

The Indian Youth Climate Network (IYCN) is an association uniting Indian youth who are concerned about environment issues & climate change. PDPU Students formed an organization to represent IYCN, for awareness of climate change in campus.

Jharokha - The Literary Club of PDPU

The main objective of JHAROKHA is to discover the untouched shores of the sea of creativity within students of PDPU like Creative writing, Poem recitation, Designing, Debate, out of box thinking, etc.

Rang – The Fine Arts Club of PDPU

o "Rang" aims to inspire young minds to have creative and artistic view and provide a strong base to showcase their talents, to make the students familiar to most types of Artistic methods used to make greeting cards, paint T-shirts and make Recycled Goods and to conduct workshops and Exhibitions and help students to have monetary gain from the same.

Soul Pepper – The Dramatics and Dance Club of PDPU

PDPU 59/269

The Soul Pepper is said to the most active club in PDPU. The Students work all throughout the year for some or the other activity. The Intra Events come up and then the inter college competitions all round the country. The club aims at developing the theater and performing are culture in the university.

VGA – Video Graphics Association, PDPU

The VGA is one of the oldest student organizations in PDPU that works with an objective to create a knowledge base and a platform for students to enhance and explore their creativity, ideas, messages, feelings, etc. The club develops short films. Also the club helps all other student organization in creating videos or covering the events.

CII - YI Net

- Young Indians (Yi) is an integral part of the Confederation of Indian Industry (CII), India's premier business association. CII initiated Yi with an objective of creating a platform for young Indians to realize the dream of a developed nation. The PDPU Yi net is formed to connect with other institutions and the industry through CII.
- Yi Net at PDPU is one of the active student organizations in PDPU. For the academic year 2012 13, Yi PDPU Net was awarded as Best Yi Net in Gujarat by CII.

Sorriso – The Photography Club

The aim of Photography club of PDPU is to increase skills, knowledge and ability in craft and art of photography in members of the club and also to cover all the events that take place in the University. Also the club provides the platform to all its members for showing their creativity by conducting various competitions.

Speculum – The Psychology Club of PDPU

The Psych Club provides opportunities for students who are interested in psychology to meet people with similar interests and to gain knowledge and experience in both the science and practice of psychology. By doing so, we are creating leaders for the future who have a psychological understanding of society and giving students valuable career development experience.

PDPU 60/269

49. State whether the program/ department is accredited/ graded by other agencies? If yes, give details.

UGC

This University has been established by an Act of the Gujarat Legislature, on 4th April, 2007. The University is recognized by UGC vide F.No. 9-17/2008 (CPP-L) dated 9th November, 2009. Moreover, the program is well recognized by the industry in terms of relevance, quality and earnestness to cater to the future.

SIRO

Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accord recognition to Pandit Deendayal Petroleum University (PDPU), Gandhinagar as Scientific and Industrial Research Organization (SIRO). On receiving this recognition PDPU is entitle to all such administrative support from the Ministry of Science and Technology (DSIR) as may be required on all issues to promote or encourage scientific research activities. Also the University will be entitled to avail the custom/excise duty exemption on the import of equipments, instruments, spares thereof, consumables etc. DSIR, a Government of India body that undertakes promotion of research and transfer of technology to India, carries out thorough evaluation of the R&D unit and ensures compliance with all the Government of India regulations before awarding renewals.

The recognition and duty waiver is awarded every three years.

As an extension to SIRO, Government of India, Ministry of Finance, Department of Revenue (Central Board of Direct Taxes), 35(1)(ii) Income Tax, has been granted to PDPU under which PDPU will get 175% income tax waiver on donations for scientific research. PDPU is the first university in India to receive such an approval.

ISO 9001:2008

PDPU has got ISO 9001:2008 certifications for Design, Development & Delivery of Higher Education Programs & Training

Association of Indian Universities

PDPU has been granted membership by the Association of Indian Universities.

PDPU 61/269

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

SPT contributes in generating new knowledge both basic and applied through various channels, such as Research & Consultancy, Expert Talks, Industry-Academia interaction, Skill Development programs, Trainings & Internships etc.

- SPT organizes Expert Lectures, Conclaves, Seminars and Workshops and also undertakes Projects in collaboration with industry. This helps the students in getting an update on the advances in the industry and the current practices. These sessions add value to the class room teaching and the students are exposed to the applications of the concepts taught in theory. Topics related to course curriculum where students need a better clarity are addressed in expert lectures by industry stalwarts. Organizing Conclaves, Seminars, Workshops for students, faculties, industry participants while keeping pace with recent trends and technologies in Oil and Gas sector makes the students and faculties aware of practices followed in industry and helps them in interacting and networking with professionals from industry and academics. This not only helps in overall development of students as well faculty members, but also makes the students aware of industry expectations, which in turn helps in making them not only employable but deployable as well. These sessions also helps the students as well as faculty members to gather and generate new knowledge.
- SPT faculty members take up joint research projects in collaboration with Industry. To name a few, currently Faculty members and B.Tech students from SPT are working on collaborative projects with companies like GSPC Gas, Shell Hazira LNG, etc. this helps the students in getting on-the job training and understanding.
- Special lectures of one week each are conducted every year by Petroskills/Shell Total on (a)
 Offshore Drilling (b) Reservoir Simulation. These lectures orient the students in acquiring knowledge on practical applications of theoretical concepts.
- SPT organizes Mock Interviews, Group discussions, seminars, Interaction programs for the students. Faculty members also conduct counseling sessions for students and also help them in designing and updating their resumes. In order to augment this, a credit course on Seminar is added in the curriculum in consultation with Board of Studies. The same has been ratified by FoET and Academic council. This course also helps in enhancing the overall personality development skills of students and in improving their presentation and orator skills.

PDPU 62/269

- SPT also conducts programs like Rural Internship, Industrial Orientation, Industrial Training and International Exposure Programs for students. The main objective of these programs is to expose students to grassroots realities, and also makes them aware of the harsh climates and adversities they might be facing on the job. The idea behind this is to develop a sensitized workforce in energy sector who are socially concerned and willing to positively contribute to the society. It also exposes students to various operations of oil and gas industry for enhancing their understanding about application of science and engineering principles studied in class.
- SPT also encourages students and faculties to carry out research projects and publish/present research papers at National & International levels. Attending conferences/workshops/seminars and training programs also helps faculties and students in acquiring new knowledge through networking with researchers, industry professionals and academicians. Students showing exceptional potential are also provided with Research Funds from the university, in order to procure lab equipments, conduct studies and attending trainings.
- The school has channels like Office of Research & Sponsored Projects (ORSP) that offer financial back up for the projects and ideas of students that are really worth. These types of programs help in adding new data and knowledge to the existing repository. This also creates a healthy competition among students and also encourages them to strive to be better. To highlight, SPT Students from 2013 batch Deep Joshi, Bhagya Bhardwaj and Harshil Saradva have filed a patent on "Pneumatically Operated Mechanical Bit using a Rotary Steerable System". The patent has been provisionally accepted (Indian Patent Application No. is 3733/MUM/2013). This is a unique work of its kind to improve the efficiency of the rotary system. This patent is a significant contribution to the prevalent Drilling technologies.
- SPT has signed some quality MoUs with leading industries and academic institutions on national and international level. SPT is also working in collaboration with many other companies and industrial bodies for student benefit.
 - Hazira LNG Pvt. Ltd., Ahmedabad for Shell Total Chair Professor ship
 - Institute of Seismology Research, Raisan for establishing academic & research collaboration and to share infrastructure facility/labs
 - Cairn India Ltd., Gurgaon for cooperation, collaboration, faculty development,
 reciprocal facilitation, guest lectures, internships, projects etc.

PDPU 63/269

- GSPC Gas for joint B.Tech student projects, internships and faculty development programs.
- Shell Hazira LNG for joint B.Tech student project
- O Joint stall by Shell Hazira LNG-PDPU was set up in ENERASIA, 2014 (A previbrant Gujarat event), where students from Downstream worked in collaboration with Shell Hazira LNG team. PDPU is also working in collaboration with Shell Hazira LNG for setting up a stall in Vibrant Gujarat, 2015.
- SPT has signed MoUs with renowned international institutes and universities, such as University of Tulsa, Georgia Institute of Technology, University of Houston. Students adapt to the practical challenges they encounter by finding mechanisms to help them cope with their new surroundings. The practices followed in these institutes, are adopted by students of SPT, during student exchange programs, which in turn helps them in gathering new knowledge and imbibes values in them.
 - University of Tulsa
 - ~ Consultation on curriculum and course content
 - ~ Opportunities for Joint research
 - ~ Exchange of undergraduate students
 - ~ Faculty participation in seminars and academic meetings
 - ~ Exchange of academic materials, publications and other information
 - ~ Joint quality assurance and benchmarking
 - Georgia Institute of Technology
 - ~ Opportunities for Joint research and educational activities
 - Exchange of undergraduate students
 - ~ Joint research projects completed
 - Students exchange program completed successfully
 - University of Houston
 - Opportunities for Joint research
 - Exchange of undergraduate students
 - ~ Students internship program completed successfully
- Faculty members of SPT also do consultancy in their domain of expertise. This helps in acquiring live data, which is used for student research projects. Enthusiastic students are also given an opportunity to assist and learn through active participation in such projects. Some of

PDPU 64/269

- the data are also used in tutorial sessions in courses, to give hand-on experience to students, with prior permission from the concerned authority.
- Sponsored research projects taken up by faculties also help in generating new knowledge base and creating integrated inter-disciplinary data repository.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- i. SPT has a good mix of earth scientists, upstream engineers and downstream engineers which caters the needs of the entire Oil & Gas value chain
- ii. Research groups that bring in projects from various funding agencies, which helps in adding funds and data to the existing repository
- iii. State-of-the-art laboratories with sophisticated equipments, existing and upcoming
- iv. Regular industry-academia interaction for knowledge and technology exchange
- v. SPT offers a program of Rural Internship, to strengthen understanding on concepts of rural development with specific reference to the Indian context.
- vi. Industrial Orientation & Industrial Training helps in skill development and holistic development of a student and also makes them aware of the challenges they might be facing on the job.
- vii. Wi-Fi connected classrooms with multimedia facilities for interactive teaching and learning
- viii. Providing Value based and Man-making courses for students
- ix. Understanding and encouraging faculties who counsel students and motivate them for overall development

Weaknesses

- i. To get experienced core Petroleum Engineers with doctorate degree
- ii. Volatility of Oil & Gas pricing has resulted in marginalization of this sector.
- iii. Limited skill development trainings for the supporting staff
- iv. Migration of faculties to other institutes/industries
- v. To get new faculties with prior experience in industry as well as academics

Opportunities

PDPU 65/269

- i. Constant encouragement and support from Govt. of Gujarat for student and faculty research and industrial exposure
- ii. Campus is well connected and placed in the Oil & Gas hub of the nation
- iii. MoUs with reputed National and International Universities, Industries and Research Organizations
- iv. Collaboration and recognition for research & development from Ministry of New
 & Renewable Energy (MNRE), a nodal Ministry of the Government of India for
 all matters relating to new and renewable energy
- v. Collaboration with ONGC Energy Centre (OEC). OEC functions under the aegis of the ONGC Energy Centre Trust and is a research and technology development centre, engaged in research of various renewable and clean energy options, specifically focusing on projects which have the potential to make an impact on India's energy scenario
- vi. Various funding agencies provide funds for many on-going research projects
- vii. SPT provides opportunities to students through its research arm, Office of Research & Sponsored Programs (ORSP), for research, publication, presenting papers and attending national and international conferences
- viii. Recognition from UGC, SIRO, ISO 9001:2008, AIU, Department of Revenue (Central Board of Direct Taxes), 35(1)(ii) Income Tax
- ix. Recognition from National and international professional societies such as SPE, Petrotech etc. for students as well as faculties
- x. Programs like Rural Internship, Industrial Orientation & Industrial Training provide opportunities to students to gain professionalism and make them industry ready

Challenges

- i. Getting experienced manpower with requisite skill set and specialization
- ii. Attracting fresh and motivated manpower with petroleum engineering background, because of disparity in pay structures in industry and academia
- iii. Providing domain specific campus placement to students due to downtrend in Oil& Gas Industry
- iv. In spite of a good industry-academia interaction, it is a challenge to bridge the gap between industry and academia in terms of providing practical skill sets

PDPU 66/269

- v. Generating technologically advanced talent pool for SPT
- vi. Providing campus placement opportunities to M.Tech students is a challenge, as industries have a mind-set of recruiting diploma and bachelor degree students.

52. Future plans of the department

The future plans of SPT are as follows:

a) Development of Man Power Skills

The School is striving very hard to develop manpower skills. The School inducts faculties who have shown demonstrated capabilities in the field of Petroleum Engineering. The School has made dedicated research groups and has plans to send faculties for exchange programs, seminars and workshops. The school plans to send its young faculties to the National & International Industries and Institutes to understand and work on practical projects.

b) Imparting world class education

The School has done quite well to train its students and make them suitable for industries locally. The School has plans to get international placement for students and make students globally employable. Chair professors are instituted in the School and efforts are on to have chair professors. The effort will bridge the gap between industry and academia.

c) Development of new laboratories

- SPT believes in an application based teaching approach rather than a theoretical approach. Practical study is required along with classroom study to understand the concepts properly as well as to develop skills for applying the conceptual knowledge in the real world. In line with this belief SPT has set up state-of-the-art Lab Facilities for the students where they not only perform experiments designed based on the theoretical studies, but are also provided a platform to take up research studies as well. By performing experiments in Laboratory, students get a hands-on experience on equipments.
- SPT has identified Key Areas for development of labs, which is a continuous process.
 Some of the point highlighted below have been achieved and some are ongoing:
 - Safety Training to Lab assistants, students, faculty members and researchers
 - o Design of New Experiments
 - Preparation of New Lab Manuals

PDPU 67/269

- Updation of Old Lab Manuals
- o Procurement of New Sophisticated Lab Equipments
- o Training to Lab Assistants
- Induction of Lab Assistants in upcoming labs

SPT has developed over the years state-of-the-art laboratories not only for student experiments but also for research and consultancy. In the upstream sector we would like to add two more laboratories in the fields of: (i) Reservoir Characterization and Stimulation and (ii) Drilling and Stimulation. Efforts will be made to add more licensed student software's such as Crystal ball, Seis vision, MBal, Petrel-RE, HTRI, etc. This will enable the students to make inroads in the world of work, with due confidence and competence.

- Reservoir Characterization Lab is being planned. Space has been allocated for the same.
- SPT is setting up a state-of-the-art Drilling and Stimulation Lab for the growth of the university and research scholars. The lab is being set up with assistance received from Department of Petroleum, Government of Gujarat.

Drilling is the backbone of exploration and development activities in E&P industry. Development of the knowledge base in drilling is one of the most important reasons for conceptualization of the lab and research activities. Stimulation is the technique which improves upon the productivity of the oil & gas wells and enhances the overall recovery of the field. The objective of setting up the Drilling and Stimulation Lab at SPT is to provide a platform for Academia-Industry relation to fulfill the requirements of oil & gas operational activities and to work in tandem with industries in and around for R&D activities. This will help in designing suitable job operations under simulated conditions in oil field reservoirs which is the need of the day for students, researchers and scholars.

d) Excellence in Applied Research and Consultancy

The school has already developed the Centre of Excellence in Geothermal Energy. Multi disciplinary research is in progress and the Centre will strive to generate electrical energy from geothermal sources. The thermal energy of earth can be utilized for domestic heating cooling applications with the help of ground source heat pumps. The school has practiced the principle of research core groups and some other thrust areas evolved for future growth. These are Shale Gas Research, Ichnofabric studies and Drilling and Stimulation. Preliminary work on experimental basis is in progress. The school encourages consultancy work and has focused consultancy in the area of hydrocarbon reserve valuation in the

PDPU 68/269

upstream sector. The infrastructure for the same already exists but needs further augmentation in the future. The other sector in which the school will focus will be seismic interpretation and petrophysical evaluation. The school has dialogues with small and medium scale industries for collaborative works.

The school will also encourage and support faculties and researchers in filing and getting patents.

e) Improvement in Library Resource

A good library is the store house of knowledge for any school. In the last seven years the School added books mostly in the upstream sectors both in hard and soft forms. From the last year collective efforts are made to improve our collection in downstream sector also. The School targets to double this effort in the next three years.

f) Choice Based Credit System

Choice based credit system is being implemented from 2015-16. Students will be offered a basket of courses at school level as well as FoET level. Students will be able to choose from a variety of courses termed as Electives offered by the concerned school and FoET, with variable credits.

g) Accreditation to School

SPT is striving to seek Accreditation for all programs (UG and PG) by concerned bodies. In the near future, SPT will also try to seek accreditation for laboratories of school by agencies like National Accreditation Board for Testing and Calibration Laboratories (NABL).

h) Student Research Projects

As a part of research venture of SPT, certain guidelines are given to students as well as faculties for monitoring the quality of student research projects. B.Tech/M.Tech projects are the foundation of the school research and require proper monitoring and mentoring. SPT has constructed panels for review & monitoring of Undergraduate & Postgraduate Student Research Projects with publications envisaged and IPR. M.Tech students have been given a mandate of publishing at least one research paper based on the outcome of their respective projects. Faculties are also being encouraged to generate resource from industry and academia for facilitating student research, development of labs, and developments of centers of excellence. SPT also encourages students to publish and present papers at national & international levels with a proper scrutiny of various research ideas.

PDPU 69/269

i) Training Programs

SPT is planning to conduct training programs for staff on soft skills, personality development, basic introduction to petroleum engg., and MS Office. Faculty members will also be encouraged to undergo trainings on soft skills, personality development, MS Office, Research Methodology. SPT has state-of-the-art laboratories with skilled Lab Assistants. Skilled/Experienced lab assistants will be stationed or inducted in each lab and proper training will be imparted to lab assistants. SPT will also organize Skill Development programs for faculty and staff and Group Dynamic sessions for faculty members and staff to help in group projects.

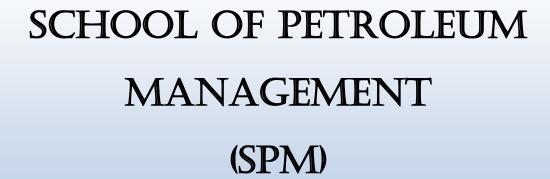
j) Publications

In the recent past, publications in SPT have improved a lot. Faculty members are working in varied areas of research such as Shale gas exploration and exploitation, ichnofabric studies, reservoir characterization, Geothermal exploration and exploitation, Extraction of thermal energies from Low Enthalpy reservoirs, City Gas Distribution, Sequence Stratigraphy and Biofuels production and kinetics. In the past one year, 13 research papers have been presented in national and international conferences by SPT faculties; and some have already been accepted for publication. SPT faculty members have published 11 research papers in reputed and peer reviewed national and international journals. 5 papers are already in press or under review, to be published in reputed journals. Since its inception, SPT faculty members have published over 47 research papers in reputed national and international journals; and presented over 40 research papers in national and international conferences/seminars.

One book on City Gas Distribution and another on Ichnology are under preparation by SPT faculty members.

SPT will keep on improving the rate of paper publication.

PDPU 70/269



PDPU 71/269

1. Name of the Institute

School of Petroleum Management - SPM

2. Year of establishment:

'School of Petroleum Management' (SPM), earlier known as 'Institute of Petroleum Management Gandhinagar' (IPMG), was established in the year 2006.

3. Is the Department part of a School/Faculty of the university?

School of Petroleum Management is a constituent of 'Pandit Deendayal Petroleum University' (PDPU)

4. Names of programs offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.).

Postgraduate Programs:

- Master of Business Administration (Full-time)
- Post Graduate Diploma in Petroleum Management Executive (PGDPM-X) (Part-time)

Doctoral Programs:

- Ph. D. in Management (Full-time)
- Ph. D. in Management (External)

5. Interdisciplinary programs and departments involved:

Nil (Management is as such interdisciplinary programme with offers courses in Economics, Psychology, Quantitative Techniques etc.)

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

PDPU at present is not offering any formal degree programs and would like to do the same as per the guidelines of UGC/AICTE. However, PDPU interacts with several Universities abroad through M.O.U's signed for training, study abroad, and summer internships, the details are as under.

PDPU 72/269

Sr.	MoU with	Objectives	Date of	Period
No.			Signing	of MoU
1	University of Wollongong, Australia	Students from PDPU can participate in the Study Abroad Program UOW & programs at its college including English & Summer (Exposure program).	28.04.14	5 Years
2	University of Toronto, Canada	 Joint research/publications Student mobility such as Internships, study abroad and fellowships. Exchange of faculty, trainee and staff Participating in, & co-hosting of lectures, meetings, seminars, conference. Joint application for funding for collaborative projects from relevant funding agencies. Collaboration in other areas that foster research and educational cooperation. 	05.02.14	5 Years
3	University of Manitoba, Canada	To facilitate the practical training & graduate study of PDPU students in UM Faculty of Engg.	05.02.14	5 Years
4	University of Bahrain, Bahrain	 Exchange of Faculty and Students Joint research activities Participation in seminars and academic meetings Exchange of academic materials and other information Special short term academic programmes Exchange of Administrative Managers/Coordinators Joint cultural programmes 	21.02.14	3 Years
5	National Mineral Resource University, Russia	 Joint Educational and Research Activities Exchange of Academic materials and academic publications Exchange of faculty members for research. Lectures and discussions Exchange of students and research 	09.01.13	5 Years

PDPU 73/269

Self Evaluation Report – Volume II				
Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
6	University of Saskatchewan, Canada	 To exchange information on research and educational programmes To exchange information on teaching, learning material and other literature relevant to their educational and research programmes To jointly organize short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate, therein. To jointly propose and engage in research or training programmes sponsored by funding agencies and to invite each other's faculty to participate therein. To exchange, on a reciprocal basis, faculty and students for limited periods of time purpose of education and /or research 	10.01.13	5 Years
7	ICCC (Indo Canada Chamber of Commerce)	Opportunity to work for one month in India or in Canada to SLS Students	12.01.13	5 Years
8	Texas A & M University, USA	 The exchange of faculty for joint teaching and research programs Encouraging the enrollment of qualifies students in the other's academic programs Avenues for strengthening their relationship and furthering excellence in US and Indian education The development of a more detailed Program Agreement. 	16.01.13	5 Years
9	University of Manitoba, Canada	 Development of mutually beneficial academic programmes and courses Coordination of academic staff mobility for purposes of teaching, research and training Coordination of student mobility 	06.02.13	5 Years

PDPU 74/269

Sr.	MoU with	Date of	Period	
No.	Wild with	Objectives	Signing	of MoU
		 programs for study and research Coordination of academic activities such as joint research, publications and symposia. Exchange of documentation and research materials in fields of mutual interest provided that, to the best knowledge of the respective institutions, there is no publications at law or otherwise against the exchange and; Other activities considered by the parties to be of benefit to each party's education and research programs. 		
10	Edith Cowan University, Australia	 To develop study tours To develop collaborative research projects Staff presentations Delivery of external units of PDPU's students Delivery of articulation arrangements in the areas of Psychology, IT, Business, Communication and Engineering. 	13.03.13	3 Years
11	Edith Cowan University, Australia	To promote joint education and student mobility by enabling the Home Institution to send its student abroad to undertake a program of study with the Host Institution.	27.10.13	5 Years
12	Memorial University of Newfoundland, Canada	 Exchange of Faculty Members Undergraduate and graduate student mobility Exchange of publications, research material, newsletters etc. Joint projects related to research, 	31.12.13	5 Years

PDPU 75/269

teaching and faculty developmentDevelopment of joint initiatives with partner institutions, including joint

Self Evaluation Report – Volume II	Self Eva	luation	Report -	Volume II
------------------------------------	----------	---------	----------	-----------

Sr.	MoU with	Objectives	Date of	Period
No			Signing	of MoU
		 collaborative degree programmes Opportunities for full- degree fee paying undergraduate/ graduate study. 		
13	University of Trinidad & Tobago	• To promote advancement in the quality of education delivered to students at the respective institutions through collaborative activities and exchange among faculty, students and staff, the sharing of teaching and laboratory facilities and the development of a framework for articulation between the programmes of the respective institutions.	10.01.12	3Years
14	University of Alberta, Canada	 Mobility of Faculty/staff/ students / graduate and undergraduate. Collaboration on graduate programming, including the cosupervision of graduate students. Joint research activities and publication Participation in seminars and academic meetings Exchange of academic materials and other information Special short- term academic programs. 	12.10.12	5 Years
15	ICBC (Indo Canada Business Chambers) & SLS (School of Liberal Studies)	 SLS - PDPU will offer to its students, an opportunity to work for one month in an Indo Canadian Company either in India or in Canada. This offer will be valid for all the students, studying in any year. ICBC - Gujarat will identify the Indo Canadian company & facilitate the offer for one month work to SLS - PDPU students 	12.10.12	
16	University of	• Joint Research & Development	30.10.12	3 Years

PDPU 76/269

Sr	. MoU with	Objectives	Date of	Period
No).		Signing	of MoU
	Wollongong, Australia	 Activities Participating and co-sponsoring of International conferences, seminars, workshops and academic meetings. Academic visits and incorporating short and long term visits of research and teaching staff. Participation of students in "International exchange and cultural educational programs of a short term nature Options for collaborative programs at undergraduate and post graduate levels Facilitation in admission of graduate and doctoral program in respective Universities for interested students in interested course offered at Institute. 		
17	Seneca College, Canada	 To establish Specific educations relations and cooperation between the two Universities in order to promote academic linkages and to enrich the understanding of culture of the two countries. To organize Student Abroad (Summer) Programs 	09.11.12	5 Years
18	3 University of Western Ontario	 Exchange of Faculty for joint teaching and research programs Encouraging the enrollment of qualifies students in other academic programs Avenues for strengthening their relationship and furthering excellence in Canada and Indian Education The development of an official MOA or Program Agreement 	10.01.11	1 Year
19	University of Saskatchewan, Canada	 To exchange information on research and educational programmes To exchange information on teaching, learning material and other literature relevant to their educational and 	10.01.11	5 Years

PDPU 77/269

Sr.	MoU with	Objectives	Date of	Period
No.			Signing	of MoU
		 research programmes To jointly organize short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate, therein and also seminars, conferences, workshops, training programmes on topics on mutual interest. To exchange, on a reciprocal basis, faculty and students for limited periods of time purpose of education and /or research 		
20	Mewborne School of Petroleum & Geological Engineering, University of Oklahoma	Promote Education and research on Shale Gas	10.01.11	2 Years
21	Ministry of Infrastructure Republic of Rwanda	 Possibilities to admit students Rwanda in PDPU on mutual understanding subject to terms and conditions of national statutory bodies. The development of an official Memorandum of Agreement at a later date within next two months with the Ministry of Education. 	13.01.11	5 Years
22	University of Regina, Canada	 Joint educational and research activities Exchange of academic materials and academic publications Exchange of faculty members for research, lectures and discussions Exchange of students for study and research 	25.05.11	5 Years
23	University of Regina, Canada	• To establish student exchange programs	03.10.11	5 Years
24	Mewbourne	Promote Education and research	12.01.10	Expired

PDPU 78/269

S	r. MoU with	Objectives	Date of	Period
N	[o.	, and the second	Signing	of MoU
	School of Petroleum & Geological Engineering, University of Oklahoma and Gujarat State Petroleum Corporation Ltd.	energy.		
2	Corporation Etc. 25 Georgia Tech Research Corporation	 In respect to the transmission of Propriety information exchanged between PDPU and GTRC. 	23.07.10	5 Years
2	Texas A&M University System, USA	Faculty exchange for research, teaching/ encouraging enrolment of qualified students/ avenues for strengthening relationship & furthering in US & India education	14.08.10	
2	Georgia Institute of Technology, USA	 Creation of Centre of Excellence in energy education & research Collaboration to enhance international experience faculty & students in various areas. Innovative programmes 	21.09.09	2 Years
2	University of Houston System	 To contribute further to the regional understanding between US and India, both cities, Gandhinagar and Houston and both Universities. Through mutual cooperation programs. To further collaboration between UHS and PDPU through academic programs in instruction, research and faculty development among faculty and students of both institutions. To enhance the International experience of faculty and students in the areas of: Research Joint Programs and Collaboration Exchange of Faculty and students 	29.10.09	5 Years

PDPU 79/269

Sr.	MoU with	Objectives	Date of	Period
No.			Signing	of MoU

7. Details of programs discontinued, if any, with reasons

15 Month Full Time Executive MBA has been temporarily suspended for revision and restructuring as recommended by an expert committee.

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

Trimester- for Postgraduate Programs

Semester- for Doctoral Programs

MBA Programme has full and half credit courses. Full credit courses have 30 hours of class room interaction while half credit courses have 15 hours of class room interaction. Each course has multiple components to evaluate the student's performance. The components are quizzes, mid-term examination, end term examination, projects, assignments etc.

Post Graduate Diploma in Petroleum Management – Executive (PGDPM-X) (Part-time) programme has about 10.5 hours of class room interaction per course. The evaluation is through module end examination, quizzes, assignments etc.

For both the courses weightage of each component is decided keeping in view the course learning objectives.

Doctoral programme has three courses and comprehensive before the thesis work starts. The course work is decided by the supervisor in consultation with the candidate based on the interest area of the candidate.

From academic year 2015-16, PDPU adopted Choice Based Credit System (CBCS) which is a flexible mode of learning that permits students to-

- 1. Choose electives from a wide range of elective courses offered by the University departments,
- 2. Adopt an inter-disciplinary approach in learning, and
- 3. Make best use of the expertise of available faculty.

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his/her courses by the concerned instructor, based on his/her performance in midsemester examination, end-semester examination, quizzes, tests, assignments, tutorials,

PDPU 80/269

Self Evaluation Report – Volume II

laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

9. Participation of the department in the courses offered by other departments

- Faculty members of the institute serve as visiting faculty at other departments/institutes
- Faculty members are appointed as research expert in the Doctoral Review Committees of research scholars of other departments/institutes

Number of teaching posts sanctioned, filled and actual (Professors/AssociateProfessors/Asst. Professors/others)

Name of the post	Sanctioned post	Filled Post	Actual
Chair Professor	1	1	1
Professor Emeritus	1	1	1
Professor	1	2	2
Associate Professor	3	5	5
Assistant Professor	5	2	2
Lecturer		1	1

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name of Faculty	Qualification	Designation	Specialization	Experien ce	No. of Ph.D/M.P hil.studen ts guided for the last 4 years
Prof. Hemant Trivedi	Ph. D.	Professor and Director	Strategic Management, Marketing, Brand Management, Retail Management	32 years	5 Ph. D. under progress
Prof. Somdeb Lahiri	Ph. D.	Professor	Microeconomics, Game theory, Mathematical methods for economics	28 years	Nil
Prof. Pramod	MBA; Ph. D.	Professor	Marketing/ Energy	24 years	2 Ph. D.

PDPU 81/269

Paliwal			Sector		guided and 2 under progress
Dr. Sudhir Yadav	Ph. D.	Associate Professor	International Business Strategy, Operations Management, Marketing Management	24 years	5 M. Tech. Thesis guided and 2 Ph. D. under progress
Dr. Tanushri Banerjee	Ph. D.	Associate Professor	Information Systems and Decision Science	21 years	Nil
Dr. Subrat Sahu	MBA; Ph. D.	Associate Professor	Marketing	20 years	Nil
Dr. Ashutosh Muduli	Ph. D.	Associate Professor	Human Resource Management	19.5 years	5 Ph. D. under progress
Dr. Satish Pandey	Ph. D.	Associate Professor	Organizational Behaviour & HRM	19 years	2 Ph. D. under progress
Mr. Lalit Khurana	M.Com. MA, MBA, PhD (Thesis Submitted)	Assistant Professor	Conceptual - Management Control Sectoral – Power Sector	19 ¹ / ₂ year	Nil
Dr. Akash Patel	M. Com.; Ph. D.	Assistant Professor	Accounting and Finance	16 years	8 Ph. D. under progress
Mr. Kaushal Kishore	MA; MMM; Ph. D. (Thesis submitted)	Lecturer	Marketing of Petroleum Products Energy Policy Brand Management	5 years	Nil

12. List of senior Visiting Fellows, Adjunct Faculty, Emeritus Professors

Name	Qualification Visiting Fellows/A	
		Faculty/Emeritus Professors
Prof. D. M. Pestonjee	D. Lit.; Ph. D.	Chair Professor
Prof. C. Gopalkrishnan	Ph. D.	Professor-Emeritus

School of Petroleum Management has adequate number of full-time faculty. However as a value addition and in order to bring in the latest and best professional inputs for students, professionals of various disciplines from relevant industries are invited to deliver courses.

Name of Visiting Faculty	Qualification	Organization/Institute association
A. B. Raju	B.Tech, PGDRM	Biz Trans Consulting
A. Khandual	M. A.	Banking Industry Professional

PDPU 82/269

Ajay Das	BE, MBA	Adani Welspun Exploration Ltd.
Ajit Desai	BE	Project Management Professional
Ankit Sanghvi	CFA, FRM	CARE Ratings
Ashish Verma	Masters in	Shell
	Management	
Ashwani Kumar	B. Tech.	CEPT University
Bharati Pathak	Ph. D.	School of Commerce, Gujarat
		University
Capt. Sarabjit Butalia	Masters of Science	Consultant
	in Maritime Affairs	
D. G. Shukla	LL. M.	Legal Expert-Gujarat High Court
D. K. Banik	M. Tech.	POGL Institute, Guwahati
Deepak Krishnan	MBA	IBS
Dhiren Desai	B. Tech.	Natural Gas Industry Professional
Divyesh Desai	BE, MBA	Shell
H. C. Shah	M. Com. LL. B., CS	Sadbhav Engineering
Jayesh Joshi	MBA	Claris Otsuka Limited
M. S. Satsangi	M.Sc., PGDOM	Operations Professional
Mahesh Chaudhary	MBA	Gujarat National Law University
N. Garimella	Ph. D.	3i Infotech Ltd.
Pankaj Jain	MBA	Cairn India
Pinky Desai	Ph. D.	St. Xavier's College
Ravi Gor	Ph. D.	Dr. Babasaheb Ambedkar Open
		University
Romit Kalra	MBA	Entrepreneur, Global Possessing
		Solution
Ruchi Tiwari	Ph. D,	Ahmedabad University
Samarth Kaji	MBA	Cairn India
Samir Pingle	Ph. D.	Nirma University
Satya Acharya	Ph. D.	Entrepreneurship Development
		Institute of India
Sujata Dalai	B. Sc., CPA	Finance Professional

PDPU 83/269

Taral Pathak	CA	Ahmedabad University
Yogesh Joshi	Ph. D.	G. H. Patel Institute of Business
		Management, VV Nagar

13. Percentage of classes taken by temporary faculty – program-wise information

Industry specific and specialized elective courses in the second year are delivered by visiting faculty. About 40% courses are delivered by visiting faculty.

14. Program-wise Student Teacher Ratios

Name of Program	Total no. of students	No. of teachers	Student-Teacher
	enrolled		Ratio
MBA	190	12	17.5:1
PGP 13 and PGP 14			
PGDPM-X	21	12	17.5:1
2013 and 2014 batch			

We have large number of visiting faculty members coming from industry who deliver industry specific course and specialized elective courses in second year. About 40% of the courses are offered by visiting faculty in both the programmes.

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Sanctioned post		Filled Post		Actual	
Administrative	Technical	Administrative	Technical	Administrative	Technical
3	1	8	1	8	1
			Out-		Out-
			sourced		sourced

16. Research thrust areas as recognized by major funding agencies

• Energy Efficiency; Funding Agency: Institute of Energy Economics, Japan

PDPU 84/269

Self Evaluation Report – Volume II

- Strategic Review; Funding Agency: Gujarat State Electricity Corporation Ltd.
- Strategic Human Resource Management; Funding Agency: Gujarat State Electricity Corporation Ltd.
- 17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Nil

- 18. Inter-institutional collaborative projects and associated grants received
 - a) National collaboration b) International collaboration

A collaborative project titled "Promoting Energy Savings in India's Transportation Sector" is going on with Institute of Energy Economics, Japan. Associated grant received is Rs.18 lacks.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

None

- 20. Research facility / centre with
- state recognition
- national recognition
- international recognition

National Recognition: Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accorded recognition to Pandit Deendayal Petroleum University.

21. Special research laboratories sponsored by / created by industry or corporate Bodies

PDPU 85/269

Not applicable

22. Publications

SPM faculty members have published research papers in national & international journals, chapters in edited books, monographs, case studies and articles in business magazines, newspapers. SPM faculty members regularly present their research papers in national and international conferences. Detailed information are as follows:

 Number of papers published in peer reviewed journals/conferences (National / International): 108

Books with ISBN with details of publishers: 2

- 1. Pestonjee, D.M. and <u>Pandey, S</u>. (2013). *Stress and Work: Perspectives for Understanding and Managing Stress*, Sage: New Delhi. (ISBN: 978-8-132-11088-0;
- 2. Paliwal Pramod, Singh Ramendra and Yadav Sudhir (2013), Cases in Business Marketing (2013), McGraw Hill Education, ISBN-13: 978-1-25-902656-6
- Number listed in International Database (For e.g. Web of Science, Scopus,
- Humanities International Complete, Dare Database International Social Sciences Directory, EBSCO host, etc.): 23
- Citation Index range / average: (Range:5-119; Average: 1.37)
- SNIP: 0
- SJR: 0.25
- Impact Factor range / average: 0.25-0.91
- h-index: 1-4
- 1. Trivedi, Jignesh and Muduli, Ashutosh, 'The Role of National Culture on Recruitment Methods and Outcomes: A Conceptual Study', in Transforming HR: Creating a Culture for Change and CSR, proceedings of the 18th Nirma International Conference on Management-8-10 January, 2015, pp-48-63.ISBN-978-93-84869-09-0
- 2. Muduli, Ashutosh, 'High Performance Work System, HRD Climate and Organizational Performance: An Empirical Study', European Journal of Training and Development, Vol. 39, Issue 3, p 239-257. 2015 (Emerald Publications)
- 3. Muduli, Ashutosh, 'High Performance Work Practices, HRD Climate and Organisational Performance: Evidence from Power Sector of Gujarat, India' in Excellence in HRD for sustainable growth, 2013 proceedings of the International HRD Conference, Mauritius, October, 2013, ISSN-1694-2140

PDPU 86/269

- 4. Muduli, Ashutosh, 'Workforce Agility: A Review of Literature', The IUP Journal of Management Research, Vol. XII, No. 3, 2013(Indexed in EBSCO & SSRN)
- 5. Muduli, Ashutosh, 'Business Strategy, Strategic HRM, HR Outcome and Organizational Performance: Evidence from an Indian industry', *Global Management Journal*, Vol.4, No.1/2, 2012 (Indexed in EBSCO)
- 6. Muduli, Ashutosh, & Sharma, Ruchika, Work Culture of Private Sector Banks in India, *The Indian Journal Of Business Administration*, Vol. 8, 2012
- 7. Muduli, Ashutosh, Datta, Saroj, & Verma, Sunita, "High performance human resource management practices and organizational performance: study of a public sector telecommunication company of India", in *Building New Business Model for Success through Competitive and Responsibility, 2012 proceedings of the 5th Annual EuroMed Conference* of the EuroMed Academy of Business, 2012, EuroMed Academy Press, Montreux, Switzerland, 2012, pp. 1163-1173..
- 8. Muduli, Ashutosh, & Kaura, Vinita, 'Southwest Airlines Success: A Case Study Analysis' in *BVIMR Management Edge*, Vol.4, No.2, July-December, 2011(Indexed in EBSCO)
- 9. Muduli, Ashutosh, Datta, Saroj, & Verma, Sunita, 'Employee Engagement Practices in Selected Banks of Sikar District, Rajasthan' in *Dharohar-International Management* Journal, Vol.I, Issue I, March, 2011
- 10. Muduli, Ashutosh, 'Performance Based Reward and National Culture: An Empirical Evidence from Indian Culture' in *Synergy: Journal of Management*, Vol. IX, Issue 1, pp.1-13, January, 2011(Indexed in EBSCO)
- 11. Muduli, Ashutosh, 'Exploring the Characteristics and Facilitators of Six Sigma Culture' in *Personnel Today, Indian Journal of Personnel Management*, Vol. XXXI, No 3, October-December, 2010
- 12. Muduli, Ashutosh, & Kaura, Vinita, 'Suitability of Instruction Methodology in Informative Management Course: An Empirical Study' in *Indian Journal of Industrial Relations*, Vol. 6, No. 2, October, 2010, pp.259-272. (Indexed in JSTOR, EBSCO & PROQUEST)

PDPU 87/269

Self Evaluation Report – Volume II

- 13. Muduli, Ashutosh, 'Empowering Leadership: Functions and Behaviours' in *B Smart-Journal of International School of Business*, Kolkota, Vol. 1, Issue 2, April-June 2010, pp 42-45.
- 14. Muduli, Ashutosh & Pestonjee, DN, 'HR Issues in Upstream Oil and Gas Industry of India: Some Reflections', *Management of Petroleum Sector*, Excel India Publishers, March, 2010
- 15. Muduli, Ashutosh, 'Understanding the Critical Attributes of Workforce Agility and Exploring it's Determinants: An Empirical Study' in *Manpower Journal*, Institute of Applied Manpower Research, Delhi, Vol. XLIV, No. 3, July-September, 2009 (Indexed in EBSCO)
- 16. Muduli, Ashutosh, 'Developing Corporate Entrepreneurship through Achievement Motivation Training: A University level study' in *The ICFAI Journal of Organisational Behaviour*, ICFAI University Press, July, 2009, Vol.33, No.3, pp.354-372. (Indexed in EBSCO & SSRN)
- 17. Muduli, Ashutosh, 'Empowerment in the Indian Steel Industry, A Plant Level Study' Submitted to *Journal of IT and Management*, Maharaja Agrasen Institute of Management and Technology, Jagadhiri, Haryana, April, 2009.
- 18. Muduli, Ashutosh, 'Exploring the Determinants of Empowerment Climate in Indian Industry' in *Management and Labour Review*, Sage Publications, Vol.33, No.3, August, 2008, pp.354-372.
- 19. Muduli, Ashutosh, 'Quality Performance in Knowledge Based Organisations: HR Perspective' published in *Global HR Practices*, Pondicherry University, 2007, pp 249-284.
- 20. Sudhir Yadav and Suresh Vaghasiya (2010), "Supply Chain Management: A Case Study of Service Provider Firm for Exploration Activities in Petroleum Sector", International Journal of Business Research (IJBR) ISSN 1555-1296, Volume 10, Number 5, 2010
- 21. Yadav, Sudhir et.al. (2010) "City Gas Distribution: Infrastructure and Operations Perspective" Vikalpa- The Journal of decision Makers (ISSN 0256-0909), Volume 35, Number 4, 2010
- 22. Yadav Sudhir and Paliwal Pramod (2011), "Re-Engineering Service Delivery Process: Case of a Natural Gas Utility", Journal of Services Research (JSR) ISSN 0972-4702, Vol. 11, No.2, Oct 2011 to March 2012

PDPU 88/269

- 23. Sudhir Yadav (2011) "Selection and Implementation of Enterprise Resource Planning (ERP) System in Indian Oil and Gas Firms", Journal of International Management Studies (ISSN 1690-2140), Vol. 11, Number 1, 2011
- 24. Sudhir Yadav et.al. (2012) "Retail Mix Elements: A Study of Indian Market", Journal of International Business and Economics (ISSN: 1544-8037), Volume 12, Number 2, 2012
- 25. Dixit, M.R. and Yadav, S. 'Capability portfolio for the initial phase of internationalisation of emerging economy firms: a study in the Indian pharmaceutical industry', *Int. J. of Business and Globalisation (ISSN 1753 3627, Inderscience Journal)*, Vol. 10, Issue 4
- 26. Sudhir Yadav, (2013) "Building regulatory capabilities for pharmaceutical firms' internationalization", International Journal of Pharmaceutical and Healthcare Marketing (ISSN 1750-6123, Emerald Journal), Vol. 7, Iss: 1, pp.58 74
- 27. Debasis Sarkar and Sudhir Yadav "Combines interpretive structural modeling and expected value method approach for managing project risks in oil exploration project", International Journal of Decision Sciences, Risk and Management (ISSN 1753-7177, Inderscience Journal), Vol.5, No.1, 2013
- 28. Sudhir Yadav and Gargi Sojitra "Supply Chain Management in Flyover Projects in India", Journal of Construction in Developing Countries (ISSN No. 1823-6499, Journal Published by USM, Malaysia), Vol. 20, Issue 1, 2015.
- 29. Mukund Dixit and Sudhir Yadav, "Motivation, Capability Handicaps and Firm Responses in the Early Phase of Internationalization: A Study of Indian Pharmaceutical Industry", Journal of Global Marketing (ISSN No. 0891-1762, Rout ledge / Taylor and Francis Journal), Vol.28, Issue 1, 2015.
 - 30. Paliwal, Pramod (with Sakariya, Sanjay) "Innovative Micro Energy Solutions: Cases from India" *The Case Centre*, *UK*; 2014 [Reference no. 314-150-1]
 - 31. Paliwal, Pramod, "Consumer Behavior towards Alternative Energy Products: A Study"; *International Journal of Consumer Studies*; Volume 36 Issue 2 March 2012; ISSN 1470-6423; Wiley Blackwell.
 - 32. Paliwal, Pramod (with Singh, Ramendra) "Interaction of customers' value appraisals and suppliers' value propositions in developing new services and relationships; a case study from the natural gas industry"; *International Journal of Energy Sector Management*; Vol. 6 No. 2, 2012; ISSN: 1750-6220; Emerald.

PDPU 89/269

- 33. Paliwal, Pramod (with Yadav, Sudhir) "Re-engineering service delivery process: Case of a Natural Gas utility" *Journal of Services Research*; ISSN: 0972-4702; Vol. 11 No. 2; October 2011
- 34. Paliwal, Pramod "Legal tangle in institutional selling: Case of gas distribution company" Oil, Gas & Energy Law Intelligence; ISSN 1875-418X; Vol. 9 issue 5; October 2011
- 35. Paliwal, Pramod (with Singh, Ramendra, & Sakariya, Sanjay) "Prabhar Oil Company and Distribution Challenges in the Indian Lubricants Industry" (Emerging Market Case Studies; Emerald; ISSN: 2045-0621);2011
- 36. Paliwal, Pramod (Principle Author & Coordinator) *Colloquium* City Gas India Roundtable 2010: Initiatives and Challenges; VIKALPA; ISSN: 0256-0909; Volume 35 NO 4 October December 2010
- 37. Paliwal, Pramod (with Sakariya, Sanjay) "Barclays Bank in India: Innovative Retail Banking Growth Strategy" *European Case Clearing House (ECCH)*, 2010 [Ref. No. 510-080-1]
- 38. Paliwal, Pramod (with Sakariya, Sanjay) "Radio Taxis in India: Revolutionizing Transportation System?" *European Case Clearing House (ECCH), 2010* [Ref. No. 310-143-1]
- 39. Planken, B., Nickerson, C., & Sahu, S. (2013). CSR across the Globe: Dutch and Indian Consumers' responses to CSR. International Journal of Organizational Analysis, 21 (3), 357-372, Emerald Publishing, ISBN: 1934-8835.
- 40. Sahu, S. & Singh, V. (2013). Natural Gas Business and Market in India, International Journal of Chemical Engineering and Applications, Vol. 4, No. 1, February 2013, pp. 35-37, National University of Singapore (NUS), Singapore, International Association of Computer Science and Information Technology Press (IACSIT Press).
- 41. Sahu, S., & Parekh, K. (2012). Determinants of Economies of Scale and their Influence on the Oil & Gas Services: A Discussion, Review of Integrative Business and Economics Research, 1 (1), 246-259.
- 42. Kar, S. Kumar and Sahu, S. (2012). Managing Natural Gas Business: A Case of Bharat Natural Gas Company Limited, Emerald Emerging Market Case Studies, Emerald Group Publishing, 2 (1), 1-22. ISBN DOI 10.1108/20450621211214450

PDPU 90/269

Self Evaluation Report – Volume II

- 43. Planken, B., Sahu, S., & Nickerson, C. (2010). Corporate Social Responsibility communication in the Indian context. Journal of Indian Business Research, 2 (1), 10-22, Emerald Publishing, ISBN: 1755-4195.
- 44. Sahu, S., & Desai, D. (2008). CRM Change Management in an Emerging Country Context: An Exploratory Study in India, Global Journal of Flexible Systems Management, 9 (2), 41-54.
- 45. Nickerson, C. & Sahu, S. (2010). "CSR, cluster groups and stakeholder engagement in the Indian context: Towards sustainable governance structures", In C. Jayachandran, M. Thorpe, R. Subramanian, V. Nagadevara (Ed.) Business clusters: Partnering for strategic advantage, (pp. 170-192). London: Taylor & Francis.
- 46. Zalzala, A., Chia, S., Zalzala, L., Sahu, S., Vaghasiya, S. and Karimi, A. (2012). "Rural E-Health Infrastructure Development", In Mohamed K. Watfa (Ed.) E-healthcare Systems and Wireless Communications: Current and Future Challenges, (pp. 179-209). U.S. A.: IGI Global. ISBN 978-1-61350-123-8 (h/c) -- ISBN 978-1-61350-124-5 (eISBN) -- ISBN 978-1-61350-125-2.
- 47. Patel Akash, Kiri Rajeshkumar, A Review of Factors Affecting Individual Investors' Sentiment towards Equity Market, International Research Journal of Business and Management- IRJBM, ISSN: 2322-083X, Vol. 3, Issue 10, August 2015
- 48. Patel Akash, Akash Engineering Ltd.: The Turnaround Story, Prestige Journal of Management and Research, Volume 10, Number 1 & 2, April/October 2006
- 49. Patel Akash, Akash Engineering Ltd.: The Turnaround Story, Case Method in Management Education and Training: Text and Illustrations, Volume- II, Dr. Upinder Dhar and Dr. Santosh Dhar, Excel Books, New Delhi, 2007
- 50. Patel Hiren, Patel Akash, IT for Organizational Excellence, Synergizing East and West for Global Competitiveness, Excel Books, New Delhi, 2007, pp. 283-288
- 51. Patel Akash, Baser Narayan, Micro-Finance and Empowerment of Women: a Study of SEWA Bank, NICM Bulletin (a Quarterly Journal of National Institute of Cooperative Management, Gandhinagar), Volume 4, Number 10, October 2007
- 52. Patel Hiren, Patel Akash, Total Quality Management: Boon for Cooperative Dairies in India, NICM Bulletin (a Quarterly Journal of National Institute if Cooperative Management, Gandhinagar), Volume 5, Number 2, April-June 2008
- 53. Khurana L K, Change Management in Government Organization: A Case of State-owned Power Distribution Company. *International Journal of Development Studies*, Vol. II Issue III January -June (2010) ISSN 09755799.

PDPU 91/269

Self Evaluation Report - Volume II

- 54. Khurana L K, Restructuring of State Electricity Boards: Some Lessons from Andhra Pradesh, *Scour Journal of Institute of Productivity & Management*, Vol. 4 No.1 January June (2010). ISSN 09736123.
- 55. Khurana L K, Organisational Performance Management in Power Sector, *Digital* (2013) ISSN 978-81-924713-2-7.
- 56. Khurana L K, Food or Fuel? Need for De-conflicting Food and Energy Security, *Himalaya Publications*, (2010) ISBN 978-81-8488-689-4
- 57. Khurana L K, Cost-cutting Strategies in Recessionary Period A Perspective of Energy Management. *Himalaya Publications* (2009) ISBN 978-81-8488-279-7.
- 58. Khurana L K, Managing Customer Services in Power Sector: A Case of Distribution Utility. *Himalaya Publications* (2011) ISBN 978-93-5024-768-4.
- 59. Rao M S, Sekhar and Khurana L K, Financing Power Projects Opportunities and Challenges: A Study of Indo-Canadian Experiences, *Excel Publications* (2009) ISBN 93-81363-83-5.
- 60. Rao M S and Khurana L K, Supply Chain Management in Power Sector: Problems and Prospects, *Allied Publishers* (2007) ISBN 978-81-8424-364-2
- 61. Khurana L K Case Jabsons Foods, Allied Publishers, (2007) ISBN 81-8424-198-4
- 62. Khurana L K, Gujarat's prospects to become Energy Hub, *Mirage of Marketing* Vol. I Issue –I Oct- Dec 2006
- 63. Global Strategy for Competitive Advantage, *Mirage of Marketing* Vol. I, Issue –III-IV July Sept 2007
- 64. K. Kishore, Y.C. Joshi, R. P. Patel (2015), "Redefining Indo-US Relations in Energy Sector Cooperation for Enhancing Future Development: A Perspective"; *DEW: The Complete Energy Journal*, Volume 24 No.03 January 2015, pp.41-51, ISSN-0971-7242.
- 65. K. Kishore (2013), "Indian Economy in the Context of Global Energy Scenario Focusing on Hydrocarbon Sector", *DEW: The Complete Energy Journal* Volume 22 No.11 September 2013,pp.50-54, ISSN-0971-7242.
- 66. K. Kishore, R.P. Patel (2013), "A Study on Lubricant Industry and Approach of Lubricants Marketing Companies in Rural India", *Synergy- Journal of Management*, Vol 14 No. 1&2, January-December 2012, India, pp. 11-19, ISSN 0973-922x.

PDPU 92/269

- 67. K. Kishore, R.P. Patel (2012), "Role of Non-fuel Retailing Services: The Face of Petro-Retailing in India", *Journal of Business and Retail Management Research (JBRMR)* Vol 7 Issue 1 October 2012, *A Journal of the Academy of Business and Retail Management (ABRM)*, U.K, pp. 48-59, ISSN 1751-8202.
- 68. K.Kishore(2012), "Role of Government in Inclusive Growth: Challenges ahead of Government of Bihar", *International Journal of Academic Conference Proceedings* (*IJACP Journal*), VOL 1, NO 2 (2012). ISSN 2164-263X.
- 69. K. Kishore, R.P. Patel (2012), "Petro-Retailing Operation in India: A Study of New Growth Strategy under the Influence of Changing Environment and Government Policies", *Excel India Publishers* (2012) pp. 234-141, ISBN 978-93-82062-53-0.
- 70. R.P. Patel, B. Parmar, K. Kishore, (2012), "Petro-Retailing on Shoulders of Celebrities: A Study on Effectiveness of Celebrity Endorsements in Promoting Petroleum Products in India", *Excel India Publishers*, pp.477-483, ISBN 93-81361703.
- 71. Pandey, S. and Ardichvili, A. (2015). **Using Films in Teaching Intercultural Concepts: An Action Research Project at two Universities in India and the United States,** *New Horizons Journal of Adult Education and HRD*, Vol. 27, No. 4, (forthcoming in November 2015, Wiley).
- 72. Maity, M., Gupta, S. and <u>Pandey, S</u>. (2014). "Sponsor, Ambusher and Other: Consumer Response to Three Strategies", *Vikalpa : The Journal of Decision-Makers*, Vol. 39, No. 1, 75-86.
- 73. Pandey, S. (2012). "Using Popular Movies in Teaching Cross-cultural Management", European Journal of Training & Development, Vol. 36, No. 2, 320-350.
- 74. Co-author in Pramod Paliwal et al (2010). "City Gas India Roundtable 2010: Initiatives and Challenges". Vikalpa: The Journal of Decision-Makers, Vol. 35, No. 4 (Oct-Dec), 61-91.
- 75. <u>Pandey, S.</u> and Verma, P. (2006). "From WorldCom to MCI". *Decision*, Vol. 33, No.2, July-December 2006, 141-190.
- 76. <u>Pandey, S.</u> and Verma, P. (2005). "Organizational Decline and Turnaround: Insights from the WorldCom Case". *Vision: The Journal of Business Perspective*, Vol.9 No.2, April-June, 2005, 51-65 (special issue on "Leading Change").
- 77. <u>Pandey, S</u>. and Verma, P. (2004). "WorldCom Inc.", Vikalpa: The Journal of Decision-Makers, Vol. 29, No. 4, (Oct-Dec), 113-119.

PDPU 93/269

- 78. Pandey, S. (2004) "Measurement of Organizational Culture: A Factor-Analytic Study of a Diagnostic Questionnaire-Organizational Culture Survey (OCS)". NMIMS Management Review, Vol. 16, No. 1-2, Jan-Dec 2004, 11-21.
- 79. Pestonjee, D.M. and <u>Pandey, S. C.</u> (2001) "A Preliminary Study of Psychological Aftereffects of Post-Traumatic Stress Disorder (PTSD) Caused by Earthquake: The Ahmedabad Experience". *Journal of The Indian Academy of Applied Psychology*, Vol. 27, No. 1-2, Jan-July. 2001, 37-44.
- 80. Pandey, S. C. (1998). "A Study Of Relationship Between Personality Dimensions And Organizational Role Stresses In a Public Sector Organization", *Indian Journal of Industrial Relations*, Vol. 33 No. 4, April 1998, 506-516.
- 81. Pandey, S. C. (1997). "Indian Ways Of Winning Stress". Journal of Indian Management and Strategy (JIMS 8M), Vol. 2, No, 2, April-June 1997. Books.
- 82. Pandey, S. (2014) *Leadership*, by Richard L. Daft, with assistance of Patricia G. Lane. South-Western, Cengage Learning, 2011,(5th edition), *European Journal of Training & Development*, Vol. 38, No. 1/2, 153-156.
- 83. <u>Pandey, S.</u> and Verma, P. (2013): "Appreciative Inquiry: A Review of Theories, Models and Applications", Chapter- 1 in Pramod Verma and Hardik Shah (Eds.), *Dynamics of Appreciative Inquiry: Concepts and Applications*, Academy of Human Resource Development, Ahmedabad, pp.2-23. (ISBN: 978-81-922353-0-1).
- 84. Pandey,S. (2011). "Managing for Change: Organizational Challenges for Development Organizations". Chapter 13 in Sandip Anand, Ibha Kumar and Anjula Srivastava (Eds.), *Challenges of the Twenty First Century: A Trans-disciplinary Perspective*, MacMillan India: New Delhi, pp. 198-217. (ISBN: 023-032-328-6).
- 85. Pandey, S. (2008). "Work Stress and Mental Health: Issues and Concerns for HR Managers", Chapter 12 in I. S. Singh (Ed.), *Recent Trends in Human Resource Management*, Mahatma Gandhi Labour Institute, Ahmedabad, 174-187.
- 86. Pandey, S. C. (2007): "Applying Action Research in Training Intervention for Government Health Departments: Lessons from OD Practitioners and Trainers", Chapter 13 in Pramod Verma (Ed.), Organization Development: Intervention Strategies, The ICFAI University Press, Hyderabad. 182-197. (ISBN: 81-314-1248-7).
- 87. Banerjee Tanushri, "Customer response towards Online banking efforts for Customer Relationship Management by Public sector banks in India: Enhancing Enterprise

PDPU 94/269

Self Evaluation Report - Volume II

- competitiveness", Prashant Gupta, Rajeshkumar Jain, Upinder Dhar, Allied Publishers Pvt. Ltd., *ISBN 81-8424-157-7*.
- 88. Banerjee Tanushri, "An Exploration of Differential Customer Response to Technology based CRM applications across Public and Private sector banks in India", published IISN 2231-4881 in Thematics Journal of Commerce and Management Peer reviewed International Journal.
- 89. Post implementation analysis of E-Urja Project (ERP) at GSECL: The Senior Management perspectives Published in Drishtikon, A Management Journal, Symbiosis *ISSN:* 0975-7422, *Volume 4, No 2, March-September2013*.
- 90. Banerjee Tanushri, "Managing employee transition to the e-Urja platform (ERP solution)" at GSECL published in Pranjana, The Journal of Management Awareness. *ISSN 0971-9997Volume 15/No2/Jul-Dec 2012*.
- 91. Banerjee Tanushri, "The softer and harder sides of a technology implementation", published in Presidency University Journal PUJ, Bangladesh *ISSN*: 2224-7610, Volume 2, No 2, July 2013.
- 92. Banerjee Tanushri, "How Technology became a game changer for Gujarat Power Utility", published in InfralinePlus magazine, Volume 2, Issue 6, October 2013.
- 93. Banerjee Tanushri, "How efficient is your AC? Its all in the stars", article published in InfralinePlus magazine, Colume 3, Issue 2, June 2014.
- 94. Prospects and Challenges behind adoption of CCS Technology in India: An Exploratory study in the book titled Development Prospects of Indian Economy by Dr. Amit Chakrapani, Dr. Navneet Gera, Dr. Mukund Chandra Mehta, Bharti Publications, Delhi, 2014, ISBN 978-93-81212-62-2.
- **95.** Banerjee Tanushri, "ICT can facilitate CSR initiatives: need assessment survey and analysis of remote villages in India" published in International Journal of Research and Scientific Innovation(IJRSI) *ISSN*: 2321 2705, Vol I Issue VII, December 2014.
- 96. Banerjee Tanushri, "Inception and Growth of the Womens' Cell at Pandit Deendayal Petroleum University for Gender Inclusivity: A Case Study from the Education sector" for publication in a book by MICA/WCD Gender Inclusivity 2014.
- 97. Tanushri Banerjee and A Banerjee, IIMA Working Paper published with title "Evaluating the purchase process of household appliances accounting for consumers' attitudes towards eco-friendly and sustainable consumption behavior" W.P. No. 2015-06-01 June 2015. It has shown up as Top 25 Working Papers by File Downloads 2015-07.

PDPU 95/269

- 98. Tanushri Banerjee and Ritu Sharma "Gender Equality and Women Empowerment in Higher Education: A Comparative Analysis in the Indian Context" published in the Special Issue of Journal of Social Vision Vol 2– "Women in India Problems, Welfare Programmes and Way forward", July September 2015, ISSN 2349-0519.
- 99. Banerjee Tanushri, "Energy Efficiency Influencing Consumer Purchase Decision of Household Products in India" accepted for publication in the July-December, 2015 issue of ASBM Journal of Management.
- 100. Tanushri Banerjee and Ritu Sharma "Womens' Cell facilitates Gender Inclusivity: A Case Study from the Education sector" reviewed for publication at Perspectiva: a Case Research Journal (ISSN # 2394 9961).
- 101. Banerjee, Tanushri "Data Science for Decision Making in Developing Economies: A Travesty of Business Investments?" accepted for publication in a special issue of International Journal of Knowledge Engineering and Data Mining (IJKEDM) (ISSN number awaited).
- 102. Banerjee, Tanushri Paper titled "State of Marketing Analytics Practice in India" Under Review.
- 103. Lahiri, Somdeb, "Existence of Market Equilibrium for Package Assignment Problems", International Journal of Mathematics, Computer Sciences and Information Technology (IJMCSIT), Vol. 4, No.1, January-June 2011, pages 45-54.
- 104. Lahiri, Somdeb, "Comparative statics of oligopoly equilibrium in a pure exchange economy", Modern Economy, Vol.2, No.2(2011), pages 77-83.
- 105. Lahiri, Somdeb, "Successive Oligopolies in a Pure Exchange Economy", Journal of Reviews on Global Economics, Volume 1 (2012), pages 150-156.
- 106. Lahiri, Somdeb, "Bilateral Oligopoly with a Competitive Fringe", Journal of Game Theory, Volume 2 (2013), No. 1, pages 1-8.
- 107. Lahiri, Somdeb, "Voluntary Provision of a Public Good in a Strategic Market Game", Louvain Economic Review, Volume 79 (2013), No. 4, pages 45-73.

23. Details of patents and income generated

In the field of management we do not have patents. However, SPM faculty gives consultancy to industry in their respective fields, from time to time.

PDPU 96/269

24. Areas of consultancy and income generated

SPM faculty members provide consultancy to energy and infrastructure industry in different management fields, viz. Marketing, HR, Finance, Strategy & Operations Management. Detailed information is given in SSR vol. 1.

25. Faculty selected nationally / internationally to visit other laboratories / institutions /industries in India and abroad

Prof. Kaushal Kishore

1. August 31, 2015 to September 19, 2015 International Visitors Leadership Programme on U.S.A Foreign Policy and Energy Security' completely sponsored by the Department of State, U.S.A which was scheduled from in the four cities of U.S.A.

SPM faculty members have also visited several countries to disseminate their research in international conferences and conducted professional workshops/seminars.

26. Faculty serving in:

- a) National committees b) International committees c) Editorial Boards d) any other (please specify)
- (a) Faculty Members in Editorial Board of National and International Journals:

Sr No.		torial boards of national and rnational journals	Faculty Name
1.	•	Member, Editorial Board, Journal of Strategic Human Resource Management	Ashutosh Muduli
2.	•	Member, Advisory Board, Journal of Management, ISSN NO. 0976-8572	Ashutosh Muduli
3.	•	Editor-in-Chief, Studies in Microeconomics	Somdeb Lahiri
4.	•	Member Ed. Advisory Board of the Open Access Academic Book Publishing Programme in Economics.	Somdeb Lahiri
5.	•	Ed. Board Research and Applications in Economics	Somdeb Lahiri

(b) faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies :

PDPU 97/269

Self Evaluation Report – Volume II

Sr	Name of the international conference	Faculty Name
No.	where faculty served as steering committee	·
	member	
1.	International Conference on Energy &	Kaushal Kishore
	Infrastructure (ICEI-2014), January 11-12,	Organizing
	2014 at School of Petroleum Management,	Secretary:ICEI-2014
	Pandit Deendayal Petroleum University, Gandhinagar, Gujarat	
2.	2 nd International Conference of Accounting &	Pramod Paliwal
	Finance (ICAF) 2012, University of Namibia	
3.	City Gas India, New Delhi organized by IQPC	Pramod Paliwal
	Dubai 2008	
4.	MENA Natural Gas Distribution Conference,	Pramod Paliwal
	Cairo-Egypt. ;2010	
	Cano Egypti ,2010	
5.	City Gas MENA 2010; Abu Dhabi, UAE;	Pramod Paliwal
	2010	
6.	Natural Gas Distribution Conference 2010;	Pramod Paliwal
	Ankara, Turkey; 2010	
		<u> </u>
7.	International Conference on Energy & Infrastructure (ICEI-2012), January 11-12,	Subrat Sahu
	2012 at School of Petroleum Management,	Organizing
	Pandit Deendayal Petroleum University,	Secretary:ICEI-2012
	Gandhinagar, Gujarat	
8.	International Conference on Management of	Sudhir Yadav
	Petroleum Sector (ICOMPS-2010), January	Organizing Secretary:
	,2010 at School of Petroleum Management,	ICOMPS 2010
	Pandit Deendayal Petroleum University, Gandhinagar, Gujarat	2010
	J. J.	
9.	Member, International Academic Committee of ELLTA Association (<i>Exploring Leadership</i>	Satish Pandey
	and Learning Theories in Asia, www.ellta.org	
), 2014	
10.	AHRD Book of the Year Review Committee	Satish Pandey
		Prof. Pramod Paliwal

PDPU 98/269

Chairs Instituted by the University

The School/University is on a constant lookout for specialized faculty wherever required in the last 3 years. The School has created a Chair Professorship with industry support and that too without compromising on the academic qualifications/eligibility.

Name	Qualification	Designation
Prof. D. M. Pestonjee	D. Lit.; Ph. D.	GSPL Chair Professor

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

SPM encourages and recommends its faculty members to participate in faculty development programs of premier institutions like IIMs, MDI, XLRI in their respective fields.

Prof. Kaushal Kishore

- 1. January 18-20, 2015. 3rd AIM-AMA Sheth Foundation Doctoral Consortium, organized by Academy of Indian Marketing (AMA) and American Marketing Association at IMT-Dubai.
- January 5-7, 2014. 2nd AIM-AMA Sheth Foundation Doctoral Consortium, organized by Academy of Indian Marketing (AMA) and American Marketing Association at IIM-Ahmedabad.

Prof. Ashutosh Muduli

- 1. Worksop on Industrial Relations in the Context of Economic Slowdown, Ahmedabad Management Association, September, 2012
- 2. Workshop on Performance Management System and Balance Score Card organised by TV Rao Learning System, Mumbai, August, 2012
- 3. National Level Training on *Health and Safety Management* organised by National Safety Council, Mumbai, December, 2010.
- 4. Workshop on *Competency Mapping* organised by AHRD, Ahmedabad, October, 2010.

28. Student projects

- percentage of students who have done in-house projects including interdepartmental projects
- percentage of students doing projects in collaboration with other universities
 / industry / institutes

PDPU 99/269

Self Evaluation Report - Volume II

All the SPM students engage themselves with industry projects as part of their summer internships with different companies. Students also engage in projects related to various courses taught as part of their curriculum. Example of students project for the year 2014-15 is as follows:

Sr. No.	Roll Number	Name	Company Name - 1
1	20141001	Abhas Mittal	Mahanagar Gas Limited
2	20141002	Abhishek Banerjee	Ernst & Young LLP
3	20141003	AKANKSHA SONKER	SBI Capital Markets Ltd.
4	20141005	Akshay Shah	GSPC LNG Ltd.
5	20141006	ANJALI SINGH	Indian Oil Corporation Limited
6	20141007	Ankit Joshi	Essar Oil Ltd.
7	20141008	Apoorv Sharma	Headway Solar Pvt. Ltd.
8	20141009	APURVA MITTAL	Energy Research and Management Institute (GERMI)
9	20141010	Azlaan Tirmizi	Sabarmati Gas Limited
10	20141011	Bhaumik Gandhi	Sabarmati Gas Limited
11	20141012	BHAVNA DOLEY	Indian Oil Corporation Limited
12	20141013	BINITA RAWAT	GAIL (India) Limited
13	20141014	Chirayu Trivedi	Mittal Processors Pvt. Ltd.
14	20141015	Deep Tigga	Hindustan Petroleum Corporation Ltd
15	20141016	Deepak Mishra	Mittal Processors Pvt. Ltd.
16	20141017	DIVYA KALE	GVK EMRI
17	20141018	GARIMA HEERANI	Energy Research and Management Institute (GERMI)
18	20141019	Gaurang Agarwal	Sabarmati Gas Limited
19	20141020	Gaurav Jaiswal	Reliance Industries ltd.
20	20141021	Ghanshyam Bhavsar	Future Retail Ltd.
21	20141022	Hardik Doshi	Future Retail Ltd.
22	20141023	HEMALI KESARIA	Reliance Industries Ltd.
23	20141024	Indranil Joshi	Total Oil India Pvt. Ltd.
24	20141025	ISHITA JAIN	Ecoziee Marketing
25	20141026	Jai Bakliya	JK Cement
26	20141027	Jay Oza	PepsiCo India
27	20141028	Ketan Gyanchandani	AXIS Bank Ltd.

PDPU 100/269

Self Evaluation Report – Volume II

28	20141029	Kunal Sugandhi	Bharat Petroleum Corporation Ltd
		Manishkumar	1
29	20141030	Bhade	Gujarat State Electricity Corporation Ltd.
		Masumraza	
30	20141031	Saiyed	Total Oil India Pvt. Ltd.
31	20141032	Maulik Patel	Total Oil India Pvt. Ltd
32	20141033	Mayank Gupta	Mittal Processors Pvt. Ltd.
22	20141024	MEHERNAZ	Gaparyari
33	20141034	PATHAN	GSPC LNG Ltd.
34	20141035	MITTALI SOLANKI	Future Retail Ltd.
35	20141035	Mohit Jaiswal	Ecoziee Finance
33	20141030	MONIKA	Ecoziee Finance
36	20141037	SINGH	Mahanagar Gas Limited
		Mridu	
37	20141038	Chakrabarty	Hindustan Petroleum Corporation Ltd
38	20141039	NIKITA SOOD	Indian Oil Corporation Limited
39	20141040	Nitin Lekhwani	Ernst & Young LLP
		Onil Linus	
40	20141041	Christian	Adani Gas Ltd
	20111012	PALAK	
41	20141042	DHAMECHA	Trident Udaipur
42	20141043	Parmarth Mishra	Bharat Petroleum Corporation Ltd
42	20141043	Parth P	Bharat I etroleum Corporation Ltd
43	20141044	Sambhwani	DCB Bank Ltd.
44	20141045	Parth P Parekh	Ernst & Young LLP
45	20141046	Parth P Panchal	Gujarat Gas Ltd.
46	20141047	Parth Mehta	Mahanagar Gas Limited
		POOJA	
47	20141048	AJMERA	DCB Bank Ltd.
48	20141049	Poras Shah	Gujarat Gas Ltd.
49	20141050	Pranjal Kishore	Hindustan Petroleum Corporation Ltd
50	20141052	Pratik Naker	Cadila Pharmaceuticals
		PRIYANKA	
51	20141053	DOHRE	Oil & Natural Gas Corporation Limited
52	20141054	Pushpraj Singh	Total Oil India Pvt. Ltd.
50	20141055	RADHIKA	E . D . H. I
53	20141055	GADARA	Future Retail Ltd.
54	20141056	Rajan P Zaveri	Gujarat State Electricity Corporation Ltd.
55	20141057	RIDDHI KANETKAR	Total Oil India Pvt. Ltd.
56	20141057	RIYA GIRI	Directorate General of Hydrocarbons
57	20141038	RUCHI PATEL	Future Retail Ltd.
		+	
58	20141061	Rushit Valera	Gujarat Gas Ltd.

PDPU 101/269

Self Evaluation Report - Volume II

		SALONI	
59	20141062	SHAH	Future Retail Ltd.
60	20141063	Sanjeev Kumar	Directorate General of Hydrocarbons
61	20141064	Saurabh Ojha	GSPC LNG Ltd.
		SAYALIS	
		DHAVALIKA	
62	20141065	R	Ernst & Young LLP
63	20141066	SHIKHA SAH	Gujarat State Electricity Corporation Ltd.
64	20141067	Shivang Parmar	Nirmal Bang Securities
		SUCHI	
65	20141068	YADAV	Future Retail Ltd.
		Sudarshan	
66	20141069	Gupta	SBI Capital Markets Ltd.
67	20141071	Vikas Dugar	GSPC LNG Ltd.
68	20141072	Vikash Kumar	Total Oil India Pvt. Ltd.
69	20141073	Vivek Mehta	Bharat Petroleum Corporation Ltd
70	20141074	Yash Maurya	Hindustan Petroleum Corporation Ltd

29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

SPM faculty members have received awards, fellowships and recognitions at national & international institutions for their specific contributions to research or academic achievement. SPM MBA students have also won awards and recognitions in business competition events organized by industrial associations. Detailed information is mentioned separately and will be made available to the visiting committee.

Faculty

Prof. Satish Pandey is awarded for highly commended paper by Journal of European Industrial Training (Emerald Group Publishing Ltd.). Prof. Satish Pandey is also invited as committee member for "2015 AHRD Book of the Year Committee & Special Nomination"

Prof. Pramod Paliwal has been elected as FCIM (Fellow of the Chartered Institute of Marketing, UK) in December 2011.

PDPU 102/269

• Students

Sr No.	Name of Award/Recognition received	Student Name
NO.		
1.	1. Winner of Financial Express Campus Mastermind	Siddhartha Bhatnagar
	2. Winner of Business standard student Corner (twice)	
	3. 12 articles got published in The Indian Economist, an online weekly magazine	
	4. Stood second in Inter Dramatics Competition	
	(Nirma University)	
	5. Presented Paper in ICMI Dehradun 20146. Protagonist in the short movie Money Order	
	(Winner of VGA)	
2.	Our research paper " Road to Recovery for Debt	Raman Shahi & Dhaval
	Ridden SEBs" won the Best Paper prize(in	Shah
	Infrastructure domain) at International Conference on Management of Infrastructure 2014, held at UPES	
	Dehradun.	
3.	1.Winner of Business Standard Weekly Strategist	Saumay Gupta
	Quiz	Saumay Supa
	2. Research Paper on " Shale Oil & Gas, Is India	
	Ready?" (2nd ICMI 2014, UPES Dehradun)	
	3. Research Paper on "Role of Independent Directors,	
	Issues and Challenges" (National Declamation Contest organized by NFCG, SIMS)	
	4. Research Paper on "Social Media, a new gadget for	
	B2B marketing"(ICSMM 2014, Welingkar Banglore)	
4.	1.Winner of Business standard student Corner	Tanya Sehgal
	2.Published article "Stock market triggers Awaited	
	this Season" as part of competition on	
	mbaskool.com	
5.	1. 1st Prize in Proscenium'13 for Drama competition	Dhwani Mandan
	held at PDPU	
	2. Runners Up in Petro Cup 2013 in table tennis held at PDPU	
	3. Runners up in Energy Cup 2013 in table tennis	
	held at SPM	
	4. Runners up in Energy Cup 2013 in hand ball held	
	at SPM	

PDPU 103/269

Self Evaluation	Report -	Volume II
Juli Lvaluation	INCPUL -	V OIUIIIC II

	5. Runners up in Parakram 2014 in table tennis held at Nirma University6. Winners in Shaurya 2014 in table tennis held at IIM Ahmedabad	
6.	Vestas Innovation Award	Vivek Kansara
7.	1.World Energy Council Young Energy Professionals (YEP) 2.TCS-IMCI Best Summer Project Award	Mohana Priya S.; Mukund Upadhayay & Saurabh Kothari

30. Seminars/Conferences/Workshops organised and the source of funding (National / International) with details of outstanding participants, if any

SPM has organized 4 international conferences since its inception bi-annually (2007, 2010, 2012, 2014). SPM has also been organizing its sector-focused industry roundtables/conclaves for power, oil & gas, renewable energy and functional disciplines like HR, finance for last 6 years. Detailed information is given below:

	1	
ICEI 2014	2014	Prof. Latha Ramchand, Dean, and Professor,
(International		Finance, C.T. Bauer College of Business, University
Conference on		of Houston
Energy and		Prof. Timothy C. Coburn, Ph.D. Director, Master of
Infrastructure);		Energy Business, Professor of Energy and
Jan. 11-12,		Operations Management, Collins College of
2014		Business, The University of Tulsa
		Dr. Kirit S. Parikh, Chairman, IRADe & Chairman,
		Expert Group for Low carbon Strategy for Inclusive
		Growth, Planning Commission of India
		Shri D J Pandian, IAS, Additional Chief Secretary,
		Energy and Petrochemicals Department, Gujarat
		Govt.
		Dr. Anurag K. Agarwal, Professor, Indian Institute
		of Management Ahmedabad, Gujarat
		Shri B.S. Negi, Former Member, PNGRB, Govt. of
		India
		Dr. T. Harinarayana, Director ,GERMI-RIIC,
		Gandhinagar, Gujarat, India
		Shri Vasant Agarwal, Managing Director,
		ECOMAX
		Shri Kishore Nair, President, Welspun Energy Ltd
		& President of Solar Power Developers Association
		(SPDA)
		Shri Rajsekhar Budhavarapu, Chief Technology
		Officer -
		Officer -

PDPU 104/269

Self Evaluation Report – Volume II				
		Renewable Investments, IL&FS Energy Development Company Ltd (IEDCL) Shri Shaleen Sharma, President and Managing Director BG India Shri Arun Kumar, GM (Geophysics) Head, Center of Delivery for Shale Gas, ONGC, Baroda Shri Divyesh Desai, Regional Marketing Manager Hazira LNG ,Shell		
Oil & Gas Conclave, Sep 8-9, 2014	2014	Mr. Anwar Husen, Head of Petroleum Engineering, Cairn India Mr. Shashank Jha, Sales Director India, GE Oil & Gas Mr. Kaushik Deb, Economist, British Petroleum Mr. Man Mohan Ahuja, President (Technical), Petronet LNG Ms. Indira Suresh, Global practice Head - Oil &Gas Solutions and Sales Enablement, Energy and Utilities Business Unit, Tech Mahindra Mr. Hemant Kumar, Practice Head, Upstream Oil & Gas, Wipro Mr. M D Agrawal, Senior Consultant, Oil & Gas Global Practice, TCS Mr. Raghuram Avadhanam, SBU Head Asset Management, L&T Technology Services Mr. Nitin Sharma, Senior Consultant-Business Consulting, Management Consulting Services, Energy & Utilities, Infosys Dr. D M Kale, Former DG, ONGC Energy Centre Mr. Jagdeep Chhaya, Head Pipeline & Land Acquisition, Cairn India Mr. Bharat Goswami, Sr. VP HR, GSPC Mr. Himanshu Amaliyar, Senior HR oordinator, Weatherford India Mr. P Elango, Energy Expert, Former CEO – Cairn India Mr. C D Joshi, MD, VGL Mr. Ravi Agarwal, MD, RSPCL GAIL Mr. B B Mandan, MD, SGL Mr. S Tambraparni, Joint President-Operations, Adani Gas Mr. G K Sharma, GM, MGL Mr. Rakesh Jain, Associate Director, Feedback Infra Mr. Ganesh Ramamurthy, Head – Audit (Refining & Marketing) Reliance Industries		

PDPU 105/269

Self Evaluation Report – Volume II				
		Mr. Prashant Maniar, Founder, Encito Advisors Mr. Vivek Bhatia, Energy Advisory Consultant, PwC Mr. Yash Malik, Executive Director, ONGC Ahmedabad Asset Mr. Vijay Ranjan, Head-Aviation Marketing, BPCL		
Business Management Symposium Nov 7-8, 2014	2014	Mr Subir Hazra Associate Vice President, Head of Strategic Planning, Delhi International Airport Limited at GMR Group Mr Prashant Mandke Vice President & Head, Anugrah Madison Mr MS Ashok COO, Accentiv', Edenred Mr Ahmed Naqvi CEO & Co-Founder, Gozoop Mr Shekhar Singh Head – Corporate Communication, Infibeam Mr Vijay Sharma Head – Operations, Hindustan Coca-Cola Beverages Pvt. Ltd. (HCCBPL) Mr Krishna Veer Singh Head of Operational Excellence, Operations, Ericsson Mr Rajesh Pednekar Supply Chain Excellence Expert Mr Ashish Mediratta Head – Vessel Performance, Maersk Line India Pvt. Ltd. Mr Vinod Wadhvani Director-Investment Banking M&A, Ambit Corporate Finance Mr Mehul Pandya Executive VP, CARE Ratings Mr Tanmay Kedia Managing Partner, V Capital Services Mr Hemal Desai Senior VP, Yes Bank Mr Vishal Gada Partner, KPMG Mr Sunil Kanojia Group CEO, Sintex India Mr Rashmin Shah CEO, Zydus BSV Pharma Mr Arijit Ray Former CEO, Dentsu Mr A B Raju CEO, Biz Trans Consulting Mr Kaiser Masood Director, LifeWorks Unlimited		

PDPU 106/269

A 1 0 11 0 G		elf Evaluation Report – Volume II
3rd Oil & Gas Conclave, 20-	2013	Mr. Sashi Mukundan, India Head, BP India Mr. S K Tripathy, Head (OALP) & DGM
21 Sep. 2013;		(Geology), DGH
SPM, PDPU		Dr. D.M Kale ,Independent Director, ONGC TERI
21111, 121 0		Biotech Ltd.
		Mr. Sunil Bharati, Head Corporate Communication,
		Cairn India
		Mr. Shridhar Tambraparni, Joint President-CGD,
		Adani Gas
		Mr. Amin Petiwala ,VP (Finance & Accounting),
		GSPC LNG
		Mr. Gyanendra Sharma ,General Manager,
		Mahanagar Gas Ltd.
		Mr.Prabhat Singh ,Director Marketing, GAIL
		Mr. Kumar Rudra Project Director, Oil & Gas and
		Special Projects, Larsen & Toubro ltd.
		Mr. Anil Joshi , Senior Vice President, GSPC LNG
3rd	2013	Chief Guest and Keynote Speaker: Mr. Arun Kumar
Infrastructure		Jagatramka, Chairman & MD, Gujarat NRE Coke
Conclave 4th		Ltd.
Oct. 2013;		Distinguished Speaker and Panellists: Mr. J.G.
SPM, PDPU		Chaturvedi, ED- Ahmedabad Asset, ONGC
		Mr. Shyama Sunder, Zonal General Manager-
		Marketing, GAIL India Ltd
		Mr. Anurag Deepak, ED-Pipelines, Bharat
		Petroleum Corporation Ltd.
		Mr. Rakesh Kumar Vij, General Manager-Sub
		Surface & Reservoir, ONGC
		Mr. Divyesh Desai, Regional Marketing Manager,
		SHELL Hazira LNG Ltd.
		Mr. Kalpesh Vithlani, General Manager Projects,
		Gujarat Maritime Board
		Mr. Kamal Dorabawila, Principal Investment
		Officer, IFC, World Bank Group, Sri Lanka
		Mr. Pankaj Sindwani, Head-Cleantech Finance,
		TATA Capital
		Mr. Manish Seth, GM (Finance), GSPL
		Mr. Anoop Sharma, DGM (Infrastructure Core
		Group), IDBI Bank
		Dr. D.M. Pestonjee, GSPL Chair Professor, School
		of Petroleum Management
		Mr. Rohintan Talati, Asst. General Manager-HR,
		Linde Engineering India Pvt. Ltd.
		Mr. Mohammad Athar, Manager- Capital Projects &
		Infrastructure, PriceWaterhouse Coopers
Duoiness	2012	Drof C Dochumora Doca (Foculty) UM
Business	2013	Prof. G Raghuram - Dean(Faculty), IIM- Ahmedabad
Management Symposium		Mr Niteen Bhagwat - Executive Director & CEO,
NAME OF THE PARTY	1	TIVIT INTECTIONARY AT - EXECUTIVE DIFECTOR & U.E.U.

PDPU 107/269

Self Evaluation Report – Volume II				
	2013, 6 December SPM PDPU		Asterii Analytics Mr Kaiser Masood - Principal Consultant, Infosys Mr Sanjay Chakraborty - Associate Vice President, Triton Communications Ms Parul Mehta - Co-founder & Site Head, Motif Inc. Mr C M Mathew - Managing Director, Task Initiatives Private Limited Mr Arindam Sen - Manager-Retail Credit Risk Management, HSBC Global Services Mr Pradeep Mallik - Deputy Resident Editor, Ahmedabad Mirror Mr Sandeep Agrawal – CEO, Credencys Solutions Inc. Mr Sachanand Taurani - Manager-Merchant Acquiring & Card Sales, IDBI Mr Rajesh Mishra - Manager-HR, L&T Mr Mignesh Parekh - Founder & Chairman, The Kamma	
	ICEI 2012 (International Conference on Energy and Infrastructure); Jan. 3-4, 2012	2012	Mr. Nitin Shukla, Managing Director and Chief Executive Officer of Hazira LNG and Port Companies Mr. Mehul Pandya, Sr. Vice President with CARE Ratings Mr. B.S.Negi, Former Member, PNGRB Dr. Anurag K. Agarwal, Professor, Indian Institute of Management, Ahmedabad, Gujara	
	2nd Oil & Gas Conclave, 7-8, Sep. 2012; SPM, PDPU	2012	Mr. L. Mansingh, Foremer Chairman, PNGRB Mr. T. P. Rao, Head (NELP & NDR), Directorate General of Hydrocarbons (DGH), Mr. Sanjay Sah, Associate Director, KPMG, Mr. Debashis Roy Chowdhary, Chief Area Manager-LPG, Indian Oil Corporation Limited (IOCL) Mr. Vivek Singh, Senior Officer, Gujarat State Petronet Limited (GSPL) Mr. D. M. Katre, Site President — Operations, Reliance Industries Limited, Mr. N Bose Babu, Head, Project, Gujarat State Petronet Limited (GSPL) Mr. Anil Joshi, Sr. VP - Projects, GSPC LNG Mr. Sumit Singhvi, Assistant Vice President, SBICaps	

PDPU 108/269

		Self E	valuation Report – Volume II
Oct SPI 2nd Info	nclave, 12th t. 2012; M, PDPU	2012	Mr. Ranajit Banerjee, Chief Consulting Officer, Pandit Deendayal Petroleum University Ms. Elizabeth Praveen, Head-HR, L&T Chiyoda Limited, Mr. Subhajit Sarkar, Consulting Manager, WIPRO Mr. A. R. Patel, Group General Manager, ONGC - Ahmedabad Asset Mr. S. Thangapandian, CEO-Marketing, Essar Oil Ltd., Mr. Nabin Panda, VP-Marketing, Reliance Industries Limited (RIL) Mr. Sabyasachi Kumar, General Manager, Marketing, Reliance Industries Limited (RIL) Mr. Shridhar Tambrapani, Joint President - CGD, Adani Gas, Mr. M. Ravichandran, MD, Indraprastha Gas Limited (IGL), Mr. V.C. Chittoda, MD, Mahanagar Gas Limited, Mr. S. K. Kudaisya, MD, Sabarmati Gas Limited and Mr. B. S. Negi, former PNGRB Member (Infrastructure Mr. D J Pandian, Principal Secretary, Energy & Petrochemicals, Gujarat Govt Dr. Ketan Shukla,IFS Mr. Chandan Guha,CEO,Mahindra Solar Mr. Ranajit Banerjee, Director, Consulting-PDPU Mr. D. J. Pandian, Principal Secretary, Energy & Petrochemical Dept., Gujarat Govt. Mr. K. V. Natarajan, Senior Port Consultant,Reliance Ports and Terminals,Navi
201 PD	12; SPM, PU		Mr. Suren Vakil, MD, BMT Consultants (I) Pvt. Ltd. Mr. K. K. Sinha, CEO- Essar Ports Ltd. Mr. Ramakant Jha, Director, GIFT, Gandhinagar
Ene Cor	newable ergy nclave, 9 o. 2011	2011	Mr. H. D. Khunteta, Chairman & Managing Director, Rural Electrification Corporation Ltd. Mr.Pashupathy Gopalan, Country Head, Sun Edison Mr.Alok Das, Head-Business Development, Suzlon Mr. KN Ramesh, GM Business Development, Lanco Solar Mr. N Ranganath, Executive Director, EI Technologies Mr.Vinay Shetty, GM, GMR Energy Mr.Aditya Handa, CMD, Abellon Energy Mr.Aditya Handa, CMD, Mamata Group Mr. Arvind Patel, MD, Sahajanand Laser Technology Shri P.K. Mishra (I.A.S. Retd.) Chairman, GERC Mr. D. J. Pandian, Principal Secretary, Energy &

PDPU 109/269

Self Evaluation Report – Volume II						
		Petrochemical Dept., Gujarat Govt.				
1st Infrastructure Conclave, 4th Nov. 2011; SPM, PDPU	2011	Prof. Shivanand Swamy, Professor and Director, School of Planning, CEPT University, Ahmedabad Mr. S. N. Patel, Joint Development Commissioner, Kandla SEZ Ms. Jyotsna Bhatia, Manager-Privatisation, Gujarat Maritime Board Mr. Kailash Bahuguna, COO, Zydus Infastructure Pvt. Ltd.				
		Mr.Vivek Kulkarni, IAS-Retd, Chairman, Brickwork Shri. Nitin Zamre, MD, ICF International Mr.Surendra Pal, GM-Marketing, Shell Hazira Mr.Sanjay Sah, Associate Director, KPMG Mr. Vishvanathan Narayanan, Sr Manager, PWC Mr.Nikhil Moghe, Manager, AF-Mercados EMI				
ICEI 2012 (International Conference on Energy and Infrastructure); Jan. 3-4, 2012	2012	Mr. Nitin Shukla, Managing Director and Chief Executive Officer of Hazira LNG and Port Companies Mr. Mehul Pandya, Sr. Vice President with CARE Ratings Mr. B.S.Negi, Former Member, PNGRB Dr. Anurag K. Agarwal, Professor, Indian Institute of Management, Ahmedabad, Gujara				
2nd Oil & Gas Conclave, 7-8, Sep. 2012; SPM, PDPU	2012	Mr. L. Mansingh, Foremer Chairman, PNGRB Mr. T. P. Rao, Head (NELP & NDR), Directorate General of Hydrocarbons (DGH), Mr. Sanjay Sah, Associate Director, KPMG, Mr. Debashis Roy Chowdhary, Chief Area Manager-LPG, Indian Oil Corporation Limited (IOCL) Mr. Vivek Singh, Senior Officer, Gujarat State Petronet Limited (GSPL) Mr. D. M. Katre, Site President — Operations, Reliance Industries Limited, Mr. N Bose Babu, Head, Project, Gujarat State Petronet Limited (GSPL) Mr. Anil Joshi, Sr. VP - Projects, GSPC LNG Mr. Sumit Singhvi, Assistant Vice President, SBICaps				

PDPU 110/269

	Self E	valuation Report – Volume II
Solar Conclave, 12th Oct. 2012; SPM, PDPU 2nd Infrastructure Conclave 2012; SPM, PDPU	2012	Mr. Ranajit Banerjee, Chief Consulting Officer, Pandit Deendayal Petroleum University Ms. Elizabeth Praveen, Head-HR, L&T Chiyoda Limited, Mr. Subhajit Sarkar, Consulting Manager, WIPRO Mr. A. R. Patel, Group General Manager, ONGC - Ahmedabad Asset Mr. S. Thangapandian, CEO-Marketing, Essar Oil Ltd., Mr. Nabin Panda, VP-Marketing, Reliance Industries Limited (RIL) Mr. Sabyasachi Kumar, General Manager, Marketing, Reliance Industries Limited (RIL) Mr. Shridhar Tambrapani, Joint President - CGD, Adani Gas, Mr. M. Ravichandran, MD, Indraprastha Gas Limited (IGL), Mr. V.C. Chittoda, MD, Mahanagar Gas Limited, Mr. S. K. Kudaisya, MD, Sabarmati Gas Limited and Mr. B. S. Negi, former PNGRB Member (Infrastructure Mr. D J Pandian, Principal Secretary, Energy & Petrochemicals, Gujarat Govt Dr. Ketan Shukla,IFS Mr. Chandan Guha,CEO,Mahindra Solar Mr. Ranajit Banerjee, Director, Consulting-PDPU Mr. D. J. Pandian, Principal Secretary, Energy & Petrochemical Dept., Gujarat Govt. Mr. K. V. Natarajan, Senior Port Consultant,Reliance Ports and Terminals,Navi Mumbai Mr. Suren Vakil, MD, BMT Consultants (I) Pvt. Ltd. Mr. K. K. Sinha, CEO- Essar Ports Ltd.
Renewable Energy Conclave, 9 Sep. 2011	2011	Mr. Ramakant Jha, Director, GIFT, Gandhinagar Mr. H. D. Khunteta, Chairman & Managing Director, Rural Electrification Corporation Ltd. Mr.Pashupathy Gopalan, Country Head, Sun Edison Mr.Alok Das, Head-Business Development, Suzlon Mr. KN Ramesh, GM Business Development, Lanco Solar Mr. N Ranganath, Executive Director, EI Technologies Mr.Vinay Shetty, GM, GMR Energy Mr.Aditya Handa, CMD, Abellon Energy Mr.Aditya Handa, CMD, Mamata Group Mr. Arvind Patel, MD, Sahajanand Laser Technology Shri P.K. Mishra (I.A.S. Retd.) Chairman, GERC Mr. D. J. Pandian, Principal Secretary, Energy &

PDPU 111/269

	Self Evaluation Report – Volume II							
			Petrochemical Dept., Gujarat Govt.					
Con	rastructure nclave, 4th v. 2011; M, PDPU	2011	Prof. Shivanand Swamy, Professor and Director, School of Planning, CEPT University, Ahmedabad Mr. S. N. Patel, Joint Development Commissioner, Kandla SEZ Ms. Jyotsna Bhatia, Manager-Privatisation, Gujarat Maritime Board Mr. Kailash Bahuguna, COO, Zydus Infastructure Pvt. Ltd. Mr. Vivek Kulkarni, IAS-Retd, Chairman, Brickwork Shri. Nitin Zamre, MD, ICF International Mr. Surendra Pal, GM-Marketing, Shell Hazira Mr. Sanjay Sah, Associate Director, KPMG Mr. Vishvanathan Narayanan, Sr Manager, PWC Mr. Nikhil Moghe, Manager, AF-Mercados EMI					

Oil & Gas India Roundtable,

14th Oct. 2011 Mr Keith G Huggins, Director-Engineering, McDermott Engineering Services Pvt Ltd Mr.Harak Banthia, CFO, HMEL Mr.Vijay Malik, Sr VP, RIL Mr.S C Gupta, CEO-Offshore Division, ABG Shipyard Mr.K Ravichandram, Sr VP & Group Head, Corporate Ratings, ICRA Mr. Parthasarthi Chatterjee, L&T ENC Mr.N S Tanwar, GM Reservoir, DGH

31. Code of ethics for research followed by the departments

Code of ethics for research is important because, it helps in defining research objectives, values that are essential for collaborative work such as trust, accountability and mutual respect, accountable to the public and moral and social values. Research Advisory Board is responsible for formulating and overseeing implementation of policies related to Code of ethics for research. ORSP Charter defines guidelines for university research activities.

Structure and composition of the Research Advisory Board (RAB) of the University is given below.

Composition of Research Advisory Board Members

Sr. Nos.	Name	Designation	Organization

PDPU 112/269

Sr. Nos.	Name	Designation	Organization
1.	Prof. H.B.Raghavendra	Director General	Pandit Deendayal Petroleum University
2.	Dr. A. V. Chainulu	Scientist –F	Department of Scientific & Industrial Research
3.	Shri R.K. Vij	DGM (Reservoir)	ONGC Ahmedabad Assets
4.	Dr. Chandra Rai	Director/ Eberly Chair	Mewbourne School of Petroleum & Geological Engineering The University of Oklahoma
5.	Dr. Vijay K. Madisetti	Professor	School of Electrical & Computer Engineering Georgia Tech
6.	Prof N.R. Dave	Educational Advisor	Pandit Deendayal Petroleum University
7.	Prof. VC Shah	Advisor-CSC	Pandit Deendayal Petroleum University
8.	Dr. B. G. Patel	Provost (Vice- Chancellor)	Charotar University of Science &Technology (CHARUSAT)
9.	Dr. Akshai Agarwal	Vice-Chancellor	Gujarat Technological University
10.	Dr. Bharat H. Desai	Professor	Jawaharlal Nehru Chair in International Environment Law, JNU
11.	Sh. Kumarpal Desai	Padmashree	An eminent Litterateur
12.	Dr. T Harinarayana	Director	GERMI
13.	Dr. Avinash Chandra	Chairman & Managing Director	Petrobiz Consultant (P) Ltd
14.	Dr. D.M. Kale	Director General	ONGC Energy Centre
15.	Dr. H.B Raghavendra	Director	School of Technology, PDPU
16.	Prof. Tarun Shah	Registrar	Pandit Deendayal Petroleum University
17.	Dr. Indrajit Mukhopadhyay	Coordinator, ORSP	Pandit Deendayal Petroleum University

In its Evaluation meeting RAB takes note of different policies and implement them for facilitated research and development activities in its various schools.

Research Ethics:

- advancing funds for sanctioned projects -
- providing seed money
- simplification of procedures related to sanctions / purchases to be made by the investigators
- autonomy to the principal investigator/coordinator for utilizing overhead charges-
- timely release of grants
- timely auditing

PDPU 113/269

- submission of utilization certificate to the funding authorities
- The strengths and culture of the participants must be respected and utilized whenever possible.
- Written permission must be obtained from the partners before beginning the research projects.
- Permission from all individual participants must be obtained prior to collecting personal information.
- The confidentially of all individuals, if required must be respected
- All research results, analyses and interpretations must first be reviewed by the participants to ensure accuracy and avoid misunderstanding.
- The participants must be involved in making decisions about the publication and the distribution of all or parts of the research results
- Anti-plagiarism

SPM and PDPU follow strict ethical standards for research. Not only doctoral but MBA students are also educated by SPM faculty on plagiarism, intellectual property rights, copyright protection, scientific research citations and professional research ethics.

32. Student profile program-wise:

MBA: MBA students of SPM are selected through a rigorous process that includes Common Admission Test of IIMs, Group Discussion and Personal Interview. MBA students come from different academic, professional and social backgrounds from across the country.

Year	Application Received	Students Admitted	Male	Female
2012	493	66	55	11
2013 (E&I)	325	61	56	5
2013 (GM)		60	28	32
2014	348	74	50	24
2015	168	45	33	12

PGDPMX: This is an executive PG Diploma program where students come from oil, gas, energy industry to learn managerial skills for their own professional development. Many of them are also sponsored by their respective companies. This program requires 36 teaching contact

PDPU 114/269

hours for 8 weekly modules spread over 2 years. These students are selected through rigorous personal interview process.

2012-13			2013-14			2014-15			2015-16		
Applic ation Receiv ed			Applicat ions Receive d			Applications Received			Applications Received		
	M	F		M	F		M	F		M	F
30	19	0	28	12	0	13	10	1	16	09	0

Ph.D.: Ph.D. students are selected through Research Aptitude Test and Personal Interview by expert committee. Currently, most of students are registered as Part-time Ph.D. candidates.

Year	Application Received	Students Admitted	Male	Female
2012	8	1	0	1
2013	30	7	6	1
2014	22	3	1	2
2015 (January)	5	1	1	0
2015 (June)	13	5	5	0

33. Diversity of students

SPM students come from different educational and social backgrounds. There are students from weaker socio-economic sections, SC, ST, minorities and others.

	Year 1 (2010)		Year 2 (2011)		Year 3 (2012)		Year 4 (2013)		Year 5 (2014)	
Category	Male	Female								
SC	8	1	4	1	8	1	5	1	4	4
ST	2	-	2	-	1	-	2	-	2	1

PDPU 115/269

OBC	-	-	-	-	-	-	-	-		_
General	46	3	43	13	46	10	81	32	44	19
Others	-	-	-	-	-	-	-	-		

Name of the program	% of the students from the same university	% of the students from the other university within state	% of the students from universities outside the state	% of the students from other countries
MBA	2.22%	55.56%	42.22%	0
PGDPM-X	0.00%	55.56%	44.44%	0

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

None of them cleared above mentioned exams while on campus.

35. Student progression

Student Progression	Percentage against enrolled (Batch 2012-14)
UG to PG	NA
PG to M.Phil.	1 student (Percentage value will be very small)
PhD to Post Doctoral	None
Employed through Campus Selection	100%
Employed through other than Campus recruitment	None
Entrepreneurs	None

Students graduating from MBA take up corporate jobs. The PGDPM-X Executive Program students are working executives and continue to work in their existing organizations.

36. Diversity of staff

PDPU 116/269

Percentage of faculty members who are graduates	100%
From the same University	None
From other Universities within the State	36%
From Universities from other States	55%
From Universities outside the Country	9%

37. Number of faculty who were awarded M. Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

One

38. Present details of departmental infrastructural facilities with regard to

a) Library

a. Library Area in Sq. Mt. : 273 sq mts.

b. Total number of books (volumes) : 11350

c. Total number of national journals : 80

d. Total number of international journals : 12

e. Total number of e-books : Nil

f. Databases : 5

g. E-journals : 2100

h. Open source software : D-Space

i. CDs : 890

b) Internet facilities for staff and students

Internet: 150 Mbps

LAN, Wi-Fi, Outlook Web Access, Team Viewer

c) Total number of class rooms : 6 classrooms

6 air conditioned classrooms equipped with multimedia and audio visual equipment.

d) Class rooms with ICT facility:

PDPU 117/269

6 Classrooms

e) Students' laboratories: 1

1 Computer laboratory

f) Research laboratories:

None

39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university: 1

b) from other institutions/universities: 12

Batch	Name	Area	Research interest	
2010	Rutvik Gandhe	HR	Role of Psycho-social Factors in Determining Energy Conservation Behavior	Part Time
2012	Dipti Yagnik	HR	Training and Development	Part Time
2013	Amit Agarwal	Operati ons Mgmt.	Application of IT/New Technology in Logistics & Supply Chain Management Operations Management in Retail Industry	Part Time
2013	Ashutosh Jani	HR	Role of technology for HR Transformation	Part Time
2013	Sanjiv Chaudhary	Marketi ng	Clean energy marketing with special focus on WIND-ONSHORE, SOLAR PV & BIOENERGY in India	Part Time
2013	Narpat Asia	Marketi ng	City Gas Distribution/NG Marketing	Part Time
2013	Darshit Shah	Finance	Stock Market	Part Time
2013	Siddharth	Finance	BASEL III: A Global	Part Time

PDPU 118/269

Self Evaluation Report – Volume II					
	Shukla		regulatory framework for		
			banking systems		
2013	Pallavi Vyas	HR	Competency Mapping	Part Time	
2014	Jyoti Rajesh Maheshwari	GM	Public Policy	Part Time	
2014	Rushi Sanatkumar Pandya	GM	The broad topic of the research is about understanding the entrepreneurial ventures and their challenges while the phase of scale up.	Part Time	
2014	Savitha Sasidharan Pillai	HR	Challenges and issues facing HR in SME Sector	Part Time	
2015	Mit Prashant Gandhi	Operati ons	Lean Management	Part Time	
2015	Himanshu Dubey	Marketi ng	To be Decided	Part Time	
2015	Manish Dhroov	Marketi ng	To be Decided	Part Time	
2015	Abhinav Kapadia	Finance	To be Decided	Part Time	
2015	Kishalaya Mishra	Internat ional Relatio ns	To be decided	Part Time	
2015	Saumyaranjan Sahoo	Opearti ons	To be decided	Full Time	

PDPU 119/269

40. Number of post graduate students getting financial assistance from the university.

One PhD student

41. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology.

Yes, the need assessment exercise is undertaken before development of a new program:

- Through contact with our Alumni and Industry partners, there is a continuous effort to improve course content. New programs are suggested and discussed in the Board of Studies (B.o.S) meetings held twice a year.
- BoS members provide their inputs based on their experience which are weaved into the proposal
- The program structures and curriculum are first discussed in the academic area meetings followed by discussion at the BoS, then in the Faculty of Management and Academic Council.

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes, the institute collects feedback from faculty with regard to curriculum and also teaching-learning evaluation.

- The feedback of faculty regarding modification of course curriculum or addition of electives is used for curriculum evaluation, improvement and enhancement. The feedback outcome is first discussed in the Academic Area Committee meeting
- The recommendations are discussed in the Board of Studies, then in the Faculty of Management and on approval is sent to the Academic Council

PDPU 120/269

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes, the institute has a formal process of collecting feedback from students about the teaching-learning-evaluation process followed in each course. Student feedback is collected at the end of each course. The feedback is reviewed by the Director after every term and it is discussed with the concerned faculty to identify the areas of improvement. The feedback also reflects on the faculty performance evaluation submitted to the University authorities on annual basis.

c. alumni and employers on the programs offered and how does the department utilize the feedback?

Yes, the institute collects feedback from both alumni and recruiters. It collects feedback through various channels and during interactions such as:

- Alumni meet in various cities
- Conclaves, where they are invited
- Recruitments
- Inviting them as Experts on varied occasions
- Admissions
- Board of Studies
- Internship and Placement activities
- Faculty of Management

The feedback and valuable suggestions are acted upon promptly.

43. List of distinguished alumni of the department (maximum 10)

Sr.	Name of Alumni	Present Designation and Organization of the	
No.		Alumni	
1	Bhaskaraharish Tadinada	Business Analyst, Weatherford Drilling	
		International, Dubai	
2	Rajvi Pandya	Well Engineer, Schlumberger, Iraq	
3	Mayank Gaur	Consultant, Marathon Oil, Houston, Texas,	

PDPU 121/269

Sell Evaluation Report – volume ii				
	USA			

		USA			
4	Nalin Saurav	Senior Consultant, KPMG, Canada			
5	Abhishek Jha	Manager, Group Internal Audit, Petrofac,			
		Sharjah,UAE			
6	Mrinal Madhav	Assistant Director (Int. Cooperation), Petroleum			
		Planning and Analysis Cell (PPAC), Ministry of			
		Petroleum and Natural Gas, Delhi/NCR			
7	Nitin Yadav	Deputy Manager- Natural Gas, BPCL,			
		Delhi/NCR			
8	Ankit Jain	Associate Technical Professional-Well Design,			
		Halliburton Offshore Services Inc., Mumbai			
9	Manas Nanavaty	Senior Consultant, Advisory Services, Ernst &			
		Young LLP, Mumbai			
10	Krishnadev CS	Deputy Director (Energy), FICCI, Delhi/NCR			

44. Give details of student enrichment programs (special lectures / workshops / seminar) involving external experts:

Students go on industry visits and also take up long term (6-8 weeks) internships for hands-on experience in their areas of interest and specialization. Aptitude test preparation is provided for students to clear entrance tests of various companies as well as institutions of higher education. Soft skills' training is provided through rigorous sessions in body language, verbal communication, CV Writing, and facing group discussion and interview panels. Various other training programs are arranged throughout the academic cycle by the respective Department as well as Special Interest Groups (Student Clubs), for theme specific training and up gradation of knowledge. Competitions are organized for raising the level of academic competitiveness amongst students. Examples are model making competition, robot wars competition, poster making competition, paper presentation competition etc. Students are encouraged and funded to participate in national and international academic competitions organized by associations / institutions. Office of International Relations of PDPU organizes students' interaction with International university representatives in the campus to guide students regarding

PDPIJ 122/269

further study options. Industry interactions during seminars/forums/ round tables provide students new perspectives on competencies required for careers. Students publish SPM-Mirror, an in-house magazine of SPM at interval of every month. CEO lecture series, Alumni Lecture series, Faculty Seminar series and Distinguished Speakers Lecture series are conducted at regular intervals throughout the academic year. In addition, Business Management Symposium, Oil and Gas Conclave, Power Sector Conclave, Infrastructure Conclave, HR Conclave, etc. are organized every year to enrich the students' learning during the program. Specialised workshops for skill enhancement and specialised subject knowledge development are conducted from time to time. International Conference on Energy and Infrastructure (ICEI) is organized once in every two year at the campus.

45. List the teaching methods adopted by the faculty for different programs:

The pedagogical tools that are used by our faculty members to enhance learning experience are:

- (a) Lecture method
- (b) Lecture supplemented by videos
- (c) Role plays
- (d) Business simulations
- (e) Management Games
- (f) In-class Exercises
- (g) Mini as well as comprehensive projects
- (h) Newspaper discussions
- (i) Research paper presentation and discussion from reputed journals
- (j) Case study analysis and presentations
- (k) Industry visits
- (1) Expert lectures by Industry
- (m) Film analysis
- (n) Observational learning through field visits
- (o) Scenario building and analysis
- (p) Debates

46. How does the department ensure that program objectives are consistently met

PDPU 123/269

and learning outcomes are monitored?

The programme objectives can be met by designing the courses such that it leads to development of required skills as a decision maker in the industry. Each course of programme is mapped against about 10 attributes/skills. These attributes or skills are used to design the course objectives and learning outcomes from the courses are monitored and measured through the continuous evaluation system across different courses. Each course faculty designs unique evaluation criteria accordingly in their respective course plan. Students are required to give feedback formally at the end of each course with respect to (a) course and (b) instructor on the basis of learning outcomes.

PDPU 124/269

SCHOOL OF PETROLEUM MANAGEMENT TWO YEAR FULL TIME MBA

Course evaluation ___Term MBA ____

- 1. Course Title:
- 2. Name of the Instructor:

Please rank on the scale of 5

Interpretation of scale

About Learning Outcomes:

5-Fully Achieved 4-Fairly Achieved 3-Satisfactorily Achieved

2-Partly Achieved 1-Not Achieved

About the Course and Instructor:

5-Strongly Agree 4-Agree 3-Undecided

2-Disagree 1-Strongly Disagree

ABOUT THE LEARNING OUTCOMES	Please rank on the scale of 5
Objectives of the course from course outline	
ABOUT THE COURSE	
The course is well designed and structured	
The contents of the course are useful	
The Text – Book prescribed is useful	
The reading materials are relevant	
ABOUT THE INSTRUCTOR	
He/she is clear with subject concepts	
He/she communicates clearly the ideas and information	
He/she relates subject matter with practical examples	
He/she involves students in the class	
He/she is able to handle the class	
He/she returns quizzes, tests and mid-term examinations on time	
He/she provides feedback on answer/analysis for mid-term examination	
He/she is fair in assessment	

47. Highlight the participation of students and faculty in extension activities.

SPM students through the program 'Community Development Initiative – CDI' of the University get engaged in the outreach programs. Apart from this they also get involved in the CDI through organisations like CII-Yi. SPM students organize Blood Donation Camp every year in collaboration with Prathma Blood Bank. The University has the NCC

PDPU 125/269

wing functional at its campus which has been recently established. Interested students of SPM are encouraged to join these activities. SPM students in collaboration with Prathma Blood Bank organize Blood Donation Camp at SPM-PDPU every year. Since last four consecutive years SPM has been receiving special trophies for donating more than 200 units of blood. To promote health and fitness awareness, students organize 'Energy Run' every year. Apart from these students have been engaging with the poor strata of the villagers in the vicinity and have been helping them by means of support for their children's education, clean drinking water etc. The students have learnt the virtues of compassion and empathy through such engagements.

SPM has also been organizing Community development program through participation in rural educational activities. These programs helped the students in inculcating the value of social sensitization. They also helped in developing the planning and organizing skills of management students.

48. Give details of "beyond syllabus scholarly activities" of the department.

- 1. Consultancy Project on "Strategic review of GSECL (Gujarat State Electricity Corporation Ltd.)"
- 2. Faculty members have published two Books

Sr.	Name of Faculty	Name of the Book	Name of the	Year of
No.	Member		Publisher	Publication
1	Pramod Paliwal &	Cases in Business	McGraw Hill	2013
1	Sudhir Yadav	Marketing	International	2013
		Stress and Work:		
2	D M Pestonjee &	Perspectives on	Saga Dublications	2013
2	Satish Pandey	Understanding and	Sage Publications	2015
		Managing Stress		

- 3. SPM, PDPU and Institute of Energy Economics, Japan (IEEJ) designed and conducted a collaborative Study to 'Promote Energy Savings in India's Transportation Sector'.
- 4. SPM designed and developed written test to recruit GETs for GSPC group of companies.

PDPU 126/269

5. Some of the innovative teaching methods adopted by the faculty during the last four years

are as follows:

- a. Using autobiographies as recommended texts
- b. Using films and simulations to impart learning
- c. Novel structuring of the courses by incorporating industry related applied notes
- d. Joint / teaching team
- e. Teaching by Industry practitioners
- f. Combination of field based training and classroom learning

49. State whether the program/ department is accredited/ graded by other agencies? If yes, give details.

Not applicable

- 50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- All faculty members have published research work in their area of interest. Faculty members
 have also published book. All the published work is used as teaching material in various
 courses.
- 2. Faculty members have also developed sector specific courses with reading material. In these courses research work / published papers are used as reading/teaching material.
- 3. So far SPM has organized four international conferences on oil and gas / energy sector. The conference proceedings are also published which contain research work of related area.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Major Strengths:

PDPU 127/269

- i. Experienced faculty with research orientation. Faculty members have good number of publications in refereed international and national journals.
- ii. Some of the faculty members also have industry experience. This industry experience helps them bring practical issues in the class discussion.
- iii. Updated course curriculum (Course Review once in two years).
- iv. MBA program with focus on Energy and Infrastructure.
- v. School gets support from promoting organization GSPC and other energy companies.

 Strong linkages with industry.

Major Weaknesses:

- i. International accreditation.
- ii. Establishment of Centre of Excellence.
- iii. Industry Sponsored Research and Consultancy.
- iv. Unable to attract participants for Management Development Program.
- v. Less number of applications for academic programs.
- vi. Faculty quarters are not available in the Campus because of which Faculty is unable to pursue Research Activity after the working hours.

Major Opportunities:

- i. Potential to offer Management Development Programs to international participants.
- ii. Potential to offer specialized courses on Energy to academic institute abroad.
- iii. School can become the resource centre for any needs of Energy industry.
- iv. Still there are many sector specific courses (like ETRM, HSE, and Energy Financing etc.) which can be developed by internal faculty. Later those topics can be offered as MDP to industry executives.
- v. Look for placement opportunities abroad.

Major Challenges:

- i. New IIMs and increase of intake by established IIMs.
- ii. Increase in intake by other reputed institutes based in cities like Delhi, Mumbai etc.
- iii. Decreased interest of students in MBA programs (number of candidates taking CAT is decreasing).
- iv. Identifying placement opportunities for students on a continuous basis i.e. every year.

PDPU 128/269

- v. To update the happenings in the energy sector as the sector is very dynamic.
- vi. To attract and retain experienced faculty members.
- vii. Rapid challenges in the area of various sectors require faculty members constantly upgrade their skills.

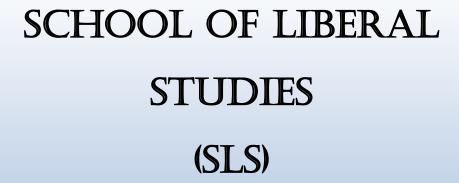
52. Future plans of the department.

SPM plans to launch full time / part time MBA (Oil and Gas) program in the regions rich in oil and gas. Few short duration international programs can also be planned. To get more number of applications for admissions to our program school plans to promote the curriculum and career opportunities in cities like Mumbai, Kolkata, New Delhi, Bangalore, Chennai etc.

School also plans:

- i. To develop centre of excellence for management / regulatory studies in energy sector.
- ii. To develop linkages with Government of India to undertake research projects related to energy sector.

PDPU 129/269



PDPU 130/269

1. Name of the Institute

School of Liberal Studies (SLS)

2. Year of Establishment:

2009

3. Is the Department part of a School/Faculty of the University?

School of Liberal Studies is a constituent of 'Pandit Deendayal Petroleum University' (PDPU).

4. Names of programmes offered (UG, PG, M. Phil, PhD, Integrated Masters, Integrated PhD, D.Sc, D.Litt, etc.)

a) Post-Graduate Programmes:

- Masters of Arts in English
- Masters of Arts in Public Policy and Admministration
- Masters of Arts in International Relations

b) Under Graduate Programmes

- B.A. (Hons.) / B.B.A. (Hons.) 4 Years Programme
- B.Com. (Hons.) 4 years Programme

c) Doctoral Programme

- PhD in areas of English
- PhD in areas of Public Policy and Administration
- PhD in areas of International Relations
- PhD in areas of Psychology
- PhD in areas of Economics

5. Interdisciplinary Programmes and Departments involved:

UG program pedagogy is Interdisciplinary where a student is exposed to interdisciplinary course structure on choice based credit system. e.g. Department of Mathametics and Department of Computer Science, and Department of Sciences.

PDPU 131/269

6. Courses in Collaboration with other Universities, Industries, Foreign Institutions, etc

Nil

7. Details of Programmes Discontinued, if Any, with reasons

Nil

8. Examination System: Annual/ Semester/ Trimester/ Choice based Credit System

Examination system is semester-based with CBCS (Choice Based Credit System).

9. Participation of the Department in the courses offered by other Departments:

- Faculty members of the institute serve as visiting faculty at other departments/ Schools in the university.
- Faculty members are invited to judge various curricular, co- curricular and extracurricular activities of other departments/ Schools in the university.
- Faculty members are appointed as Research Experts in the Doctoral Review Committees of research scholars of the other Departments/ Schools in the university.
- Students participate in courses of the other Schools in the university
- SLS courses are offered to students of other Schools under CBCS.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/ Asst. Professors/others)

Name of the Post	Sanctioned Post	Filled Post	Actual
Chair Professor			
Professor Emeritus			
Professor	2	1	1
Associate Professor	5	3	3
Assistant Professor	17	9	9
Lecturer on Contract		3	3

11. Faculty Profile with Name, Qualification, designation, area of Specialization, Experience and Research under Guidance

Name of the	Qualification	Designation	Specialization	Experience	Research
Faculty					and
					Guidance
Prof. Nigam	Ph.D.	Professor,	English	22Years	 Guiding
Dave		Dean and	Literature		6 PhD
		Director			students

PDPU 132/269

	Self Evaluation Report – Volume II					
Dr. Pradeep Mallik	PhD	Adjunct Professor	Mass Communicatio n	- 27 years (Industry), - 23 years (as visiting faculty), - 01 year (full-time	 Guided 2 M.Phil. Students Guided 7 B.A. Dissertati ons Guiding 01 PhD student Guided 15 Master's dissertati 	
Dr. Ashvin Dave	Ph.D.	Associate Professor	Finance, Project Management, Banking and Insurance	teaching) 34 Years	on 65 MBA dissertations Guided,	
Dr. Tejas Dave	Ph.D.	Associate Professor	Marketing, e- Commerce,	25 years		
Dr. Prashanta Panda	Ph.D.	Associate Professor	Economics, Micro Economics	10 Years		
Dr. Ritu Sharma	Ph.D.	Assistant Professor	Psychology, Clinical Psychology, Personality Mapping	12 Years	One PhD under progress	
Dr. Neeta Sinha	Ph.D.	Assistant Professor	Applied and Industrial Psychology	15 Years	4 PhD Under progress	
Ms. Neeta Khurana	Ph.D.	Assistant Professor	English Literature	20 Years	1 DLD - 1	
Dr. Sanjay Pradhan	Ph.D.	Assistant Professor	Political Science and International Relations	8 Years	1 PhD under progress	
Dr. Chaitanya Vyas	Ph.D.	Assistant Professor	Marketing, Digital Marketing, Marketing Communicatio ns	10 Years		
Dr. D. Sriram	Ph.D.	Assistant Professor	Public Administration: Public Private	3 years	8 MA Dissertations Guided, 2	

PDPU 133/269

			Partnerships,		PhD under
			Public Health		progress
Dr. Anurag	Ph.D.	Assistant	Public	5 Years	6 MA
Srivastava		Professor	Administration:		Dissertations
			E Governance		Guided
Dr.M.Venkat	Ph.D.	Assistant	Public	2 Years	
Ram Reddy		Professor	Administration,		
			Police		
			Administration		
Dr. Sitakanta	Ph.D.	Assistant	Political	4 Years	
Mishra		Professor	Science and		
			International		
			Relations		
Dr. Pradeep	PhD	Adjunct	Mass	- 27 years	· Guiding 01
Mallik		Professor	Communicatio	(Industry),	PhD student
			n	- 23 years (. Guided 15
				as visiting	Master's
				faculty),	dissertation
				- 01 year	
				(full-time	
				teaching)	
Ms. Urmi	MA, M.Phil.	Lecturer	English	7 years	
Satyan			Literature		
Ms. Supriya	MBA	Lecturer	Organizational	3 Years	
Pal			Behavior,		
			SHRM,		
Ms. Niyati	MA, M.Phil.	Lecturer	English	10 years	
Trivedi			Literature		

12. List of Senior Visiting Fellows, Adjunct Faculty, Emeritus Professors

School of Liberal Studies has adequate number of Full time faculty. However as a value addition and in order to bring in the latest and best professional inputs for students, professionals of various disciplines from relevant industries are invited to deliver courses.

Sr.No.	Name of the Visiting Faculty	Qualification	Organization/Institute
			Association
1	Asha Mandappa	P.G.	Professional artist
2	Prof. Sangeeta Sharma	PhD	University of Rajasthan
3	Prof. Venkatraman	PhD	Veernarmad South Gujarat
			University
4	Dr. Nilesh Joshi	PhD	Veernarmad South Gujarat
			University
5	Prof.Preeti Garg	PhD	Veernarmad South Gujarat
			University
6	Dr. MV Reddy	PhD	Osmania University
7	Dr. Dhyani Mehata	PhD	Nirma University
8	Mr. Manoj Sahoo	MA, M.Phil	PDPU

PDPU 134/269

9	Mr. Meena Bilgi	MA	PDPU Researcher
10	Mr. Ashwin Parwani	M.Com	Gujarat University
11	Mr. Abhinav Kapadia	CA	PDPU
12	Mr. Abhinav Banker	Professional	Theatre Professional
		Expert	
13	Ms. Esha Shah	M.A.	Professional trainer
14	Ms. Krishna Kanabar	Freelance	Freelance Media Person
		Media Person	
15	Dr. Parna Mukharjee	PhD	Faculty, Nirma University
16	Ms. Nisha vyas	M.A.	Professional Language
			Trainer
17	Ms. Lavanya Trivedi	M.A.	Professional Language
			Trainer
18	Mr. Khoei	M.A.	Professional Language
			Ttrainer
19	Ms. Poorvi Vyas	CCEE	Food Entrepreneur
20	Ms. Preeti Das	M.A.	Freelance media Person
21	Ms. Rifat Quaadri	MA	GU
22	Dr. Minni Mathews	PhD	GU
23	Dr. Shilpa Das	PhD	GU
24	Dr. Geetanjali Dutta	PhD	GIDR
25	Dr. Arun Kumar Malik	PhD	GNLU
26	Dr. Sanjay Kumar Jha	PhD	GCU
27	Ms. Shilpa Parshurampuria	MA	Research Scholar
28	Mr. Bansi Patel	MBA	NICM
29	Mr. Harshil Trivedi	CA	ICAI
30	Mr. Bhasin Mehata	MBA	PDPU
31	Dr. Rohit Srivastava	PhD	PDPU
32	Dr. Manoj Kumar Pandey	PhD	PDPU
33	Dr. Bala Murali Mayya	PhD	PDPU
34	Dr. Nirendra Mishra	PhD	PDPU
35	Mr. Darshit Shah	M.Sc	PDPU
36	Mr. Rajesh Jani	B.P.Ed	Freelance Sports Coach
37	Dr. Junera	PhD	NICM
38	Dr. Vijay Sinh Dandakihia	PhD	St. Xavier's College
39	Dr. Jigna Trivedi	PhD	NICM
41	Dr. Balaji Ranganathan	PhD	GCU

13. Percentage of classes taken by temporary faculty –Programme wise information:

None

PDPU 135/269

14. Programme wise Student Teacher Ratio -

Name of the	Total no of	No of Teachers	Student Teacher
Programme	Students		Ratio
MA English	7	4 + 3 Adjunct	1:1
		Faculty	
MA Public Admin	17	3+1 Adjunct faculty	4.25:1
MA IR	4	2+3 Adjunct faculty	1:1
		, ,	
BA/BBA/ B.Com	668	17 + 39 Adjunct	11.92:1
Hons		Faculty	

15. Number of academic support staff (Technical) and Administrative staff: sanctioned, filled and actual:

Sanctioned Post	Filled Post	Actual
4	4	4

16. Research thrust areas as recognized by major funding agencies

Nil

17. Number of faculty with ongoing projects from a) National b) International Funding agencies and c) Total grants received. Give the names of the funding agencies, projects title and grants received project – wise:

Sl.No	Project Details	Faculty involved	Funding	Funding Amount
			Agency	
1	Impact India 2021:	Prof. (Dr.) Nigam	World	1500 USD
	Elevating the Value of	Dave	Bank	
	Women & Girls	Ms. Neeta Khurana		
	Pilot study	Dr. Ritu Sharma		
2	"Women's Economic	Dr Ritu Sharma	Edith	\$6,360.00 (AUD)
	Empowerment in	(Project Head), Dr	Cowan	
	Asia: Psychosocial	Neeta Sinha, Ms.	University,	
	and Anthropological	Neeta Khurana,	Australia	
	factors"	Ms. Supriya Pal,		
		Prof D. M.		
		Pestonjee (Mentor		
		for Review)		
3	Slum Rehabilitation	Ms. Neeta Khurana	B Safal	3,00,000 INR
	housing impact		Pvt Ltd	

PDPU 136/269

 Self Evaluation Report – Volume II						
assessment-	Dr. Ritu Sharma					
Ahmedabad-2015						

18. Inter- Institutional collaborative projects and associated grants received

a) National Collaboration b) International Collaboration SLS, PDPU and Raksha Shakthi University have collaborated for research collaborations and have hosted Psychology Symposium and national conference on Mental Health. The Conference was funded by American Psychologists Association.

19. Departmental projects funded by UGC-SAP/CAS, DPE, ICSSR etc, Total grants Received:

Nil

20. Research Facility/ Center with

- State Recognition
- National Recognition
- International Recognition

Not Applicable

21. Special Research Laboratories Sponsored by /created by industry or corporate Bodies

Nil. However, out of genuine research inclinations, PDPU has established Psychology Laboratory. The following is an illustrative list of Lab test/Instruments available at SLS:

- Muller Lyre Illusion with Stand Scale and Manual
- Mirror Drawing Apparatus Electronics with Digital reset error counter
- Human Maze Learning Electronics with Digital reset error counter and Timer
- Memory Drum Four Variable Speed Electrical
- Recall of Completed and In completed Task: (RCIT-B) Zeigarnik Effect-English
- Cattell and Cattell. Culture Fair (Free) Intelligence Scale Indian Print Kapoor, Rao and Singh. (Indian Adaptation)- (ii) Scale II (English) (CFIS-II E)
- Stop Watch (Timer) Racer Electronics Digital
- Metronome (Electronics Indian)
- Performance Intelligence Test of Adult- (Age group 15 to 45 years.)
- Pass-a-Long Test of Intelligence
- Koh's Block Design Test with Cards, Manual and 100 Scoring Sheet (KBDT–K) (Mental Age 5 years 7 months to 19 years 11 months)

PDPU 137/269

- Bhatia. Battery of Performance Intelligence Test (BPIT–B) (A 11 to 16 years)
- R. B. Cattell 16 P. F. Questionnaire (16PFQ–CR)
- Cattell and Cattell. Technical Hand Book of HSPQ
- H. J. Eysenck. Maudsley Personality Inventory (MPI–E)
- Bender Visual Motor Gestalt Test Guidelines. Indian (BVMGTGI) (Age group 7 to 14 years.)
- H. Rorschach Ink Blot Technique
- Rorschach Record and Analysis Blank
- H. A. Murray. Thematic Apperception Test(TAT–MH)
- Draw-A-Man Test for Indian Children Dr. P. Phatak
- Levenson's Scale for Locus of Control Indian Adaptation(English)-by Vohra
- Adjustment Inventory for School Students (AISS) English by A.K. P Sinha and R.P.Singh Set
- Adjustment Inventory for College Students English/Hindi specify -by A.K. P. Sinha and R.P.Singh
- P. G. I. General Well-being Measure PGIGWBM–VV) Hindi/ English S. K. Verma and Anita Verma.
- Parent Child Relationship Scale(PCRS)- NaliniRao (English).
- State-Trait Personality Inventory Measure Anxiety, Anger, Depression, & Curiosity in one Inventory Charles D. Spielberger: STPI
- Differential Aptitude Test (DAT)

22. Publications

Number of papers published in peer reviewed journals (National and International) = 49

1	Sanjay Kumar Pradhan	Appraisal of Gandhi and Indian Struggle against Racism in South Africa	World Focus	JAN	2011
2.	Sanjay Kumar Pradhan	Russia-US Relationship in the Post-Cold War Era: Can it be reset?	Journal of Peace Studies	JAN	2011
3.	Sanjay Kumar Pradhan	Problems of Tribal Education in India	Kurukshetra	JAN	2011
4.	Sanjay Kumar Pradhan	Contemporary Dimensions of the India-Africa Economic Relationship: An Indian Perspective	World Affairs	JAN	2011
5.	Sanjay Kumar Pradhan	Are the Elephant and Dragon in Brawl? A Comparative perspective of India and China in Africa	World Focus	JAN	2011

PDPU 138/269

		Self Evaluation Report – Volu	me II		
6.	Sanjay Kumar Pradhan	India and Africa: Quest for Oil and Gas	Indian Foreign Affairs Journal	JAN	2012
7.	Sanjay Kumar Pradhan	Spartly Dispute: Looking through Oil and Gas and India's Energy Approaches	World Focus	JAN	2012
8.	SANTOSH KUMAR	Challenges of Good Governance in India: Changing Role of CAG	The Discussant: journal of Centre for Reforms, Development and Justice	JUL	2012
9.	Dr.Anurag Kumar Srivastava	Climate change: Global response"	"Scholarly Journal of Engineering Research"	OCT	2012
10.	Sanjay Kumar Pradhan	The NREGA and Rural Women: Employment Opportunities and Challenges	International Journal of Academic Conference Proceedings	NOV	2012
11.	Ritu Sharma	"A Comparative Analysis of Managerial Competencies across Business Domains: An Indian Perspective"	International Journal on Research and Development –A Management Review (IJRDMR)	JAN	2013
12.	Ritu Sharma	• "Depression Management through Psycho Spiritual Package: An Indian Perspective"	in Indian Journal of Health & Well being	JAN	2013
13.	Sanjay Kumar Pradhan	The Myanmar-Bangladesh- India Gas Pipeline: Intricacies, and Indian Foreign Policy Discourse	World Focus	JAN	2013
14.	Sanjay Kumar Pradhan	Stable Oil and Unstable Sudans: Implications for Indian Energy Security	International Interdisciplinary Research Journal	JAN	2013
15.	Sanjay Kumar Pradhan	India's International Quest for Oil and Gas Resources: A Foreign Policy Perspective'	World Focus	JAN	2013
16.	Ritu Sharma	• "Mood State Study: An Indian Perspective"	-Social and Behavioral - (ELSEVIER)	FEB	2013
17.	D Sriram	Public Private Partnerships in safeguarding Maternal Mortality and Neonatal	Public Affairs and Governance	MAR	2013

PDPU 139/269

		Self Evaluation Report – Volu	me II		
		Helath: The Gujarat Model(Chiranjeevi Yojana))			
18.	Ritu Sharma	"Mentoring for Effective Positive Workforce: A Case Study"	Global Journal of Finance and Management	APR	2013
19.	NEETA SINHA	1. A Comparative Analysis between Gender, Age groups and levels of teaching of perceived Organizational Role Stress among faculties of Management Education	International Journal of Business and General Management	JUL	2013
20.	Ritu Sharma	Global Talent-Create to Sustain"	Journal of Global Studies (JGS)	SEP	2013
21.	NEETA SINHA	6. Organization Culture and its Dynamics – A Case Study	International Journal of Business, Management and Social Sciences,	OCT	2013
22.	NEETA SINHA	1. An exploratory study on the feasibility and challenges of implementation of Right to Education Act (RTE)	The International Journal of Indian Psychology, IJIP	OCT	2013
23.	Ashvin R. dave	Customer Satisfaction In Banking Sector – Evidence from India	Global Management Horizon	DEC	2013
24.	Chaitanya Vyas	What do Indian customers want in a cell phone? Strategies for network providers and handset manufacturers	International Journal of Indian Culture and Business Management, Inderscience Publisher	DEC	2013
25.	Sanjay Kumar Pradhan	India-Iraq Energy Cooperation: Boost with Accomplishments, Twisted with Anomalies	World Focus	JAN	2014
26.	NEETA SINHA	A Comparative Analysis between Gender, Age groups and levels of teaching of perceived Organizational Role Stress among faculties of Management Education	International Journal of Business and General Management (IJBGM),	JUL	2014
27.	Sanjay Kumar Pradhan	Iraq and Energy 'insecurity'	Geopolitics	AUG	2014

PDPU 140/269

		Self Evaluation Report – Volu	me II		_
28.	NEETA SINHA	An Analysis of the Effect of Emotional Intelligence and Gender on Stress Levels of Management Students	International Journal of Education and Management Studies	DEC	2014
29.	Neeta khurana	Lonliness	Research Scholar : An International Refereed e-Journal of Literary Explorations	FEB	2015
30.	Neeta khurana	Vaccuum	Research Scholar An International Refereed e-Journal of Literary Explorations	FEB	2015
31.	Sanjay Kumar Pradhan	Shale gas in Indo-US cooperation	Geopolitics	FEB	2015
32.	Ritu Sharma	Cognitive-Behavioral Approach in Mentoring College Students For Personal Effectiveness: An Empirical Study	Scholedge International Journal of Multidisciplinary &Allied Studies	MAY	2015
33.	NEETA SINHA	Effects of growing mobile usage at workplace and its impact on work productivity - A detailed analysis	Global Journal of Research in Business & Management	JUN	2015
34.	Sanjay Kumar Pradhan	Geopolitics and Cooperation between India and Russia on the Hydrocarbon Sector	Indian Foreign Affairs Journal	JUN	2015
35	Dr. D. Sriram	Role of Public Private Partnerships in controlling Tuberculosis: A Study with Reference to Hyderabad	Osmania Journal of Social Science	Dec	2010
36	Dr. Venkat Ram Reddy	Information and Communication Technology and Police reforms in India	KU Journal of Social Sciences		2013
37	Dr. Sitakanta Mishra	"Nuclear Rehabilitation of Pakistan!"	Defence and Diplomacy (New Delhi)	Oct-Dec	2014
38	Dr. Sitakanta Mishra	Defence Beyond Design: Towards a New Nuclear Paradigm	Air Power (New Delhi)	July-Sep	2014
39	Dr. Sitakanta Mishra	India's Nuclear Grand Bargain	Defence and Diplomacy (New Delhi)	July-Sep	2013

PDPU 141/269

40	Dr. Sitakanta Mishra	Safety, Security, Safeguards: The Intricate Interface"	Air Power (New Delhi)	July-Sep	2013
41	Dr. Sitakanta Mishra	Nuclear Waste: India's Gordian Knot?	Air Power (New Delhi)	Oct-Dec	2012
42	Dr. Sitakanta Mishra	"Social Acceptance of Nuclear Power in India"	Air Power (New Delhi)	July- Sept	2012
43	Dr. Sitakanta Mishra	"Cyber Threat to Nuclear Installations"	Scholar Warrior (New Delhi)	Autumn	2012
44	Dr. Sitakanta Mishra	"Gaze China – The Most Favoured Nuclear Guest"	Defence and Diplomacy (New Delhi)	July-Sep	2012
45	Dr. Sitakanta Mishra	Siting of India's Nuclear Plants: The Modus Operandi"	Air Power (New Delhi)	April- June	2012
46	Dr. Sitakanta Mishra	"Safety and Security of India's Nuclear Facilities"	Defence and Diplomacy (New Delhi)	Jan-Mar	2012
47	Dr. Sitakanta Mishra	The Nuclear Factor in India's Foreign Policy", (co-authored)	Journal of Indian Studies, The Korean Society for Indian Studies (South Korea)	Novemb er	2009
48	Dr. Sitakanta Mishra	Nuclear Security Governance in India: Institutions, Instruments, and Culture (co- authored)	Sandia Report, SAND2015-0233, Sandia National Lab, Albuquerque, USA	January	2015
49	Dr. Sitakanta Mishra	Cooperative Measures to Support the Indo-Pak Agreement on Reducing Risk from Accidents Relating Nuclear Weapons (co- authored)	Sandia Report, Sandia National Lab, Albuquerque, USA	April	2014

Full papers in Conference Proceedings: 08

1.	Sanjay Kumar Pradhan	ICTs and its Impact on Rural Women in India	AUG	2012
2.	Sanjay Kumar Pradhan	Visualizing Women Entrepreneurship in South Africa: A Post-Apartheid Scenario	FEB	2013
3.	Dr. Anurag Kumar Srivastava	Policies On Water: An Analytical Study On Water Allocation Priorities	MAY	2013
4.	Dr. Anurag Kumar	Island Biodiversity: Impact of Climate Change on of	MAY	2013

PDPU 142/269

	Srivastava	Small Islands"		
5.	D Sriram	Proliferation of Private Sector in Service Delivery: An Experience from India	OCT	2013
6.	D Sriram	Public Private Partnerships in helath Services in India: Arogyasri as a Benchmark	NOV	2013
7.	Dr. Sanjay Kumar Pradhan	Indo-Nigerian Ties: Geopolitics for Energy Security and Challenges	JAN	2014
8.	Chaitanya Vyas	Limitations of Selected e-Governance Services in India: Policy Change as Solution for Experience Enhancement of Citizen Services	JAN	2015

Chapters in Books: 13

1	Rupakjyoti Borah	India and Japan in the Emerging Asian Equation	October 2012
2	Rupakjyoti Borah	India's Engagement With New Zealand: What Ails The Relationship	December 2012
3	Dr.Anurag Kumar Srivastava	Applying Service Quality Metrics for E – Urban Governance: A Case Study of Lucknow Municipal Corporation	February 2013
4	Dr. Neeta Sinha	Perceived Role Efficacy of faculties of Management Institutes in Saurashtra Region: A comparison between two genders	February 2015
5	Dr. D. Sriram	Organizational Structure for better work culture in Academic institutions	December 2014
6	Dr. Venkat Ram Reddy	Governance	2014
7	Dr. Sitakanta Mishra	"Zero Justifiable Gains: Lessons from Cold War TNWs Experience", in Vinod Patney <i>edited Asian</i> <i>Defence Review 2014-2015</i> , KW Publishers.	August 2015
8	Dr. Sitakanta Mishra	"India's Nuclear Diplomacy: From Apartheid to Multi-Alignment", in Badrul Alam edited Contours of Indian Foreign Policy: Challenges and Opportunities, New Delhi: Reference Press	2014
9	Dr. Sitakanta Mishra	"Cruise Missile Defence: The Supersonic Challenge", in the Project Report to DRDO on <i>Threats, Challenges and Capabilities 2050</i> led by Jasjit Singh, Centre for Air Power Studies, New Delhi	2013
10	Dr. Sitakanta Mishra	"Introspecting on China's India War" in Jasjit Singh edited <i>China's India War 1962</i> , New Delhi: KW Publishers, pp. 309-322	2013
11	Dr. Sitakanta Mishra	"Nuclear Waste: India's Gordian Knot?", in Jasjit Singh edited <i>Asian Defence Review 2012</i> , New Delhi: KW Publishers Pvt. Ltd., pp. 79-102.	2013

PDPU 143/269

12	Dr. Sitakanta Mishra	"Fukushima Nuclear Disaster: Breakdown of	2012
		Events", in Manpreet Sethi edited Nuclear	
		Power: In the Wake of Fukushima, New Delhi:	
		KW Publishers Pvt. Ltd.	
13	Dr. Sitakanta Mishra	"Securing India's Nuclear Facilities: Defence by	2012
		Design and Beyond", in Jasjit Singh edited Asian	
		Defence Review 2011, New Delhi: KW	
		Publishers Pvt. Ltd.	

Books Edited: 02

1	Prof. Nigam Dave	Ruskin Bond: A Critical Evaluation	Jan 2012
2	Dr. Sanjay K	The People of Indian Origin (PIO) in South	Jan 2013
	Pradhan	Africa: Past Trajectory and Present Discourse	

Papers Presented in the conference: 65

1.	Nigam Dave	Black Donnellys Vs. Reaney's Donnellys: An Attempt by a Dramatist to Re-Write History	FEB	2009
2.	Nigam Dave	Ruskin Bond's Dehra: A Town with Grey Heads and Green Hedges	DEC	2009
3.	Nigam Dave	The Language I speak becomes Mine: Appreciating Kamla Das the Poet and the Person	JAN	2010
4.	Nigam Dave	Translating Literature through SMS Language	SEP	2010
5.	Nigam Dave	Translating Literature through SMS Language	SEP	2010
6.	Sanjay Kumar Pradhan	Critical Theory in International Relations	MAR	2011
7.	Nigam Dave	Digital Resources and Research Methods	JUN	2011
8.	Nigam Dave	You Tube for US	DEC	2011
9.	Urmi Satyan	Bama's Karukku—A Journey and Search with a Hope for Integrity and Humility	DEC	2011
10.	Urmi Satyan	The Inside-Outside Coflict between Spiritual Hollowness and Materialistic Wish-Fulfillment: An Approach to Study the Fiction Writings by Bharati Mukherjee and Chitra Banerjee Divakaruni	JAN	2012
11.	Nigam Dave	Afro-American Identities in Painting	MAR	2012
12.	Sanjay Kumar Pradhan	Theorizing Patriarchy in India	AUG	2012
13.	Sanjay Kumar	ICTs and its Impact on Rural Women in India	AUG	2012

PDPU 144/269

	Pradhan			
14.	Sanjay Kumar Pradhan	Education of Tribal Women in India: Opportunities and Challenges'	OCT	2012
15.	Sanjay Kumar Pradhan	Impact of e-Governance on Rural Women in India	NOV	2012
16.	Sanjay Kumar Pradhan	Rise of India and China in African Oil and Gas Market: Strategies, Competition and Assessment	DEC	2012
17.	Urmi Satyan	Food as a Symbol of Culture: A Study of Jhumpa Lahiri's The Interpreter of Maladies	DEC	2012
18.	Ritu Sharma	"A Comparative Analysis of Managerial Competencies across Business Domains: An Indian Perspective"	JAN	2013
19.	Sanjay Kumar Pradhan	Indo-Nigerian Ties: Geopolitics for Energy Security and Challenges	JAN	2013
20.	Sanjay Kumar Pradhan	Gender Budgeting in India: An Overview	JAN	2013
21.	Sanjay Kumar Pradhan	Gandhiji and Non-Violent Action in South Africa: Theory and Practice'	JAN	2013
22.	Sanjay Kumar Pradhan	Visualising Women Entrepreneurship in South Africa: A Post-Apartheid Scenario	FEB	2013
23.	Urmi Satyan	Existentialism and "A Leap into the Abyss": A Study of The Immigrant by Manju Kapur	FEB	2013
24.	D Sriram	Public Private Partnership in Safeguarding of Maternal Mortality and Neonatal Health	MAR	2013
25.	D Sriram	Technological Innovations in India with Reference to time and Drudegry saving for Women	MAR	2013
26.	Dr. Anurag Kumar Srivastava	"National Food Security Bill"	MAR	2013
27.	Sanjay Kumar Pradhan	Natural oil and gas in Africa: opportunities, strategies and challenges for India	MAR	2013
28.	Sanjay Kumar Pradhan	Cooperatives in South Africa: An Assessment through Third World Perspective	MAR	2013
29.	Dr.Anurag Kumar Srivastava	Discourses on Indian Politics: Post-Coalition Era- Technology and Development: Trends and Policies of Alliance an Overview	APR	2013
30.	Dr.Anurag Kumar Srivastava	The Rights Discourse: Concerns Regarding the Implementation of National Food Security Act 2013"	APR	2013

PDPU 145/269

31.	Sanjay Kumar Pradhan	Right to Education in India: Challenges for Rural Girl Children	APR	2013
32.	Urmi Satyan	Young India and the 16 th Loksabha Election	APR	2013
33.	NEETA SINHA	2. An exploratory study on the feasibility and challenges of implementation of Right to Education Act (RTE)	JUL	2013
34.	Neeta khurana	"Feminist Perspective on Maternity Benefits: Disparities in the Law"	AUG	2013
35.	Niyati Shah	Performing Artists and Autobiography: Embedded Gender Roles	AUG	2013
36.	Ritu Sharma	'Mood State Study: An Indian Perspective'	AUG	2013
37.	Neeta khurana	"A Gynocritical Reading of Nalini Jameela's The Autobiography of a Sex Worker and Amen: The Autobiography of a Nun by Sister Jesme"	SEP	2013
38.	Neeta khurana	'Engendering Law : A Feminist Perspective'	SEP	2013
39.	NEETA SINHA	1. An analysis of the effect of Emotional Intelligence on gender and stress levels of Management students	SEP	2013
40.	Sanjay Kumar Pradhan	Piracy in the Malacca Strait: Maritime Insecurity and Implications for the World Energy Flow	SEP	2013
41.	NEETA SINHA	5. Organization Culture and its Dynamics – A Case Study	OCT	2013
42.	Rupakjyoti Borah	India-China Strategic Ties in the Asian Century: Problems and Prospects	OCT	2013
43.	Sanjay Kumar Pradhan	Corporate Social Responsibility (CSR): A Reference to Oil and Gas Companies in India		2013
44.	Sanjay Kumar Pradhan	The PIO and shaping of South Africa-India relationship in the post-apartheid era: A foreign policy perspective	DEC	2013
45.	SANTOSH KUMAR	MODERNIZATION, SOCIAL EXCLUSION AND EMPOWERMENT OF OTHER BACKWARD CASTES IN INDIA: A STUDY OF GUJARAT	MAR	2014
46.	SANTOSH KUMAR	KEY NOTE ADDRESS: DEMOCRACY AND DEVELOPMENT IN INDIA: THE ISSUES IN INCLUSION AND EXCLUSION	MAR	2014
47.	SANTOSH KUMAR	DEMOCRATIC GOVERNANCE AND BUREAUCRATIC ETHICS IN INDIA	MAR	2014
48.	Ritu Sharma	"Mentoring for Effective Positive Workforce: A Case Study"	APR	2014
49.	Urmi Satyan	M G Vassanji's The Book of Secrets: A Study of	AUG	2014

PDPU 146/269

		Engendered Culture of Colonized East Africa		
50.	Urmi Satyan	"Ability" "Delight" and "Ornamentation" in Technological ELL	OCT	2014
51.	Nigam Dave	Higher Education Vision 2030	NOV	2014
52.	NEETA SINHA	Perceived Role Efficacy of faculties of management institutes	FEB	2015
53.	S. VENKATA KRISHNAN	India's Capabilities, Perceptions and Influence	FEB	2015
54.	Ritu Sharma	'Cognitive Behavior Approach in Mentoring College Students for Personal Effectiveness: An Empirical Study'	MAR	2015
55.	Ritu Sharma	Gender Equality and Women Empowerment in Higher Education: A Comparative analysis in the Indian Context	JUN	2015
56	Dr Sitakanta Mishra	"Security of Nuclear Assets in South Asia", in a seminar on "Technology and Aerospace Power" jointly conducted by CAPS and HQ MC at 3 BRD, Chandigarh	25 August	2015
57	Dr Sitakanta Mishra	"Fallouts of US-Iran Nuclear Deal", at the seminar on Geopolitics and Air Power, organized by Centre for Air Power Studies & HQ South Western Air Command, 36 Wing Air Force, Vadodara	25 June	2015
58	Dr Sitakanta Mishra	"India's Nuclear Doctrine: A Regional Perspective", presented in the CAPS-CAC Allahabad, India	10 December	2014
59	Dr Sitakanta Mishra	Co-presented paper on "Nuclear Security Governance in India: Institutions, Instruments, & Culture" at the Sandia National Lab, Albuquerque (USA)	9 July	2014
60	Dr Sitakanta Mishra	"Social Acceptance of Nuclear Power in India", presented at CAPS organised National Seminar on Nuclear Power: An Assessment Three Years after Fukushima at Air Force Auditorium, Subroto Park, New Delhi	03 March	2014
61	Dr Sitakanta Mishra	Co-presented paper on India's Nuclear Security Culture at the Nuclear Threat Initiative (NTI), Washington DC	17 July	2014
62	Dr Sitakanta Mishra	Co-presented paper on India's Nuclear Security Culture at the Stimson Centre, Washington DC	16 July	2014
63	Dr Sitakanta Mishra	Roundtable Discussion at the Carnegie Endowment, Washington DC on Nuclear Security in India	15 July	2014
64	Dr Sitakanta Mishra	Paper on "Social Acceptance of Nuclear Power in India", presented at CAPS organised National Seminar	03 March	2014

PDPU 147/269

	on Nuclear Power: An Assessment Three Years after Fukushima at Air Force Auditorium, Subroto Park, New Delhi			
65	Dr Sitakanta Mishra	Co-presented a paper on "Cooperative Measures to Support India-Pakistan Agreement on Reducing Risk from Accidents Relating to Nuclear Weapons" at the Cooperative Monitoring Centre of Sandia National Lab, USA	09 December	2013

SLS faculty members have published research papers in National and International Journals, Chapters in Edited books, Monographs, Case studies and Articles in Business magazines and NEWS papers.

SLS faculty members regularly present their research papers in national and international conferences. There are four edited books also authored by SLS faculty Members. Detailed information is mentioned separately and will be made available to the visiting committee.

23. Details of patents and income generated

Nil

24. Areas of consultancy and income generated

Nil

25. Faculty selected nationally/ Internationally to visit other laboratories / institutions/ Industries in India and abroad

SLS faculty members have visited several countries to disseminate their research in international conferences and conducted professional workshops/seminars.

Detailed information will be made available to the visiting committee.

S.No	Name of the Faculty	Institutes and Universities	Year
1	Prof. Nigam Dave	University of Houston, US	2009
2	Prof. Nigam Dave	Tulsa University, US	2009
3	Prof. Nigam Dave	Oklahoma University US	2009
4	Prof. Nigam Dave	Texas A&M University US	2009
5	Prof. Nigam Dave	National University of Singpore, Singpore	2013
6	Prof. Nigam Dave	Singpore Management University, Singpore	2013
7	Prof. Nigam Dave	TAFE, Sydney, Australia	2013
8	Prof. Nigam Dave	University of Melbourne, Australia	2013
9	Prof. Nigam Dave	University of Wollongong, Australia	2013

PDPU 148/269

11Prof. Nigam DaveUniversity of Adelaide, Australia12Prof. Nigam DaveEdith Cowan University, Australia13Prof. Nigam DaveCurtin University, Perth, Australia14Prof. Nigam DaveUniversity of Western Australia, Perth, Australia15Dr. Ashvin DaveOxford University, UK16Dr. Ashvin DaveAsia Pacific International Academy, Singapore17Dr. Ritu SharmaICSB 2015 60th World Conference, UAE	2013 2013 2013 2013 2013
13 Prof. Nigam Dave Curtin University, Perth, Australia 14 Prof. Nigam Dave University of Western Australia, Perth, Australia 15 Dr. Ashvin Dave Oxford University, UK 16 Dr. Ashvin Dave Asia Pacific International Academy, Singapore	2013 2013
14 Prof. Nigam Dave University of Western Australia, Perth, Australia 15 Dr. Ashvin Dave Oxford University, UK 16 Dr. Ashvin Dave Asia Pacific International Academy, Singapore	2013
Australia 15 Dr. Ashvin Dave Oxford University, UK 16 Dr. Ashvin Dave Asia Pacific International Academy, Singapore	
15 Dr. Ashvin Dave Oxford University, UK 16 Dr. Ashvin Dave Asia Pacific International Academy, Singapore	2014
16 Dr. Ashvin Dave Asia Pacific International Academy, Singapore	2014
Singapore	∠U14
	2014
17 Dr. Ritu Sharma ICSB 2015 60 th World Conference, UAE	
	2015
18 Dr. Ritu Sharma University of Wollongong, Australia	2014
19 Dr. Ritu Sharma American Psychological Association (APA), 2013
Turkey	
20 Dr. D. Sriram UNREDD, Bangkok, Thailand	2014
21 Dr. D. Sriram UESTC, China	2014
22 Dr. D. Sriram IASIA, Louis Lycee Le grand, Paris, Franc	e 2015
23 Dr. Neeta Sinha IAAR, Singapore	2013
24 Dr. Neeta Sinha University of Wollongong, Australia	2015
25 Dr. Chaitanya Vyas World Association of Science,	2015
Engineering & Technology, Zurich,	
Switzerland	
26 Dr. Chaitanya Vyas University of Wollongong, Australia	2015
27 Ms. Niyati Trivedi University of Paris, pantheon, France	2015
Naval War College, USA in Istanbul, Turke	ey 2014
Dr. Sitakanta Mishra	
29 Dr. Sitakanta Mishra Sandia National Labs, New Mexico, USA	2014

26. Faculty serving in

a) National Committees b) International Committees c) Editorial Boards d) any other (please specify)

SLS faculty members have been members on editorial boards of national and international journals, International academic associations, International award committees, reviewers for International journals and members of research review committees of other universities for PhD research. Detailed information is mentioned separately and will be made available to the visiting committee.

- a. Dr. Neeta Sinha Has been appointed as member of RDC as an external expert at the Department of Labour and Social Welfare, Gujarat University.
- b. Dr. Neeta Sinha Has been appointed as member, Board of Studies, Department of Psychology, Calorx University
- c. Dr.D. Sriram has been appointed as PhD Research Review committee Member, Department of Planning, CEPT University.

PDPU 149/269

d. Dr. Ritu Sharma has been appointed as External PhD Supervisor at Raksha Shakti University.

b) Chairs instituted by the University

The School/ university is on a constant lookout for specialized faculty whenever required in the last 3 years.

27. Faculty recharging strategies UGC, ASC, (Refresher/ orientation programmes, Workshops, training programmes and similar programmes)

SLS encourages and recommends its faculty members to participate in faculty development programmes of premier institutions like IIMs, Central Universities, and Academic Staff Colleges of various universities. Detailed information is mentioned separately and will be made available to the visiting committee.

- 1. Ms. Anju Musafir, Founder and Principal of Mahatma Gandhi International School, lecture on 'Male Gaze and Objectification of Women', February 13, 2015
- 2. Dr. Niladri Chatterji, lecture on 'Male Body Politics' on April 3, 2015
- 3. Prof. Bharat Desai, JNU, lecture series on 'Role of International Law in International Politics' on April 27-28, 2015
- 4. Prof. Ranjana Harish, Former HOD, Dept. of English, Gujarat University, Lecture on 'Shakespeare and Mirabai' on April 17, 2015.
- 5. Mr. Mahesh Pandya, Paryavaran Mitra, lecture on 'The role of a student and a citizen in the field of environmental protection with the help of law' on April 20, 2015
- 6. Mr. Manvendra Saraswat, State Head, Adecco India, lecture on 'CEO for a Month Program' on July 15, 2015.
- 7. Shri. Hariom Gandhi, Zonal Director, Narcotics Control Bureau, lecture on 'Happy and Healthy Life' on July 31, 2015.
- 8. Prof. Arvind Kudchadker, lecture on 'Exciting Times Challenges and Opportunities for Young India' on August 11, 2015.
- 9. Mr. Ajay Ramasubramaniam, Director of Business Development, Reyerson Futures Inc. and the Program Head, Xone Startups India, lecture on 'Innovation and Entrepreneurship' on August 12, 2015.
- 10. 1st Distinguished Lecture by the famous poet Makarand Paranjape on April 1, 2014
- 11. 2nd Distinguished Lecture by Google India Head, Mr. Lalitesh April 15, 2014
- 12. 3rd Distinguished Lecture by RBI Regional Head, Prakash Chandra Sahu on April 15, 2014
- 13. 3rd Public Diplomacy Lecture Series, lecture by Ambassador of India to Japan Dr. Aftab Seth, July 22, 2014
- 14. 1st Teachers' Day Lecture Series, Lecture by Prof. Dawoodbhai A. Ghanchi, Former Pro-VC of North Gujarat University September 5, 2014.

PDPU 150/269

28. Student Projects

• Percentage of students who have done in house projects including interdepartmental projects.

Weblink: http://sls.pdpu.ac.in/students-projects.html

• Percentage of Students doing projects in collaboration with other universities/ Industries/ Institutes.

Weblink: http://sls.pdpu.ac.in/students-projects.html

29. Awards/ recognitions received at the national international level by

- Faculty
- Doctoral/ Post Doctoral Fellows
- Students

SLS faculty members have received awards, Fellowships, and recognitions at national and international institutions for their specific contributions to research and academic achievements. SLS students have also won awards and recognitions in various events organized by different institutions. Detailed information will be made available to the visiting committee.

30. Seminars/Conferences/ Workshops organized and the source of funding (National/ International) with details of outstanding participants, if any

SLS has organized 4 national seminars since its inception annually. SLS has also been organizing subject related workshops, conclaves; roundtables etc. detailed information will be made available to the visiting committee.

31. Code of ethics for research followed by the departments

SLS and PDPU follow strict ethical standards for research. Not only doctoral but PG and UG students are also educated by SLS faculty on plagiarism, intellectual property rights, copyright protection, scientific research citations and professional research ethics. In the paper of research methodology modules of research and academic ethics are discussed.

- To consult the Primary Sources
- To follow the international parameter for research
- Preparation of Index as per research guidelines
- To encourage the scholars to produce original research work

PDPU 151/269

32. Student Profile programme -wise

UG (**BA/BBA Honors**, **B.Com Honors**): students are selected through a rigorous process that includes written test, personal interview. UG students come from different academic, professional and social backgrounds from across the country. Total 668 students are enrolled in UG programmes.

MA: MA students are selected through an entrance exam. SLS offering MA in English, Public Administration and International Relations. Total 28 students are enrolled in PG programmes.

PhD: PhD students are selected through research aptitude test and personal interview by expert committee. Total 17 students are enrolled in PHD programmes.

Student profile programme-wise (2015):

Name of the	Applications	Selected	Pass Percentage	
Programme	Received		Male	Female
B.A/BBA/BCOM	868	264	45	55
M.A	18	15	40	60
Ph.D.	6	01	0	100

33. Diversity of Students

Name of the program	% of the students from the same university	% of the students from the other university	% of the students from universities outside the	% of the students from other countries
		within state	state	
B.A/BBA/B.Com	NA	NA	NA	3
M.A	18	82	0	00
Ph.D	00	100	0	0

34. How many students have cleared Civil service and Defense Service Examinations:

NET, SET, GATE and other competitive examinations? Give Details Category Wise.

Nil

PDPU 152/269

35. Students Progression

Students Progression	Percentage against Enrolled
UG to PG	50%
PG to PhD	10%
PhD to Post Doctoral	Nil
Employed through Campus Selection	20%
Employed through other than campus	20%
recruitment	
Entrepreneurs	15%

Majority if the students graduating from the School are going for higher education in the Indian and Foreign institutes and Universities. Very small percentage of students take up jobs.

36. Diversity of Staff

Percentage of faculty members who are graduates	100%
From the same University	None
From other University within the state	50%
From the Universities from other states	50%
From Universities outside the County	None

37. Number of faculty who were awarded M. Phil, PhD, PDF, D.Sc, and D.Litt during the assessment period

Mr. Anurag Srivastava awarded PhD from University of Rajasthan.

38. Present details of Departmental infrastructural facilities with regard to

A) Library

a) Library Area in Sq.Mt
 b) Total Number of Books
 c) Total number of National Journals
 d) Total Number of International Journals
 e) Total number of E-books
 256 Sq.Mts
 7710
 23
 30
 40
 50
 50

f) Databases : 02 (Jstor, India Stat)

g) E-journals : 1046

h) Open source software : Dspace(Digital Library Software)

i) CDs : 286

B) Internet facilities for staff and Students

PDPU 153/269

Internet: 150 MBPS

LAN, Wi-Fi, Outlook Web Access, Team Viewer

C) Total number of Class rooms:

20 Class Rooms equipped with multimedia and audio visual equipment

D) Class rooms with ICT facility:

18 Class Rooms

E) Student's Laboratories:

2 Computer laboratories, 1 Physics Lab, 1 Chemistry Lab, 1 Psychology Lab

F) Research Laboratories:

39. List of Doctoral, Post-Doctoral students and research Associates

a) From the host Institution/ University:

b) From other Institutions/ University:

Sl.No	Batch	Name	Area	Research interest	
1	2009	Devang Rangani	English	Contemporary	PhD Student
				Pakistani Fiction	
2	2010	Niyati Shah	English	Autobiography	PhD Student
				and performing	
				Arts	
3	2011	Urmi Satyan	English	Diaspora	PhD Student
4	2011	Sneha Patel	English	Campus Novels	PhD Student
5	2012	Purvi Dave	English	Film Studies	PhD Student
6	2012	Kshama balaji	English	Portrayal of Metro	PhD Student
				cities in English	
				fiction	
7	2010	Daljeet kaur	Economics		PhD Student
8	2011	Meena Bilgi	Public Policy	Women	PhD Student
			and	Empowerment	
			Administration		
9	2011	Elamathi	Public Policy	Public Health	PhD Student
		Dhanaraju	and		
			Administration		
10	2012	Heatal Thakkar	Public Policy	E-Governance	PhD Student
			and		
			Administration		
11	2013	Bhagesh Jha	Public Policy	Service Delivery	PhD Student
			and		
			Administration		
12	2013	Sharon Writer	Psychology	Psychology	PhD Student

PDPU 154/269

Self Evaluation Report – Volume II					
13	2014	Sandhya Sree	Public Policy	Service Delivery	PhD Student
		kumar	and		
		Administration			
14	2014	Shilpa	International	International	PhD Student
		parasurampuria	Relations	Relations	
15	2015	Madhu bharathi	Public Policy	Service Delivery	PhD Student
		Boni	and		
			Administration		
16	2015	Sakshi Jain	Psychology	Psychology	PhD Student
17	2015	Neeta Khurana	English	English	PhD Student

40. Number of Post Graduate Students getting Financial assistance from the University None

41. Was any need assessment exercise undertaken before the development of new programme(s)? if so, highlight the methodology

Yes, the need assessment exercise is undertaken before development of a new programme:

- Through contact with our alumni and industry partners, there is a continuous effort to improve course content. New programmes are suggested and discussed in the Board of Studies (BoS) meeting held for every year.
- BoS members provide their inputs based on their experience which are weaved into the proposal.
- The programme structures and curriculum are first discussed in the academic area meetings followed by discussion at the BoS, then in the faculty of Liberal studies and Academic Council.

42. Does the Department obtain feedback from

a) Faculty on curriculum as well as teaching —learning-evaluation? If yes, how does the department utilize the feedback?

Yes, the institute collects feedback from faculty with regard to curriculum and also teaching – learning evaluation.

- The Feedback of faculty regarding modification of course curriculum or addition of electives is used for curriculum evaluation, improvement and enhancement. The feedback outcome is first discussed in the academic area committee meeting.
- The recommendations are discussed in the Board of Studies, then in the faculty of Management and on approval is sent to the academic council.

PDPU 155/269

b) Students on staff, curriculum and teaching- learning – evaluation and how does the department utilize the feedback?

Yes, the institute has a formal process of collecting feedback from students about the teaching-learning —evaluation process followed in each course. Student feedback is collected at the end of each course. The feedback is reviewed by the Director of every term and it is discussed with the concerned faculty to identify the areas of improvement. The feedback also reflects on the faculty performance evaluation submitted to the University authorities on annual basis.

c) Alumni and Employers on the programmes offered and how does the department utilize the feedback?

Yes, the institute collects feedback from both alumni and recruiters. It collects feedback through various channels and during interactions such as:

- Alumni meet in various cities
- Conclaves, where they are invited
- Recruitments
- Inviting them as experts on varied occasions
- Admissions
- Board of Studies
- Internship and Placement activities
- Faculty of Liberal Studies

The Feedback and valuable suggestions are acted upon appropriately.

43. List of distinguished alumni of the department (maximum 10)

Sr.No	Name of the Alumni	Present designation and Organization of the
		Alumni
1	Ms. Jainisha Chavda	Masters at Birmingham University
2	Ms. Anupriya Raol	Masters at RMIT, Australia
3	Ms. Riva Patel	Masters at Sheffield University, UK
4	Ms. Ashvini srinivas	Masters at John Hopkins University
5	Ms. Isha Gandhi	Masters at Ohio State University, US
6	Ms. Archita Bhaloita	Masters at Mary wood University, US
7	Ms. Mansi patel	Masters at North Island College, Canada
8	Ms. Krishna Bodwala	Masters at Humber College, Canada
9	Mr. Devarsh Trivedi	Masters at Fanshawe College Canada
10	Mr. Ms. Kinjal Gandhi	Masters at Perdue university, US
11	Mr. Hetansh Desai	Masters at Boston University, US
12	Mr. Twikle Thakkar	Masters at Lancester University, UK
13	Mr. Ashima Agarwal	Masters at Cardiff University, UK

PDPU 156/269

44. Give details of student enrichment programmes

(Special lectures/Workshops/seminar) involving external experts:

Students go on industry visits and also take up long term (6-8 weeks) internships for hands-on experience in their areas of interest and specialization. Aptitude test preparation is provided for students to clear entrance tests of various companies as well as institutions of higher education. Soft skills training is provided through rigorous sessions in body language, verbal communication, CV writing, and facing group discussion and interview panels. Various other training programmes are arranged throughout the academic cycle by the respective department as well as Special Interest Groups (Student Clubs), for theme specific training and up gradation of knowledge. Competitions are organized for raising the level of academic competitiveness amongst students. Examples are poster making presentation, Model United Nations, Paper presentation competition etc. Students are encouraged and funded to participate in national and international academic competitions organized by associations/Institutions. Office of International relations of PDPU organizes students interaction with international university representatives in the campus to guide students regarding further study opinions. Industry interactions during seminars/forums/round tables provide students new perspectives on competencies require for careers. Students publish SLS-Mirror, an in-house magazine of SLS at interval of every month. Distinguished lecture series, Faculty Seminar series are conducted at regular intervals throughout the academic year. In addition, psychology symposium, economic conclave, roundtable on gender studies etc. are organized every year to enrich the students learning during the programme. Specialised workshops for skill enhancement and specialized subject knowledge development are conducted from time to time.

45. List of teaching methods adopted by the faculty for different programmes

The pedagogical tools that are used by our faculty members to enhance learning experience are:

- a) Lecture Method
- b) Lecture supplemented by videos
- c) Role plays
- d) In-class exercises
- e) Mini as well as comprehensive projects
- f) News paper discussions
- g) Research paper presentation and discussion from reputed journals
- h) Case study analysis and presentations
- i) Industry visits
- j) Expert lectures by industry
- k) Film analysis
- 1) Observational learning through field visits
- m) Scenario building and analysis

PDPU 157/269

n) Debates

46. How does the department ensure that programme objectives are consistently met and learning outcomes are monitored?

Programmes and objectives and learning outcomes are monitored and measured through the continuous evaluation system across different courses. Each course faculty designs unique evaluation criteria accordingly in their respective course plan. Students are required to give feedback formally at the end of each course with respect to a) Course and b) instructor on the basis of learning outcomes.

47. Highlight the participation of students and faculty in extension activities

SLS students through the programme 'Community Development Initiative-CDI' of the University get engaged in the outreach programmes. Apart from this they also get involved in the CDI through organizations like CII-Yi. SLS students organize blood Donation Camp every year in collaboration with Government Civil Hospital. The University has the NCC wing functional at its campus which has been recently established. Interested students of SLS are encouraged to join the activities. SLS students in collaboration with Government Civil Hospital organize blood donation bank at SLS-PDPU every year. Since last four consecutive years SLS has been receiving special trophies for donating more than 200 units of blood. To promote health and fitness awareness, students organize 10k run every year. Apart from these students have been engaging with the poor starta of the villagers in the vicinity and have been helping them by means of support for their children's education, clean drinking water etc. The students have learnt the virtues of compassion and empathy through such engagements.

SLS has also been organizing Community development programme through participation in rural educational activities. These programmes helped the students in inculcating the value of social sensitization. They also helped in developing the planning and organizing skills of SLS students.

48. Give details of "beyond Syllabus scholarly activities" of the department

1. Faculty Members have published two Books

Sl.No	Name of Faculty	Name of the	Name of the	Year of
	Member	Book	Publisher	Publication
1	Dr. Ashvin Dave	Financial	AV	2013
		management	Akademikerverlag	
		_	GmbH&Co. KG	
2	Dr. Chaitanya Vyas	Permission	LAP	2012

PDPU 158/269

	Self	Evaluation Report -	- Volume II	
		Marketing: Awareness, Perception, and Preferences in Gujarat		
3	Dr. Chaitanya Vyas and Dr. Darshan Dave	Publishing in high impact management journals	Humming Words Publications	2012
4	Dr. Sanjay kumar Pradhan	The people of Indian origin (POI) in south Africa: Past trajectory and present Discourse	Scholars press, Germany	2013
5	Prof. Nigam Dave	Ruskin Bond	Co-author, Atlantic publications	2012
6	Dr. Sitakanta Mishra	Parmanu Politics: Indian Political Parties and Nuclear Weapons	Kalpaz Publications, Gyan Books, New Delhi	2015 ISBN: 978-93- 5128-093-4
7	Dr. Sitakanta Mishra	Cruise Missiles: Evolution, Proliferation and the Future	KW Publishers, New Delhi	2011 ISBN: 978-93- 80502-81-6

- 2. Some of the innovative teaching Methods adopted by the faculty during the last four years are as follows:
 - a. Using autobiographies as recommended books
 - b. Using films and simulations to impart learning
 - c. Novel structuring of the courses by incorporating industry related applied notes
 - d. Collaborative teaching method
 - e. Teaching by industry and practitioners
 - f. Combination of field based training and classroom learning
- 49. State whether the programme/ Department is accredited/ graded by other agencies? If yes, Give details

ISO 9001-2008

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied

PDPU 159/269

- a) All faculty members have published research work in their area of interest. Faculty members have also published books. All the published work is used as teaching material in various courses.
- b) Faculty members have also developed sector specific courses with reading material. In these courses research work /Published papers are used as reading/ teaching material.
- c) So far SLS has organized three national conferences on multi disciplinary research in social sciences.

51. Detail five Major strengths, weaknesses, opportunities and challenges (SWOC) of the School.

Major Strengths:

- Focus on interdisciplinary study and choice based credit system in curriculum
- Internship focused pedagogy
- Research Dissertation at the UG and PG level
- International / National Acceptance of the alumni
- Holistic Grooming of Students

Major Weaknesses:

- Less Number of PG students
- International Faculty are still to be attracted to start full time
- Less international students for the enrollment

Opportunities:

- Acceptance of students at the International platform
- Industry acceptance
- Skilled Human resource with the community sensitization
- CBCS offering for the engineering students on the campus
- Hosting International students for short term

Challenges:

Creating awareness for the importance of interdisciplinary study.

PDPU 160/269

52. Future Plans of the Department

To see that the Objectives and the Academic Philosophy of the School is implemented into practice, Strategic plan 2009-13 is designed. The strategic plan would broadly look at following points: Teaching-Learning Experience at the Undergraduate Level. Managing cultural identity with the openness to global changes. Support for research driven activities. Contribution to community and the nation building.

1. Teaching-Learning Experience at the Undergraduate Level:

- To provide breadth and depth of learning experience for relevant subjects.
- To design and implement innovative curriculum that adheres to UGC, industry and the global requirements.
- To design and implement innovative methods of teaching and interaction.
- To include a pool of highly talented and sensitive faculty from academics, industry and Arts.
- To arrange for orientation and training program for faculty in areas of innovative practices of teaching.
- To find out unconventional methods of teaching learning that make academic sessions interesting and at the same time meaningful.
- To balance the number of students and teachers. Preferably smaller classes.
- To acquire and use infrastructure for ICT enabled classroom teaching.
- To teach life-skills along with subject knowledge through week-end activities.
- To balance classroom hours with practical exposure to the subjects with the help of laboratory sessions, creative sessions, visits, tours, students' exchange etc.
- To design and implement academic schedule to ensure smooth functioning of the academic work.
- To design and implement Activities Calendar to ensure students' exposure to sports and cultural activities.
- To design and implement examination schedule in consultation with the Exams Department, Director Academic and the office of the Registrar.
- To provide access to large number of subjects for Majors and Minors.
- To ensure smooth and transparent procedures for admissions.
- To provide excellent administrative support to the school.

PDPU 161/269

- To provide excellent ICT support for academic and administrative work.
- To establish good library and reading room with large number of study books, leisure reading, research journals, newspapers, magazines, audio video resources.
- To form and work through different academic committees.
- To involve students in committees to create sense of 'ownership'.
- To ensure study material in the form of archives on the intranet.
- To show willingness to feedbacks from all levels.
- To design academic and infrastructural facilities for the physically challenged students.
- To interweave adequate practical and theoretical curricula of sports.

2. Support for research driven activities.

- To implement the initiative of mandatory 'research dissertation' by all UG students.
- To encourage both the faculty and students for research activities.
- To facilitate research activities through travel assistance and other financial assistance.
- To encourage joint research projects of students-faculty.
- To add postgraduate research programs like M.A. and M.Phil.
- To ensure smooth functioning of Ph.D. program in the area of Humanities, Studies and Social Sciences.
- To generate and allocate sufficient revenue for research activities.
- To arrange for meaningful national and international seminars, conferences, symposiums and workshops.
- To coordinate the Students' research seminar every year

3. Contribution to community and the nation building

- To design and implement a yearlong community development program.
- To encourage faculty and students for participation in community work.
- To inculcate the spirit of nation building and responsibility in young minds.
- To voluntarily submit services in times of national, international crises or natural calamities.
- To ensure that all stakeholders of the society benefit through the community work.

PDPU 162/269

- To play the part of a bridge between industry and society.
- To create awareness in the society about the community work
- **4. International Study Centre**: SLS proposes to plan and execute International Study Centre in coordination with the office of international relations, PDPU. The proposed centre would offer Diploma and Certificate programs in International Trade, Commerce, Culture, Art and Languages. The centre proposes to coordinate with the Consulates and Govt. of various countries. The centre proposes to start with Canadian Studies and American Studies. It would also plan and implement International workshops and conferences.
- **5. Art Gallery:** SLS, PDPU offers Art electives like 'Styles of Painting' and 'World Civilization'. SLS PDPU already possesses Performing Arts Room. It proposes to have the Art Gallery which would showcase paintings of famous painters of the world and also creative forays of students.
- **6. International Students:** SLS, PDPU proposes to start the programs for international students with short term programs, field trips. It is already working with various international universities and consulates in this regard. AISEC Students Chapter at PDPU would also facilitate for this. Already, SLS has the honour of having the first international student intern on campus from China. In the year 2011 9 students from Bhutan had enrolled in SLS for MA Programme. SLS conducts international admissions through agencies like EDUCIL and as per the guidelines of UGC.
- **7. Public Policy/Governance Centre: -** SLS, PDPU proposes to revive and provide new vigour to the Centre of Good Governance started by PDPU.
- **8. Publications:** SLS proposes to publish an Bi-annual basis and International Research Journal.
- **9. New Majors:** SLS proposes to introduce new majors in History, Sociology and International Trade.
- **10. Programs for International Students**: SLS would like to strongly contribute in PDPU vision of having the international students' population on campus. SLS proposes to conduct workshops/ cultural exposure programs/ study programs for International students/industry people.
- 11. Dynamic Placement initiatives: SLS proposes to prepare a database of recruiters and industries which would provide guided career opportunities in various domains. All industry people and important stakeholders would be apprised monthly

PDPU 163/269

about the activities at SLS through monthly newsletter and interactions on and off the campus. SLS has already initiated the concept of corporate internship successfully. Year round, every Wednesday industry exposure for students would be arranged to enable students to understand industry requirements.

- 12. Working with Industry and Government: SLS proposes to join hands on a triple helix model with the government and industry through research, extension and consultancy projects. It also proposes to work as its CSR with government agencies during times of natural calamities or national crises. SLS already has started working with the Municipal Corporation to create awareness on civic duties.
- **13. Joint Study Programs with International Universities: -** PDPU has MOUs with number of Universities abroad. SLS proposes to start joint Degree/Diploma programmes with international universities of repute. A detailed credit transfer policy has already been prepared.

School of Liberal Studies at Pandit Deendayal Petroleum University is committed in its efforts of creating a better world. With generous support of all stakeholders, it will continue its sincere efforts.

PDPU 164/269



PDPU 165/269

1. Name of the Institute:

School of Technology

2. Year of establishment of the private University: 2007

3. Is the Department part of a School/Faculty of the university?

Yes. The Institution, School of Technology (SOT), is a constituent of Pandit Deendayal Petroleum .University (PDPU).

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.).

Undergraduate Programmes:

- B.Tech. (Civil Engineering)
- B.Tech. (Mechanical Engineering)
- B.Tech. (Electrical Engineering)
- B.Tech. (Chemical Engineering)
- B.Tech. (Industrial Engineering)

Post graduate Programmes:

- M.Tech. (Infrastructure Engineering)
- M.Tech. (ThermalEngineering)
- M.Tech. (Power Systems)
- M. Tech. (Energy Systems & Technology)
- M. Tech. (Nuclear Energy)
- M. Tech. (Environmental Engineering & Studies)

Ph.D Programme:

- Full Time
- Part Time

5. Interdisciplinary programmes and departments involved:

The new interdisciplinary programmes established by the involvement of one or more departments of engineering:

- 1) Environmental Engg. studies (Civil Engg., Chemical Engg. and Chemistry)
- 2) Solar Energy (Solar Energy, Electrical Engg. and Mechanical Engg.)
- 3) Nuclear Engg. (Nuclear Engg. and Physics)

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

PDPU at present is not offering any formal degree programs and would like to do the same as per the guidelines of UGC/AICTE. However, PDPU interacts with several Universities abroad through M.O.U's signed for training, study abroad, and summer internships, the details are as under.

PDPU 166/269

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
1	University of Wollongong, Australia	Students from PDPU can participate in the Study Abroad Program UOW & programs at its college including English & Summer (Exposure program).	28.04.14	5 Years
2	University of Toronto, Canada	 Joint research/publications Student mobility such as Internships, study abroad and fellowships. Exchange of faculty, trainee and staff Participating in, & co-hosting of lectures, meetings, seminars, conference. Joint application for funding for collaborative projects from relevant funding agencies. Collaboration in other areas that foster research and educational cooperation. 	05.02.14	5 Years
3	University of Manitoba, Canada	To facilitate the practical training & graduate study of PDPU students in UM Faculty of Engg.	05.02.14	5 Years
4	University of Bahrain, Bahrain	 Exchange of Faculty and Students Joint research activities Participation in seminars and academic meetings Exchange of academic materials and other information Special short term academic programmes Exchange of Administrative Managers/ Coordinators Joint cultural programmes 	21.02.14	3 Years
5	National Mineral Resource University, Russia	 Joint Educational and Research Activities Exchange of Academic materials and academic publications Exchange of faculty members for research. Lectures and discussions Exchange of students and research 	09.01.13	5 Years
6	University of Saskatchewan, Canada	 To exchange information on research and educational programmes To exchange information on teaching, learning material and other literature relevant to their educational and research programmes 	10.01.13	5 Years

PDPU 167/269

		Self Evaluation Report – Volume II		
Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
		 To jointly organize short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate, therein. To jointly propose and engage in research or training programmes sponsored by funding agencies and to invite each other's faculty to participate therein. To exchange, on a reciprocal basis, faculty and students for limited periods of time purpose of education and /or research 		
7	ICCC (Indo Canada Chamber of Commerce)	Opportunity to work for one month in India or in Canada to SLS Students	12.01.13	5 Years
8	Texas A & M University, USA	 The exchange of faculty for joint teaching and research programs Encouraging the enrollment of qualifies students in the other's academic programs Avenues for strengthening their relationship and furthering excellence in US and Indian education The development of a more detailed Program Agreement. 	16.01.13	5 Years
9	University of Manitoba, Canada	 Development of mutually beneficial academic programmes and courses Coordination of academic staff mobility for purposes of teaching, research and training Coordination of student mobility programs for study and research Coordination of academic activities such as joint research, publications and symposia. Exchange of documentation and research materials in fields of mutual interest provided that, to the best knowledge of the respective institutions, there is no publications at law or otherwise against the exchange and; 	06.02.13	5 Years

PDPU 168/269

• Other activities considered by the

Self Evaluation Report – Volume II	Self Eva	luation	Report -	Volume II
------------------------------------	----------	---------	----------	-----------

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
		parties to be of benefit to each party's education and research programs.		
10	Edith Cowan University, Australia	 To develop study tours To develop collaborative research projects Staff presentations Delivery of external units of PDPU's students Delivery of articulation arrangements in the areas of Psychology, IT, Business, Communication and Engineering. 	13.03.13	3 Years
11	Edith Cowan University, Australia	To promote joint education and student mobility by enabling the Home Institution to send its student abroad to undertake a program of study with the Host Institution.	27.10.13	5 Years
12	Memorial University of Newfoundland, Canada	 Exchange of Faculty Members Undergraduate and graduate student mobility Exchange of publications, research material, newsletters etc. Joint projects related to research, teaching and faculty development Development of joint initiatives with partner institutions, including joint collaborative degree programmes Opportunities for full- degree fee paying undergraduate/ graduate study. 	31.12.13	5 Years
13	University of Trinidad & Tobago	• To promote advancement in the quality of education delivered to students at the respective institutions through collaborative activities and exchange among faculty, students and staff, the sharing of teaching and laboratory facilities and the development of a framework for articulation between the programmes of the respective institutions.	10.01.12	3Years
14	University of Alberta, Canada	 Mobility of Faculty/staff/ students / graduate and undergraduate. Collaboration on graduate programming, including the co- 	12.10.12	5 Years

PDPU 169/269

Self Evaluation Report – Volume II	Self Eva	luation	Report -	Volume II
------------------------------------	----------	---------	----------	-----------

Sr No		Objectives	Date of Signing	Period of MoU
		 supervision of graduate students. Joint research activities and publication Participation in seminars and academic meetings Exchange of academic materials and other information Special short- term academic programs. 		
15	ICBC (Indo Canada Business Chambers) & SLS (School of Liberal Studies)	 SLS - PDPU will offer to its students, an opportunity to work for one month in an Indo Canadian Company either in India or in Canada. This offer will be valid for all the students, studying in any year. ICBC - Gujarat will identify the Indo Canadian company & facilitate the 	12.10.12	
		offer for one month work to SLS - PDPU students		
16	Wollongong, Australia	 Joint Research & Development Activities Participating and co-sponsoring of International conferences, seminars, workshops and academic meetings. Academic visits and incorporating short and long term visits of research and teaching staff. Participation of students in "International exchange and cultural educational programs of a short term nature Options for collaborative programs at undergraduate and post graduate levels Facilitation in admission of graduate and doctoral program in respective Universities for interested students in interested course offered at Institute. 	30.10.12	3 Years
17	Seneca College, Canada	 To establish Specific educations relations and cooperation between the two Universities in order to promote academic linkages and to enrich the understanding of culture of the two countries. To organize Student Abroad (Summer) 	09.11.12	5 Years

PDPU 170/269

Self Evaluation Report – Volume II	Self Eval	uation	Report -	Volume II
------------------------------------	-----------	--------	----------	-----------

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
18	University of Western Ontario	 Programs Exchange of Faculty for joint teaching and research programs Encouraging the enrollment of qualifies students in other academic programs Avenues for strengthening their relationship and furthering excellence in Canada and Indian Education The development of an official MOA or Program Agreement 	10.01.11	1 Year
19	University of Saskatchewan, Canada	 To exchange information on research and educational programmes To exchange information on teaching, learning material and other literature relevant to their educational and research programmes To jointly organize short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate, therein and also seminars, conferences, workshops, training programmes on topics on mutual interest. To exchange, on a reciprocal basis, faculty and students for limited periods of time purpose of education and /or research 	10.01.11	5 Years
20	Mewborne School of Petroleum & Geological Engineering, University of Oklahoma	Promote Education and research on Shale Gas Pagaibilities to admit attribute Proceeds	13.01.11	2 Years 5 Years
21	Ministry of Infrastructure Republic of Rwanda	 Possibilities to admit students Rwanda in PDPU on mutual understanding subject to terms and conditions of national statutory bodies. The development of an official Memorandum of Agreement at a later date within next two months with the Ministry of Education. 	13.01.11	5 rears
22	University of Regina, Canada	• Joint educational and research activities	25.05.11	5 Years

PDPU 171/269

Self Evaluation Report – Volume II	Self Eval	uation	Report -	Volume II
------------------------------------	-----------	--------	----------	-----------

Sr.	MoU with	Objectives	Date of	Period
No.		 Exchange of academic materials and academic publications Exchange of faculty members for research, lectures and discussions 	Signing	of MoU
		Exchange of students for study and research		
23	University of Regina, Canada	• To establish student exchange programs	03.10.11	5 Years
24	Mewbourne School of Petroleum & Geological Engineering, University of Oklahoma and Gujarat State Petroleum Corporation Ltd.	Promote Education and research energy.	12.01.10	Expired
25	Georgia Tech Research Corporation	 In respect to the transmission of Propriety information exchanged between PDPU and GTRC. 	23.07.10	5 Years
26	Texas A&M University System, USA	• Faculty exchange for research, teaching/ encouraging enrolment of qualified students/ avenues for strengthening relationship & furthering in US & India education	14.08.10	
27	Georgia Institute of Technology, USA	 Creation of Centre of Excellence in energy education & research Collaboration to enhance international experience faculty & students in various areas. Innovative programmes 	21.09.09	2 Years
28	University of Houston System	 To contribute further to the regional understanding between US and India, both cities, Gandhinagar and Houston and both Universities. Through mutual cooperation programs. To further collaboration between UHS and PDPU through academic programs in instruction, research and faculty development among faculty and students of both institutions. To enhance the International experience of faculty and students in 	29.10.09	5 Years

PDPU 172/269

Self Evalu	ation	Donort	Volumo	TT
Sell Evalu	lauon	Reboit -	voiuille	п

Sr. No.	MoU with	Objectives	Date of Signing	Period of MoU
		the areas of: 4. Research 5. Joint Programs and Collaboration 6. Exchange of Faculty and students		

7. Details of programmes discontinued, if any, with reasons

Nil.

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

An academic year consists of two semesters. The autumn semester generally starts from July to November & the spring semester generally starts from December to April. The student registers for course(s) during a given semester, on the basis of the program as prescribed in the Curriculum. Examinations of the students, who clear minimum attendance criteria i.e. 80%, are conducted in the middle and at the end of the semester. Students, who do not fulfill the criteria, are not permitted to take the end-semester examination in that course. They are permitted to take re-examination in subsequent semester.

The percentage allocation for evaluating a Theory course will generally remain as 30% for Mid Semester examination, 60% for End Semester and 10% for the Internal Assessment like Quiz, Class Assignments. The percentage allocation for evaluating a Practical course will generally remain as 50% for the Laboratory Work and 50% for the Laboratory related Examination. Each course is assigned a numerical weightage termed as credits for that particular course. A letter grade is awarded to students as the final evaluation in each course, and each letter grade carries numerical points, known as grade points. Based on the grades and their numerical equivalents, Semester Performance Index (SPI) and Cumulative Performance Index (CPI) of the student are calculated at the end of each semester: SPI and CPI are calculated up to the second decimal.

Choice Based Credit System (CBCS) is a flexible system of learning that permits students to,

- 1. Choose electives from a wide range of elective courses offered by the University departments,
- 2. Adopt an inter-disciplinary approach in learning, and
- 3. Make best use of the expertise of available faculty.

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his courses by the concerned instructor, based on his performance in mid-semester examination, end-semester examination, quizzes, tests, assignments, tutorials, laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work

PDPU 173/269

as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

9. Participation of the department in the courses offered by other departments

- Production Operations management, Workshop, Manufacturing process, Metallurgy
 Interdisciplinary having Industrial Engg. and Mechanical Engg. Dept.
- Elements of Civil Engineering, Applied Mechanics are the subjects of Civil Engineering which are taught to all the streams of Engineering during first year of their respective B.Tech. programme.
- The department of Electrical Engineering teach the subject named as "Elements of Electrical Engineering" all the streams of Engineering during the first year of their respective B. Tech Programme. The subject named as "Electrical Technology" is taught to the students of Mechnanical and Industrial Engineering branches by the faculties of Electrical Engineering Department. The subject named as "Electrical and Electronics for Chemical Engineers" is taught to the students of Chemical Engineering branch by the faculties of Electrical Engineering Department.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

No. of sanctioned Faculties

UG						
Sr. No.	Department	Prof.	Asso. Prof.	Asst. Prof./Lect.		
1.	Civil Engg.	2	4	18+4*		
2.	Chemical Engg.	1	2	9		
3.	Electrical Engg.	2	4	18+3*		
4.	Industrial Engg.	1	2	9		
5.	Mechanical Engg.	2	4	18+5*		
6.	First Year Faculty		Required Fac	ulties:		
	requirement of B.Tech.		Science – 1	10*		
	for courses of	Maths – 08*				
	Humanities, Sciences and	Communication skill- 1*				
	Computers	Environment- 1*				
		Computer Science-2*				
<u>PG</u>						
1.	Civil Engg.	1	1	3		
2.	Electrical Engg.	1	1	3		
3.	Mechanical Engg.	1	1	3		
4.	Nuclear Engg.	1	2	3		
5.	Solar Energy.	1	2	3		
6.	Environmental Engg.	1	1	1		
7.	Mathematics	-	2	2		

^{*} indicates faculty involved in handling first year students

PDPU 174/269

Available Faculties:

Department	Prof.	Asso. Prof.	Asst. Prof.	Lect.	Total
Civil Engg	1	2	4	10	17+6###
Chemical Engg	1##		2	6	9
Electrical Engg		2	2	14+1#	19
Industrial Engg		1	2	5+1#	09
Mechanical Engg	1	2	5	16	24
Nuclear Energy				2	2
Solar Energy	1##	1	1		3
Environmental Studies			1		1
Mathematics & Computer Sciences	1		7	2	10
Sciences	1	1	7		09
English				1	1
Computer Science			1		1

[#] indicates number of available Adjunct Faculty;

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Currently the institute, SOT, has 102 faculty members. The following table gives more details:

Department of Chemical Engineering

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.s tudents guided for the last 4 years
Dr. Pravin Kodgire	PhD in Chemical Engineering	Assistant Professor & HOD	Polymer Science & Technology	12 yrs and 1 yr of internation	4 (Guiding)
	from IIT Bombay and Post doctoral Research experience from Colorado			al experience	

PDPU 175/269

^{##} indicates number of available Professor Emiritus;

^{###} indicates number of available Temporary/Visiting faculty

	Self Evaluation Report – Volume II					
	School of Mines, CO, USA					
Dr. Sukanta K. Dash	PhD in Chemical Engineering; IIT Kharagpur	Assistant Professor	Chemical Engineering	10.5 yrs	5 (Guiding)	
Mr. Himanshu H. Chokshi	ME- Chemical Engineering; MS University, Baroda	Lecturer	Polymer Science & Technology	18.5 yrs	Nil	
Ms Anvita Sharma	ME- Chemical Engineering; DDIT, Nadiad,	Lecturer	Computer aided design and control	4 yrs	Nil	
Ms Bharti Saini	M Tech in Chemical Engineering; IIT Roorkee	Lecturer	Environmental Engineering	3 yrs	Nil	
Mr. Abhishek Kumar	M Tech in Chemical Engineering; IIT BHU	Lecturer	Catalysis, Separation Processes	3 yrs	Nil	
Mr. Anirban Dey	M Tech in Chemical Engineering; IIT Guwahati	Lecturer	Nanotechnolog y aided separation Processes, Catalysis	2 yr	Nil	
Ms. Sweta Balchandani	M Tech in Chemical Engineering; DDU,Nadiad	Lecturer	Process Control, CCS	2.5 yr	Nil	

PDPU 176/269

Civil Engineering:

Name	Qualification B.E. (Civil),	Designation Professor,	Specialization Geotechnical	No. of Years of Experience	No. of Ph.D/M.Phil.st udents guided for the last 4 years Ph.D: 03
Dr.H.B. Raghavendr a	MS (Research) (IIT Madras), PhD (IISC Bangalore)	Director SoT	Engineering	31	Completed
Dr. Debasis Sarkar	B. E. (Civil), M. Tech (IIT Delhi) [Building Sc & Construction Mgmt], PhD (Civil Engg. :Project Management) , DDU, MIE.	Associate Professor, & i/c HOD	Building Science & Construction Management; Project Management	19	PhD: 03 (Guiding)
Dr. H. R. Dhananjaya	B.E. (Civil), M. E. (Structures), PhD (IISC Bangalore)	Associate Professor	Structural Engineering	26	PhD -2 (Guiding)
Dr. Tejas Thaker	B.E. (Civil), M.E., PhD (IIT Delhi)	Asst. Professor	GeoTechnical Engineering	5	PhD -1 (Guiding)
Dr. Manas K Bhoi	B.E. (Civil), M.E., PhD (IISC Bangalore)	Asst. Professor	GeoTechnical Engineering	6	PhD -1 (Guiding)

PDPU 177/269

Name	Qualification	Designation	Specialization	No. of Years of Experience	
Dr. Anurag Kandya	B. E. (Civil), M. Tech, PhD (IIT Delhi)	Asst. Professor	Environmental Engineering	8	Nil
Dr. Anantha Singh	B. E. (Civil), M. Tech, PhD(NIT Trichi)	Asst. Professor	Environmental Engineering	6 months	Nil
Mr Rajesh Gujar	B.E. (Civil), M.E (Constn Engg. & Mgmt.), PhD (Pursuing)	Lecturer	Construction Engg. & Management, Transportation	19	Nil
Mr Apurva Dave	B.E. (Civil), M.E. (CASAD), PhD (Pursuing)	Lecturer	Structural Engineering	20	Nil
Mr. Akshay Jain	B.E. (Civil), M.Tech (Geomatics in Civil Engineering) PhD (Pursuing)	Lecturer	Geomatics in Civil Engineering	3	Nil
Mr. Naimish Bhatt	B.E. (Civil), M.E. (Water Resources Engg.) PhD (Pursuing)	Lecturer	Water Resources and Irrigation Engg.	8	Nil

PDPU 178/269

Name	Qualification	Designation	Specialization	No. of Years of Experience	
Mr. Niragi Dave	B.E. (Civil), M.E., PhD (Pursuing)	Lecturer	Structural Engineering	8	Nil
Mr Shivam Kapoor	B. Tech (Env.), M.Tech (SVNIT)	Lecturer	Environmental Engg.	6 months	Nil
Mr Sudhanshu Dixit	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Water Resources	6 months	Nil
Mr Ronak Motiani	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Structural Engineering	6 months	Nil
Mr Sharan Baswa	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Structural Engineering	6 months	Nil
Ms Sonal Dharne	B. E. (Civil), M. Tech (SVNIT)	Lecturer	Environmental Engg.	6 months	Nil

PDPU 179/269

Electrical Engineering:

Name	Qualificati on	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.stude nts guided for the last 4 years
Dr. Vivek Pandya	B.E., M.E., Ph.D.	Associate Professor & HOD	Power System Protection	20	Ph.D02 (Guiding)
Dr. Jitendra G. Jamnani	B.E., M.Tech, Ph.D.	Associate Professor	Power Systems, High Voltage Engg.	21	Ph.D02 (Guiding)
Dr Pratik Shah	B.E. M.Sc PhD	Assistant Professor	Image Processing, Computer Vision, Embedded Systems	10	Nil
Dr. Chandrasekara n	B.E., M.E., PhD	Assistant Professor	Grid Synchronizatio n Techniques	10	Nil
Anilkumar Markana	M.Tech, B.E. (PhD Pursuing)	Lecturer	Systems and Control	13	Nil
Siddharth Joshi	M.E. B.E. (PhD Pursuing)	Lecturer	Power System	5	Nil
Astik Dhandhia	M.E. B.E. (PhD Pursuing)	Lecturer	Power System	5	Nil
Vatsal Shah	M.Tech, B.E.	Lecturer	(Power Electronics & Drives)	4	Nil
Nitin Prajapati	M.E. B.E.	Lecturer	Applied Instrumentatio n	1	Nil
Leena Santosh	M.E. B.E.	Lecturer	Power Systems	6	Nil
T. Phani Swecha	M.Tech. B.E.	Lecturer	Power Electronics	10- Months	Nil
Mr. Elijah T. Toppo	B.Tech M.Tech	Lecturer	Power Electronics and Drives	3	Nil
Mr. Bandopant	B.Tech.	Lecturer	Power Systems	11 Months	Nil

PDPU 180/269

Pawar	M.Tech.				
Mr. Gaurav	M.Tech.	Lecturer	Power System	2.3 Years	Nil
Khare	B.E.				
Mr. Vipin	M.Tech	Adjunct	Nuclear	1	Nil
Shukla	B.Tech	Faculty	Engineering		
Mr. K Satya	Mtech	Lecturer	Power	3	Nil
Raja Sekhar	Btech		Electronics and		
			Drives		
Mr. T. V.	M.Tech.	Lecturer	Power Systems	1 year	Nil
Pavan Kumar	B.Tech.,		Engineering		
Mr. Ravi Botta	M.Tech.	Lecturer	Power Systems	2 Months	Nil
	B.Tech.,		Engineering		

<u>Department of Industrial Engineering:</u>

Name	Qualification	Designation	Specialization	No. Of years of experience	No. of Ph.D./ M. Phil. Students guided for the last 4 years
Dr.M.B.Kiran	PhD (Indian Institute of Technology,M adras,1997) PMP (USA)	Associate Professor & HOD	Surface Metrology & Digital Image Processing	25 (18 Years of Post Ph.D experience)	(Five guiding)
Dr.Abhishek Kumar	PhD (BITS, Pilani, 2012)	Assistant Professor	Manufacturing	16 (3.5 Years of Post Ph.D experience)	(Four Guiding)
Dr.D.M.Parikh	PhD (Singhania University,Raj astan, 2014)	Adjunct Professor	Industrial Management and Entrepreneurship development	35	Nil
Dr.Poonam Savsani	Ph.D. (Pacific University, 2014).	Assistant Professor	Robotics, trajectory optimization, advance optimization technique	7	Nil
Mallika Taneja	M.Tech (NIT, 2014)	Lecturer	CAD/CAM	1	Nil
Sagar Patil	M.Tech (NIT, 2014).	Lecturer	Industrial Engg.	-	Nil
Balaji Rao	M.Tech-NIT- 2015	Lecturer	Industrial Engg.	-	Nil
Kishan Fuse	M.Tech-NIT- 2014	Lecturer	Production Engg.	-	Nil

PDPU 181/269

Self Evaluation Report – Volume I	II
-----------------------------------	----

Jai Kishan	M.Tech-NIT-	Lecturer	Industrial Engg.	-	Nil
	2015				

Department of Mathematics and Computer Science:

Name	Qualificati on	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.stude nts guided for the last 4 years
T. P. Singh	Ph.D.	Professor & HOD	Numerical reservoir simulation	28 years	Nil
Poonam Mishra	Ph.D.	Assistant Professor	Optimization	7 years	Nil
Mohammad Sharifuddin Ansari	Ph.D.	Assistant Professor	FluidDynamics/ Magnetohydrody namics,	5 years	Nil
Manoj Sahni	Ph.D.	Assistant Professor	Solid Mechanics, FGM, Tomography	10 years	Nil
Bhasha Vachharajani	Ph.D.	Assistant Professor	Oceanography (Data assimilation)	6.5 Years	Nil
Shobhit Nigam	Ph.D.	Assistant Professor	Software reliability	2 months	Nil

PDPU 182/269

Name	Qualificati on	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.stude nts guided for the last 4 years
Brajesh Kumar Jha	Ph.D.	Assistant Professor	Computational Neuroscience	4.5 years	Nil
Jwangsar Brahma	Ph.D.	Assistant Professor	Computational Seismology	6 years	Nil
Dishant Pandya	M. Sc., M.Phil.	Lecturer	Theory of Relativity	9 Years	Nil

Department of Mechanical Engineering:

Name	Qualification	Designation	Specialization	No. of Years of Experi ence	No. of Ph.D/M.P hil.student s guided for the last 4 years
Prof.Surendra Singh Kacchwaha	Ph.D	Professor & HoD	Thermal	26	Two completed and six (Guiding)
Dr. Vishvesh Badheka	PhD (Metallurgical Engineering)	Associate Professor	Metallurgy and Welding Processes	6.6 (after PhD)	6 (Guiding)
Dr. Anurag Mudgal	Ph.D	Associate Professor	Thermal	20	3 (Guiding)
Dr. Vimal Savsani	PhD	Assistant Professor	Machine design optimization	8	Nil
Dr. Jatin Patel	PhD	Assistant Professor	Solar Thermal	11	3 (Guiding)
Dr. Vivek Patel	PhD	Assistant Professor	Thermal	12	1 (Guiding)
Dr. Pavan Kumar	PhD	Assistant	Additive	9	Nil

PDPU 183/269

Gurrala		Professor	Manufacturing		
Mr. Jaydeep Patel	M.E. (PhD Pursuing)	Lecturer	CAD/CAM	4	Nil
Mr. Nagababu Garlapati	M.Tech (PhD Pursuing)	Lecturer	MACHINE DESIGN	4.9	Nil
Mr. Bhargav Gadhavi	M. Tech CAD- CAM (PhD pursuing)	Lecturer	CAD-CAM	3.3	Nil
Mr. Jay Vora	M.E. (PhD Pursuing)	Lecturer	Welding Technology (Metallurgy and material science)	4	Nil
Mr. Kush Mehta	M. Tech (AMT), Ph.D. pursuing	Lecturer	Advance Manufacturing Techniques, Welding Technology	2	Nil
Mr. Vivek Patel	M.E. (Mechanical), PhD (pursuing)	Lecturer	Production Engineering	7	Nil
Mr. Nirav Patel	M. Tech, PhD (Pursuing)	Lecturer	CAD/CAM	3.8	Nil
Mr. Rakesh chaudhari	M. Tech	Lecturer	Mechanical	1	Nil
Mr. Parth Prajapati	M. Tech	Lecturer	Mechanical Engineering	1	Nil
Mr. Bhasuru Srinivasa Abhinaya	M. Tech	Lecturer	thermal power engineering	0	Nil
Mr. Rahul Deharkar	M. Tech	Lecturer	Thermal Engineering	0	Nil
Mr. Hardik Goswami	M. Tech	Lecturer	Thermal Engineering	0	Nil
Mr. Krunal Mehta	M. Tech	Lecturer	CAD/CAM	1	Nil

PDPU 184/269

Department of Nuclear Engineering:

Name	Qualific ation	Designation	Specialization	No. of Years of Experience	No. of Ph.D/M.Phil.stude nts guided for the last 4 years
Mr G.Vaithees waran	M.Tech., M.Sc., B.Sc	Lecturer	Reactor Physics, Accelerators, Plasmas and Tokomaks.	2 years	Nil
Mr Vikram Rathore	M.Sc., M.Tech., Ph.D(Purs uing)	Lecturer	Computational Physics, Reactor Physics, CFD, Radiation Detection Techniques.	2 years	Nil

Department of science:

Name	Qualification	Designation	Specialization	No. Of Years of Experien ce	No. of Ph.D./ M.Phil. students guided for the last 4 years
Dr. Nirendra M. Misra	Ph. D.	Professor & Head	Physical Chemistry	31	9 (Completed)
Dr. Rajib Bandyopadhyay	Ph. D.	Associate Professor	Physical Chemistry	17	3(Guiding)
Dr. Manoj Pandey	Ph. D.	Assistant Professor	Organic Chemistry	7	4(Guiding)
Dr. Satyam Shinde	Ph. D.	Assistant Professor	Computational Condense Matter Physics	6	1(Guiding)
Dr. Bharat Parekh	Ph. D.	Assistant Professor	Experimental condense matter Physics and material science	7	3(Guiding)
Dr. Balamurali Krishna Mayya	Ph. D.	Assistant Professor	Statistical Physics	12	3(Guiding)
Dr. Manoj Kumar	Ph. D.	Assistant Professor	Photovoltaic	8	2 Completed/ 1(Guiding)

PDPU 185/269

Dr. Rohit Srivastava	Ph. D.	Assistant Professor	Electronics and isotope geochemistry	5	Nil
Dr. Anirban Das	Ph. D.	Assistant Professor	Physical Chemistry and Geochemistry	10	Nil
Dr. Brijesh Tripathi	Ph. D.	Assistant Professor	Solar Cell	7	Nil

Department of Solar Energy:

No.	Name	Qualification	Designation	Specialization	No. of	No. of
					Years of	Ph.D/M.Phil.s
					Experien	tudents guided
					ce	for the last 4
						years
1	Dr. Indrajit	M.Sc., Ph.D.	Associate	Physical Chemistry,	19	2 Completed
	Mukhopadhy		Professor &	Thin film solar cell,		
	ay		Head	Energy Storage		
2	Dr. Abhijit	M.Sc., PhD	Assistant	Experimental	12	1 Completed
	Ray		Professor	Condensed Matter		
				Physics, Thin film		
				solar cells		

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

While the School has adequate number of full time scholarly faculty, role and importance of visiting and guest faculty cannot be undermined. In order to bring in the latest and best professional inputs for SOT students professionals of various disciplines from industrial and business organizations are invited to supplement course deliveries at the school.

List of Visiting Faculties:

- Prof. James Miller
- Mr. Rajnikant Patel
- Dr. Claudio Garrizo
- Mr. Jigar Pandya
- Ms. Sushmita Ghosh
- Dr.C.V.S.Rao
- Mr. Jayraj K. Pandya
- Mr.Bhavin D Shah

PDPU 186/269

13. Percentage of classes taken by temporary/visiting faculty – programme-wise information

Programme	Percentage of classes taken by temporary faculty
Civil Engineering	
M. Tech (Infrastructure Engg &	20
Management)	
Mechanical Engineering	Nil
Electrical Engineering	Nil
Industrial Engineering	Nil
Chemical Engineering	Nil
Nuclear Engineering	Nil
Solar Energy	Nil

14. Programme-wise Student Teacher Ratios

Programme	Student Teacher Ratios
Civil Engineering	25:1
Mechanical Engineering	18:1
Electrical Engineering	19:1
Industrial Engineering	22:1
Chemical Engineering	24:1
Nuclear Engineering	7:1
Solar Energy	20:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

(a) Technical and Administrative staff:

	Sanctioned	Filled	Actual
Number of technical	20	17	17
staff			
Number of	8	6	6
administrative staff			

(b) Supporting Staff: 168

16. Research thrust areas as recognized by major funding agencies

- Renewable Energy Technology
- Solar Energy
- Friction stir welding
- Cost Effective Concentrator Photovoltaic (CPV) System
- Thermal Plasma pyrolysis of Crude Oil
- Gas Metal Arc Welding

PDPU 187/269

- Low cost Kesterite(CZTS) thin-film solar cells
- Nano-rod Based Dye Sensitized Solar Cells (DSSC)
- Electrodeposition of Si & Ge
- Chemical and Isotopic Investigations Of Fluoride Rich Groundwater
- Cost Effective ConcentratorPhotovoltaic (CPV) System
- Synthesis of Sumanene and Corannulene derivatives
- Image processing and computer aided inspection
- Flexible manufacturing system modeling and simulation
- Development of CZTS Solar Cells
- Establishment of waste management and water recycling system for Industrial Parks
- Weldability aspects of Low Activation Ferritic-Martensitic Steel
- Development of MIS for Kalpasar Project
- Structures with Sandwich Panels
- Development of clean energy and Environment
- Development of Energy conservation laboratory (Bio fuels)
- Partial Identification Framework for multi input multi output system identification
- Development of New Anode Material
- Research Project on Prefabricated Housing
- Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Sr.no	Project	Title of Project	Funding	Grant (Rs. Lacs.)
	Investigator		Agency	
1	Dr. Abhijit Ray	Development of CZTS	MNRE	193.56
		Solar Cells & Modules		
		on Glass and Metallic		
		Substrates by Non-		
		Vacuum Processes		
2	Dr. Rajib	Development of	RIL	25.8
	Bandyopadhyay	nanosized catalysts for		
		the application in FCC		
		& Hydroprocessing		

18. Inter-institutional collaborative projects and associated grants received a) National collaboration b) International collaboration

Sr.		Principal Investigator/Co-PI	National	Grant (in
No.	School		Collaboration	Rs. lacs)
			Project/Details	
1	SOT	PI: Indrajit Mukhopadhyay, Dr.	Development of New	
		Takeyoshi Yagyu, Prof. Shinji	Anode Material for next	3.0
		Kawasaki, Dr. Yosuke Ishii & Dr.	awasaki, Dr. Yosuke Ishii & Dr. Generation Li ion	
		Abhijit Ray [Ongoing]	Batteries by	
			electrodeposition of Si	
			on the inner-surface of	
			nanospace carbon	

PDPU 188/269

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Department of Mechanical Engineering:

Sr No.	Year	Project Title	Sponsoring Agency	Total grant Received (Rs. Lacs)
1.	2014	Dissimilar material joining of SS316LN (UNS S31653) and XM-19 (UNS S20910) Stainless steel joints	Board Of Research In Fusion Science & Technology (BRFST)	14.0

Department of Sciences:

Sr. No	Year	Name of the project	Name of the funding agency	Total grant Received (Rs. Lacs)
1	2010	Synthesis of Sumanene and Corannulene derivative and its application in various fields of chemistry	DST, India Registration No. 199/2010	18.8

Department of Solar Energy

Sr No.	Year	Project Title	Name of the funding agency	Total grant received (Rs. Lacs)
1	2011-	Studies on the Electrodeposition of Si and Ge at room temperature using less viscous ionic liquid.	DST	37
2	2011- 15	Development of CZTS Solar Cells & Modules on Glass and Metallic Substrates by Non-vacuum Processes	MNRE	194
3	2011- 15	Fabrication and characterization of TiO ₂ based Dye-Sensitized Solar cells(DSSC's)	DRDO	19

PDPU 189/269

20. Research facility / centre with

- state recognition
- national recognition
- international recognition

National Recognition: Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accorded recognition to Pandit Deendayal Petroleum University.

21. Special research laboratories sponsored by / created by industry or corporate Bodies

• Mechanical Engineering:

Welding Research Lab- received funds of Rs 1 Cr from various funding agencies like DST, ISRO, DAE, BRFST for R & D projects in the area of Friction Stir Welding, Metal Cored Arc Welding, ATIG welding and Friction Stir Welding of Dissimilar metals.

• Chemical Engineering:

Reaction Engineering Laboratory, Fluid Flow Laboratory are established by Gujarat Alkalies and Chemicals Limited (GACL).

• Civil Engineering:

Several Civil Engineering laboratories like: Fluid Mechanics, Material Testing and Soil Mechanics are funded by L&T ECC Ltd.

• Electrical Engineering:

Several Electrical Engineering laboratories like: Modeling and simulation Power System Protection, High Voltage Engineering, Microprocessor & Microcontroller, Process Dynamics & Control, and Modeling & Simulations are funded by GETCO and GSECL.

22. Publications

1.Department of Chemical Engineering:

- Number of papers published in peer reviewed journals/conferences (national / international):31
- Books with ISBN with details of publishers Catalytic Abatement of Diesel Soot Emissions: Green revolution on wheels, paperback-July 2 2014, LAP LAMBERT Academic Publishing, ISBN-13-978-3-659-54281-7
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)
- Impact Factor range / average 1.4-5.191/3.2955
- h-index: 6
- 1. J. R. Dorgan, P. Kodgire, 'Design of non-equilibrium blends via theory: The butanol-water study", Advances in Membranes and Separation Science and Technology for Fuels and Energy Production, Petroleum Preprint, 242nd American Chemical Society National Meeting & Exposition, Denver, CO, USA, Aug 2011

PDPU 190/269

- 2. S. Bose, A. R. Bhattacharyya, Pravin V. Kodgire and A. Misra, 'Fractionated crystallization in PA6/ABS blends: Influence of a reactive compatibilizer and multiwall carbon nanotubes', Polymer, 48, 356-362, 2007 (Citations: 33; IF-3.4)
- 3. Pravin V. Kodgire, A. R. Bhattacharyya, S. Bose, N. Gupta, A. R. Kulkarni and Ashok Misra, 'Control of multiwall carbon nanotubes dispersion in polyamide6 matrix: An assessment through electrical conductivity' Chem. Phys Lett., 432, 480-485, 2006 (Citations: 60; IF 2.15)
- 4. Pravin Kodgire, R. Kalgaonkar, S. Hambir, N. Bulakh, J. P. Jog, 'PP/Clay nanocomposites: Effect of clay treatment on morphology and dynamic mechanical properties', J. Appl. Poly. Sci., 81, 1786-1792, 2001 (Citations: 92; IF 1.4)
- 5. S. Hambir, N. Bulakh, Pravin Kodgire, R. Kalgaonkar, J. P. Jog, 'PP/Clay nanocomposites: A study of crystallization and dynamic mechanical behavior', J. Polym Sci: Part B Polym Phys, 39, 445-450, 2001 (Citations: 97; IF 2.22)
- Kangana P. Bhatt, Pravin Kodgire & Sukanta K. Dash, 'A Review on Recent Pilot Plant CO2Capture Processes', Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4),pg19-23, 2014
- 7. Kangana P. Bhatt, Pravin Kodgire & Sukanta K. Dash 'densities and viscosities of aqueous solutions of pz, (amp+pz) and (amp+1-mpz) at 313 k and 323 k', CHEMCON 2014, Indian Institute of Chemical Engineers Chandigarh regional centre, Dec 2014, Kangana, Pravin, Sukanta
- 8. Himanshu Choksi, Pravin Kodgire, S.S. Kachhwah, Biodiesel Production Using Supercritical Alcoholysis: A Review', pp. 1-6, aug 2014, Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4
- 9. Dash, S. K., Samanta, A., Samanta, A. N., Bandyopadhyay, S. S. Vapour Liquid Equilibria of Carbon Dioxide in Dilute and Concentrated Aqueous Solutions of Piperazine at Low to High Pressure. Fluid Phase Equilibria 300 (2011) 145 154 (Impact Factor- 2.379)
- 10. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. (Vapour + liquid) equilibria (VLE) of CO2 in aqueous solutions of 2-amino-2-methyl-1-propanol: New data and modelling using eNRTL-equation. The Journal of Chemical Thermodynamics 43 (2011) 1278-1285. (Impact Factor- 2.297)
- 11. Dash, S. K., Samanta, A., Samanta, A. N., Bandyopadhyay, S. S. Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-methyl-1-propanol Solvent. Chemical Engineering Science 66 (2011) 3223-3233. (Impact Factor- 2.653)
- 12. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. Solubility of carbon dioxide in aqueous solution of 2-amino-2-methyl-1-propanol and piperazine. Fluid Phase Equilibria 307 (2011) 166-174. (Impact Factor- 2.379)
- 13. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. Experimental and Theoretical Investigation of Solubility of Carbon Dioxide in Concentrated Aqueous Solution of 2-

PDPU 191/269

- Amino-2-methyl-1-propanol and Piperazine. The Journal of Chemical Thermodynamics. 51 (2012) 120-125. (Impact Factor- 2.297)
- 14. Dash, S.K., Bandyopadhyay, S.S. Carbon Dioxide Capture: Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-Methyl-1-Propanol. Journal of Clean Energy Technologies, Vol. 1, No. 3, May 2013.
- 15. Dash, S. K., Samanta, A. N., Bandyopadhyay, S. S. Simulation and Parametric Study of the Post Combustion CO2 Capture using aqueous 2-Amino-2-methyl-1propanol and Piperazine. International Journal of Greenhouse Gas Control. (2013). Accepted for publication. (Impact Factor- 5.191).
- 16. Dash, S.K. Multi-Technology Approach to Carbon Dioxide Capture and Sequestration: A Strategy for Global Warming and Greenhouse Gas Mitigation, International Journal of Research and Scientific Innovation (IJRSI)
- 17. Javishk Shah, Kandarp Mavani, Himanshu Choksi, Conducting Polymers: A New Generation of Conductors, International Journal of Scientific Computing
- 18. S K Shukla, Shai Pandya, Manan Upadhyay, Himanshu Choksi, Industrial Water: A Study, International Journal of Scientific Computing
- 19. Baldania Ashish D. & Choksi Himanshu H., Purification of Ethanol by adsorption using 3-A0 Zeolite adsorbent under static conditions, International Journal of Biotechnology, Chemical & Environmental Engineering
- 20. Himanshu Choksi, Pravin Kodgire & Surendra Singh Kachhwaha; 'Biodiesel Production Using Supercritical Alcoholysis: A Review', Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4), pg 1-6, 2014
- 21. Techno-Economical analysis of Biodiesel production using castor oil An Indian Approach', Journal of Energy, Environment & Carbon Credits, pp. 1-10, jan 2013
- 22. Modelling of Activated Sludge Process', Global Journal of Researches in Engineering Chemical Engineering, pp. 11-16, jan 2013
- 23. Saini B., Mehrotra I., Kumar P. and Verma R. (2013) "Insight of Riverbank Filtration System at Haridwar for Enhancement of Drinking Water Quality". International Journal of Current Engineering and Technology. Vol. 3, No. 4.
- 24. Saini B., Verma R., Himanshu S. K. and Gupta S. (2013) "Analysis of Exhaust Emissions from Gasoline Powered Vehicles in a Sub-urban Indian Town". International Research Journal of Environment Sciences.
- 25. Saini B., Kumar P. (2012) "Assessment of Ground Water Quality of IIT Roorkee Campus". Journal of Chemical, Biological and Physical Sciences.
- 26. R. Prasad, Abhishek Kumar, Anupama Mishra, Potash Substituted Mixed Metal (La-Zn) Oxide Catalysts for Diesel Soot Oxidation, International Journal of Advances in Science and Technology (IJAST), 125-130, ICAST(2014), ISSN 2348-5426
- 27. Ram Prasad, Abhishek Kumar, Anupama Mishra, Isothermal Kinetics of Diesel Soot Oxidation over La0.7 K0.3ZnOy Catalysts, Bulletin of Chemical Reaction Engineering & Catalysis (BCREC), 9(3), 2014, 192-200

PDPU 192/269

- 28. Dey, R. Singh, M.K. Purkait*, 2014, Cobalt ferrite nanoparticles aggregated schwertmannite: A novel adsorbent for the efficient removal of arsenic. Journal of Water Process Engineering, Vol.3, pp-1-9
- 29. A.Dey, M.K.Purkait, 2014, Effect of fatty acid chain length and concentration on the structural properties of the coated CoFe2O4 nanoparticles, Journal of Industrial and Engineering Chemistry (IF-2.011), Accepted 22 Sep . 2014.(doi: 10.1016/j.jiec.2014.09.027
- 30. Anvita Sharma, Dr. Pravin Kodgire & Dr. Surendra Singh Kachhwaha; 'Review on Biodiesel Production using Process Intensification Techniques', Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi (ISBN 978-93-81212-84-4),pg. 7-18, 2014
- 31. Sukanta K. Dash*, Sweta Balchandani, Multi-Technology Approach to Carbon Dioxide Capture and Sequestration: A Strategy for Global Warming and Greenhouse Gas Mitigation, International Conference on Multidisciplinary Research & Practice, 30.11.14.

2. Department of Civil Enginering

- Number of papers published in peer reviewed journals/conferences (national / international) 53
- Monographs 01
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.) 52
- SNIP 5-101/12
- Impact Factor range / average 0.5-2.5/0.9
- h-index: 4
- 1. Sarkar, D., Raghavendra, H.B., Mitul, R. (2015) "Role of Key Performance Indicators for Evaluating the Usage of BIM as Tool for Facility Management of Construction Projects" Int. Journal of Civil & Structural Engineering, Vol. 5(4), pp. 370-378.
- 2. Sarkar, D. (2015) "A Framework for development of Lean Integrated Project Delivery Model for Infrastructure Road Projects" Int. Journal of Civil & Structural Engineering, Vol. 5(3), 261-271.
- 3. Sarkar, D. and Bhattacharjee, B. (2014) "Application of Multivariate CUSUM for Quality Monitoring of Ready Mixed Concrete" Int. Journal of Quality Engineering & Technology, Vol. 4(2), pp. 161-179. Inderscience Publishers, UK.
- 4. Sarkar, D and Bhusan, M (2014) "Application of Bootstrap Technique and Genetic Algorithm for Resource Optimization of Bridge Projects" Int. J. of Latest Technology in Engineering Management, Vol. (III) (III), pp. 109-118.
- 5. Sarkar, D and Gunjan, B (2014) "Risk Analysis of Elevated Corridor Project Using Failure Mode and Effect Analysis (FMEA) and Combined Fuzzy FMEA" NICMAR Journal of Construction Management, Vol. XXIX (2), pp. 5-21

PDPU 193/269

- 6. Sarkar, D. and Shah, D (2013) "A framework for Application of Genetic Algorithm in Productivity Optimization of Highway Equipments Using Evolver Software" European Int. Journal of Science & Technology, Vol. 2(5), pp.151 -163
- 7. Sarkar, D and Yadav, S. (2013) "Combined interpretative structural modeling and expected value method approach for managing project risks in oil exploration projects" International Journal for Decision Sciences and Risk Management, Inderscience Publications, UK, Vol. 5(1), pp. 35 54
- 8. Sarkar, D. and Patel, K. (2012) "Project Risk Management Framework for PPP Models for Indian Highway Projects" Civil Engineering & Construction Review, Vol. 25 (3), pp 104-114
- 9. Sarkar, D and Shah, S. (2012) "Evaluating Tower Crane Safety Factors for a Housing Project through AHP" NICMAR Journal of Construction Management, Vol. XXVII (II & III), pp. 61 -70.
- 10. Sarkar, D. (2011) "Simulation Application in Project Risk Management for Infrastructure Transportation Project" International Journal of Project Organization and Management, Inderscience Publications, UK. Vol. 3(3 /4), pp. 374 -392
- 11. Sarkar, D. and Dutta, G. (2011) "A Framework for Project Risk Management for the Underground Corridor Construction of Metro Rail" International Journal of Construction Project Management, Vol. 4(1), pp. 21-38
- 12. Sarkar, D. (2011) "Decision Tree Analysis for Risk Mitigation Options for Underground Corridor Metro Rail Project" International Journal for Decision Sciences and Risk Management, Inderscience Publications, UK, Vol. 4, Nos. 1/2, pp. 25 3
- 13. Sarkar, D. and Kamdar, P. (2011) "Application of Simulation in Evaluation of Travel Time Performance of Bus Rapid Transit System, Ahmedabad" Journal Of Institution of Engineers, Vol. 92, pp 9-13
- 14. Sarkar, D. and Shah, M. (2011) "Grey Water Recycling Systems: A Study of Economic Implications and Potential Applications in Residential and Commercial Projects" NICMAR Journal of Construction Management, Vol. XXVI, pp. 5 13.
- 15. Sarkar, D. and Dutta, G. (2010) "Design and Application of Risk Adjusted Cumulative Sum for Strength Monitoring of Ready Mixed Concrete" Journal of Construction Engineering and Management, ASCE. Vol. 136 (6), pp623 631
- 16. Sarkar, D. (2010) "Project Risk Assessor Model (PRAM) for Underground Corridor Construction of Metro Rail: A Case Study of Delhi Metro" New Building Materials & Construction World, Vol. 15(11) pp. 190 204
- 17. Sarkar, D, (2010) "Effect of Local Environment Factors in Selection of Green Building Materials and Technology: A Case Study of a Commercial Complex in Ahmedabad" New Building Materials & Construction World, Vol. 16(2) pp. 132 140
- 18. Sarkar, D. and Dutta, G. (2009) "Optimum Design of Control Charts for Indian RMC Industry" New Building Materials & Construction World, Vol. 14 (12), pp 122 130
- 19. Sarkar, D. (2009) "EWMA and CUSUM Control Charts for Online Strength Monitoring of Ready Mixed Concrete" The Journal of Institution of Engineers (India), Vol. 90, pp 19 23

PDPU 194/269

- 20. Sarkar, D. and Dutta, G. (2009) "Economic Design of CUSUM Control Charts for Indian Ready Mixed Concrete Industry" NICMAR Journal of Construction Management, Vol. XXIV (III) pp 22 27
- 21. Sarkar, D. (2008) "A Framework for Development of Quality Control Model for Indian RMC Industry, New Building Materials & Construction World, Vol. 14 (6), pp 144-161
- 22. Sarkar, D. and Akalkotkar, P.V. (2008) "A Framework for Selection of Appropriate Housing Technology and Materials for EWS Housing" New Building Materials & Construction World, Vol. 14 (4), pp 64 -71
- 23. Sarkar, D. and Thaker, M (2007) "Operating Characteristic Curves: Design and Application for Online Quality Monitoring of Ready Mixed Concrete" NICMAR Journal of Construction Management, Vol. XXII (III), pp 46 56
- 24. Sarkar, D. and Thaker, M. (2007) "An Application of OC Curves in Online Strength Monitoring of RMC" New Building Materials & Construction World,
- 25. Sarkar, D. (2007) "Formulation of Risk Adjusted Cusum for Online Quality Monitoring of Ready Mixed Concrete" NICMAR Journal of Construction Management, Vol. XXII (IV), pp 5 16.
- 26. Sarkar, D. and Nagesh, M. (2006) "Enabling Structures for Ground Improvement for Construction of Underground Metro Rail Corridor Civil Engineering & Construction Review, Vol. 19 (2), pp 41 46
- 27. Sarkar, D. and Nagesh, M. (2006) "Enabling Structures for Construction of Underground Corridor with special Focus on Productivity" NICMAR Journal of Construction Management, Vol. XXI (I), pp 1 -7
- 28. Sarkar, D. and Bhattacharjee, B. (2003) "Quality monitoring of ready mixed concrete using cusum system" Indian Concrete Journal, Vol 77 (2), pp 1060-1065
- 29. H.R.Dhananjaya, "A Software For Concrete Mix Design", The Indian Concrete Journal, September, 1996, pp.489-493
- 30. H.R.Dhananjaya, "A Software For Optimum Design Of Post-Tensioned Pre-Stressed Concrete T Beams", Journal of Structural Engineering, Vol. 27, No.4, January 2001, pp.293-300.
- 31. H.R.Dhananjaya, P.C.Pandey, J.Nagabhushanam, "Mindlin-Reissner Theory Based New Four Node Quadrilateral Plate Bending Element For Integrated Force Method", Journal of Structural Engineering, Vol. 32, No. 3, August September 2005, pp. 179 194
- 32. H.R. Dhananjaya, J. Nagabhushanam, P.C. Pandey, "Bilinear plate bending element for thin and moderately thick plates using Integrated Force Method", Structural Engineering and Mechanics –An International Journal, Vol. 26. No. 1, 2007, pp. 43 68.
- 33. H.R.Dhananjaya, J.Nagabhushanam, P.C.Pandey, "Automatic Generation Of Equilibrium And Flexibility Matrices for Plate Bending Elements Using Integrated Force Method", Structural Engineering and Mechanics—An International Journal, Vol 30, No 4. 2008. pp.387-402
- 34. H.R.Dhananjaya, P.C.Pandey , J.Nagabhushanam, "New eight-node serendipity plate bending element for thin and moderately thick plates using Integrated Force Method", Structural Engineering and Mechanics—An International Journal, Vol 33, No 4. 2009. pp.485-502

PDPU 195/269

- 35. H.R.Dhananjaya, J.Nagabhushanam, P.C.Pandey, "Closed Form Solutions For Equilibrium And Flexibility Matrices of 4-node Rectangular Plate Bending Element Using Integrated Force Method", Electronic Journal of Structural Engineering, Vol.10, 2010, pp. 1-10
- 36. H R Dhananjaya, J. Nagabhushanam, P.C.Pandey, M. Zamin Jumath. "New twelve node serendipity quadrilateral plate bending element based on Mindlin-Reissner theory using Integrated Force Method", Structural Engineering and Mechanics—An International Journal, Vol 35, No 4. 2010, pp.485-502
- 37. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, Ismail Othamon, "Closed Form Solutions For Equilibrium And Flexibility Matrices of Eight-node Rectangular Plate Bending Element Using Integrated Force Method" Structural Engineering and Mechanics—An International Journal, Vol 40, No 1. 2011, pp.121-148
- 38. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, Zaina Ibrahim, "New nine node Lagrangian quadrilateral element based on Mindlin Reissner theory using IFM", Structural Engineering and Mechanics—An International Journal, Vol 41, No 2. 2012, pp.205-229
- 39. H R Dhananjaya, T R Madhavan, "A study on flexural behavior of pre-tensioned prestressed fiber concrete rectangular beams with fly ash", Anusandhana- Journal of Science, Engineering and Management, Vol. 1. No.2, 2012, pp 09-17
- 40. H R Dhananjaya, P.C.Pandey, J Nagabhushanam, Kirchhoff theory based bilinear plate bending element using IFM, ", Anusandhana- Journal of Science, Engineering and Management, Vol. 3. No.1, 2014, pp 08-18
- 41. Thaker T.P., Rao K.S. and Gupta K.K.(2010), "Site Specific Ground Response Studies for Coastal Soil, Kutch, Gujarat: A Case Study", International Journal of Earth Science Engineering 3(4), 543-553.
- 42. T.P.Thaker, Ganesh W. Rathod, K.S.Rao, K.K.Gupta (2012), "Use of Seismotectonic Information for the Seismic Hazard Analysis for Surat City, Gujarat, In Deterministic and Probabilistic Approach", Pure and Applied Geophysics. 169(1-2), 37-54.
- 43. K.S.Rao, T.P.Thaker, A.Aggarwal, T.Bhandari, and S.Kabra (2013), "Deterministic Seismic Hazard Analysis of Ahmedabad Region, Gujarat", International Journal of Earth Science and Engineering (Under Review).
- 44. Patra, C.R., Das ,B.M., Bhoi,M.K., and Shin, E.C. (2006). Eccentrically loaded strip foundation on geogrid reinforced sand. Geotextile and Geomembrane, Elsevier, 24(4), 254-259.
- 45. Kumar, J., and Bhoi, M.K. (2009). Interference of two closely spaced strip footings on sand using model tests. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 135(4), 595-604.
- 46. Kumar, J., and Bhoi, M.K. (2008). Interference of multiple strip footings on sand using small scale model tests. Geotechnical and Geological Engineering, Springer, 26(4), 469-477.
- 47. Kumar, J., and Bhoi, M.K. (2009). Vertical uplift capacity of equally spaced multiple strip anchors in sand. Geotechnical and Geological Engineering, Springer, 27(3), 461-472.

PDPU 196/269

- 48. Kumar, J., and Bhoi, M.K. (2009). Vertical uplift resistance of a group of two strip anchors in sand from model tests. International Journal of Geotechnical Engineering J. Ross Publishing, 4(2), 269-277.
- 49. Kumar, J., and Bhoi, M.K. (2009). Effect of interference of strip footings and strip anchors on their elastic settlements. International Journal of Geotechnical Engineering, J. Ross Publishing, 4(2), 289-297.
- 50. Rajesh Gujar, "Application of Hydrated Lime as Optional Filler in Microsurfacing" Journal Name: International Journal of Civil Engineering and Technology (IJCIET) Journal Impact Factor (2012): 3.1861 Calculated by GISI.
- 51. Rajesh Gujar ,"Application of Copper Slag as Optional Filler in Microsurfacing" Journal Name: International Journal of Civil, Structural, Environmental, and Infrastructure Engineering Research and Development (IJCSEIERD) Journal Impact Factor (2012): 1.0565
- 52. Rajesh Gujar, Calculated by GISI, http://www.tjprc.org/
 "Application of Fly Ash as Optional Filler in Microsurfacing" Journal Name: nternational Journal of Civil Engineering, http://www.iaset.us/
- 53. Mr. Akshay Jain, "Flood simulation for ungauged basin: A case study of lower Tapi basin, India" -Journal of Geomatics (Oct 2013 Issue)

3. Department of Electrical Engineering:

- Number of papers published in peer reviewed journals/conferences (national / international):75
- Books with ISBN with details of publishers 04

Books with ISBN with details of publishers

Sr. No.	Name of Faculty	Title of the book	Publishing Year	Name of Publisher with	National/In ternational level
				ISBN Number	
	Dr. Jitendra	AC Machines	First Edition,	Mahajan	National
1.	Jamnani		January 2015	Publishing	
				House	
				978-93-83058-	
				87-7	
2.	Dr. Jitendra	DC Machines and	First Edition,	Mahajan	National
	Jamnani	Transformers	July 2014	Publishing	
				House	
				978-93-83058-	
				59-4	
3.	Dr. Jitendra	"Elements of	Fourth	Mahajan	National
	Jamnani	Electrical Design"	Edition, July-	Publishing	
			2013	House	
				978-93-83058-	
				10-5	

PDPU 197/269

Self Evaluation Report – Volume II							
4	Dr. Jitendra	"Switchgear"	First Edition,	Mahajan	National		
	Jamnani		July-2012	Publishing			
				House			
				978-93-81256-			
				59-6			

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)
- Citation Index range / average: 14, 4.7

• SNIP 0.5-3.5/1.5

• SJR 0.5

• Impact Factor – range / average 0.8 -3.5/1.6

• h-index: 3

- 1. Hemant Joshi, Vivek Pandya, "A Review on Up Gradation of Conventional Grid to Smart Grid for Optimal Residential Power Scheduling", International Journal of Innovative Research in Advanced Engineering (IJIRAE), pp. 1-8, Apr 2015.
- 2. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Small Signal Stability Enhancement of DFIG based Wind Power System using Optimized Controllers Parameters", International Journal of Electrical Power & Energy System, pp. 70-82, Jan 2015.
- 3. Hemant Joshi, Vivek Pandya, "Optimal RTP Based Power Scheduling for Residential Load in Smart Grid", Journal of The Institution of Engineers (India): Series B Electrical, Electronics & Telecommunication and Computer Engineering, pp. 1-9, Oct 2014.
- 4. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Modelling of Fixed Speed Squirrel Cage Induction Generators for Small Signal Stability Assessment", WSEAS (World Scientific and Engineering Academy and Society; Greece) Transactions on Power Systems, pp. 360-375, Aug 2014.
- 5. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Small signal stability analysis of power systems with DFIG based wind power penetration", International Journal of Electrical Power & Energy System, pp. 64-74, Jan 2014.
- 6. Siddharth Joshi, Vivek Pandya"Momentary L-G Fault Analysis in 800 KW Grid Tied Wind Energy Conversion System", INTERNATIONAL JOURNAL OF ENGINEERING DEVELOPMENT AND RESEARCH (IJEDR), pp. 110-114, Jan 2013.
- 7. Vivek Pandya, S.A. Kanitkar, "Current Differential Pilot Relaying Protection of Series Compensated Transmission Line using Wavelet Transforms", Journal of World Academy of Science, Engineering and Technology (WASET), PP Feb 2008.
- 8. Vivek Pandya, S.A.Kanitkar,"A novel Technique for Distance Protection of Series Compensated Transmission Lines", The Icfai University Journal of Electrical & Electronics Engineering, pp. 54-59, Oct 2008.
- 9. Vivek Pandya, B.A.Oza, "Microprocessor based Distribution Relays Application and Economy", Journal of Engineering & Technology, Sardar Patel University, pp. 92-95, Mar 2001.

PDPU 198/269

- 10. Vaibhav Desai, Vivek Pandya, Anil Markana, "Enhancement of Transient Stability of Power System with Variable Series Compensation", ITM Universe, Vadodara, pp. 1-7, Apr 2015.
- 11. Parth Rawal, Vivek Pandya, "Distribution Transformer Future Failure Prediction using Extreme value model", ITM Universe, Vadodara, pp. 1-7, apr 2015.
- 12. Parth Rawal, Vivek Pandya, "Distribution Transformer FailureAanalysis inGgujarat DISCOM", INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANASI, pp. 1-4, jan 2015.
- 13. Vaibhav Desai, Vivek Pandya, Anil Markana, "Comparative Analysis of Series Compensation for Enhancement of Transient Stability of Power System", Adhiparasakthi Engineering College, melmaruvathur, pp. 1-4, feb 2015.
- 14. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Small Signal Stability Analysis of Power Systems with DDSG Based Wind Power Penetratio", Singapore University, pp. 1-6, Oct 2014.
- 15. Siddharth Joshi, Vivek Pandya, Bhavesh Bhalja, "Maximum Power Point Tracking and MPPT Efficiency for Wind and Solar Energy Conversion Standalone System PSIM based P&O Method", GOA,IEEE, pp. 71-76, Oct 2014.
- 16. Siddharth Joshi , Vivek Pandya, "A Brief Survey on Wind Energy Conversion Systems & Modeling of PMBLDCG based Wind Turbine", National Institute of Technology, Rourkela, pp. 195-200, mar 2013.
- 17. Bhinal Mehta, Pragnesh Bhatt, Vivek Pandya, "Analysis of Wind Power Penetration With DFIG on Small Signal Stability of Power Systems Equipped With AVR & PSS", Indian Institute of Technology, Roorkee, pp. 168-173, Oct 2013.
- 18. Vivek Pandya, S.A.Kanitkar, "Protection of series Compensated Transmission Lines using wavelet Transform", Central Power Research Institute (CPRI), Bangalore, pp. 1-4, Dec 2007.
- 19. Vivek Pandya, S.A.Kanitkar, "A Novel Technique for Distance Protection of series Compensated Transmission Line", Engineering College, Bikaner, pp. 206-208, mar 2007.
- 20. Vivek Pandya, S.A.Kanitkar, "Emerging Trends in Power system Protection with a birds eye on Distance Protection aspects of Series compensated transmission Line", Central Power Research Institute (CPRI), Bangalore, pp. 36, Dec 2005.
- 21. Vivek Pandya, S.A.Kanitkar, "Recent Trends in Power system Protection with Emphasis on Protection aspects of Series Compensated Transmission Lines", SIST, Hyderabad, pp. 83-88, Nov 2005.
- 22. Vivek Pandya, S.A.Kanitkar, "Advantages of Series Compensation and Distance Protection Aspect", THAIGARAJAR COLLEGE OF ENGINEERING, MADURAI, TAMIL NADU, pp. 181-184, Dec 2005.
- 23. J. G. Jamnani & Avdhut D., "Closed loop control of Thyristor switched capacitor for instantaneous reactive power compensation" at International Journal of Engineering development and Research, pp. 84-87, January, 2014.
- 24. J. G. Jamnani & Kaustubh A. Vyas, "Optimized design of Substation Grounding System Using newly developed IEEE Compliant Software" International Journal of Engineering development and Research, pp. 88 to 93, January, 2014.

PDPU 199/269

- 25. J. G. Jamnani & Kaustubh A. Vyas, "Development of IEEE Complaint Software 'Economical Substation Grounding System Designer' Using MATLAB GUI Development Environment" International Journal on Electrical Engineering and Informatics, Volume 4, Number 2, pp. 335-346, July 2012.
- 26. J. G. Jamnani & Kaustubh A. Vyas, "Optimal design of grounding system for HV/EHV substations in Two Layered Soil", at International Journal of Emerging Technology and Advanced Engineering (IJETAE), Vol. 2, Issue 5, pp. 383-392, May 2012.
- 27. J. G. Jamnani & Manan Pathak, "Load Flow Analysis of 66/11 kV Substation using Shunt Connected FACTS Controller for Maintaining Voltage Profile" 4th International conference on computation of power energy, information and communication, ICCPEIC 2015 held during April 2015 at AEC Kanchipuram, T.N (978-1-4673-6524-6/15 IEEE 2015).
- 28. J. G. Jamnani & Varun Patel, "Techniques to Increase Surge Impedance Loading levelof EHV AC Transmission Lines for Improving Power Transfer Capability", 4th International conference on computation of power energy and information and communication ICCPEIC 2015 to be held during April 2015 at AEC Kanchipuram, T.N (978-1-4673-6524-6/15 IEEE 2015).
- 29. J.G.Jamnani & S. A. Kanitkar, "TRV Rating Concepts and Generation of TRV Envelopes for Synthetic Testing of Extra High Voltage Circuit Breakers" International Journal of Electrical and Computer Engineering (IJCEE). Vol.3, No.1, pp.24-29, Feb. 2011
- 30. J.G.Jamnani & S. A. Kanitkar, "Computer Aided Optimized Design and Simulation of Synthetic Test Circuit for Testing 800kV Rating Circuit Breakers" IEEE International conference on Emerging Technologies for sustainable development (TENCON2009) held at Singapore during November 23-26,2009
- 31. J.G.Jamnani & S. A. Kanitkar, "Computer Aided Optimized Design, Simulation and Comparison of Synthetic Test Circuits for Testing 420 kV Rating Circuit Breakers" IEEE PES Power systems International conference and Exposition (PSCE-09) held during March 15-18, 2009 at Seattle, Washington, USA.
- 32. J.G. Jamnani & S. A. Kanitkar, "Design, Simulation and Comparison of Synthetic test circuits for High Voltage Circuit Breakers" International Conference on power system Technology 2008 (POWERCON 2008) & 2008 IEEE Power India Conference held during October 12-15, 2008 at New Delhi.
- 33. J.G.Jamnani & S. A. Kanitkar, "Computer Aided Optimized Design, Simulation and Comparison of Synthetic Test Circuits For 245kV Rating Circuit Breakers" International Journal of Engineering and Technology, IETECH Journal of Electrical Analysis, Vol.2, No.4, pp.258-262, Nov. 2008.
- 34. J.G. Jamnani & S. A. Kanitkar, "Development and Fabrication of Automatic Controller and Triggering Circuit for Circuit Breakers Synthetic Test Circuit" at 15th National Power System Conference (NPSC-2008) held at IIT, Bombay during Dec.16-18 2008, pp.37-42.

PDPU 200/269

- 35. J. G. Jamnani & S. A. Kanitkar, "Design, Simulation and Comparison of Synthetic test circuits for Extra High Breakers" IET-International Conference on Information and communication Technology in Electrical Sciences (ICTES-2007) held during Dec. 20 -22, 2007 at Chennai, pp.464-468.
- 36. J.G. Jamnani & S. A. Kanitkar "Design and Simulation of 2- Parameters TRV synthetic testing circuits for Medium voltage circuit breakers" IEEE International Conference on Electrical Engineering, (ICECE-2006) held during Dec.19-21, 2006 at Dhaka, Bangladesh, pp.1-4.
- 37. J.G. Jamnani & S. A. Kanitkar, "Design and Simulation of 4 Parameters TRV synthetic testing circuits for High Voltage circuit breakers" IEEE International Conference on Electrical Engineering (ICECE-2006) held during Dec.19-21, 2006 at Dhaka, Bangladesh, pp. 25-28.
- 38. Kaustubh A. Vyas & J. G. Jamnani, "MATLAB GUI Development Environment Simplifies Deployment of Standalone Software for Optimal design of Substation Grounding Systems", at International conference on Computer Science and Information Technology, ICCSIT-2012, Pune, April 2012, pp. 303-311.
- 39. J. G. Jamnani & J. V. Kadia, "Modelling and Analysis of TCSC Controller for Enhancement of Transmission Network", at International Journal of Emerging Technology and Advanced Engineering (IJETAE), Vol. 2, Issue 3, pp. 1-7, March 2012
- 40. Kaustubh A. Vyas & J.G.Jamnani, "Optimal design and development of software for design of substation grounding system" at International conference on current trends in technology, NUiCONE-2011, Institute of Technology, Nirma University, Ahmedabad, Dec. 2011, pp.1-6
- 41. Ishan Desai & J.G.Jamnani, "Reliability Improvement of Extra high voltage substation" at International conference on current trends in technology, NUiCONE-2011, Institute of Technology, Nirma University, Ahmedabad, Dec. 2011.
- 42. Avdhut D. & J.G.Jamnani, "Maintaining voltage profile in a power system using shunt connected FACTs controllers" at International conference on Innovative Science and Engg. Technology ICISET-2011, V.V.P Engineering College, Rajkot, April, 2011.
- 43. Avdhut D. & J.G.Jamnani, "Comparative analysis of series connected FACTS controllers with conventional methods of Series compensation for large industrial loads" at International conference on current trends in technology, NUiCONE-2010, Institute of Technology, Nirma University, Ahmedabad, Dec. 2010.
- 44. Jignesh Pandya & J.G.Jamnani, "A 10kV, 100mA DC Power Supply using Zero Voltage Switching with Full Bridge AC-DC Converter" at International conference on current trends in technology, NUiCONE-2010, Institute of Technology, Nirma University, Ahmedabad, Dec. 2010.
- 45. Dr Pratik Shah, "Shot Detection Using Pixel wise Difference with Adaptive Threshold and Color Histogram Method in Compressed and Uncompressed Video", at International Journal of Compute Applications, Volume 64 No 4/2013/38-44, ISSN 0975-8887, Impact Factor 0.871.

PDPU 201/269

- 46. Dr Pratik Shah, "Perceived Directionality of $1/f^{\beta}$ Noise Surfaces", In proceedings of 5th Symposium on Applied Perception in Graphics and Visualization (APGV), 2008/203, ISBN 978-1-59593-981-4.
- 47. Dr Pratik Shah, "Analysis of Human perception of surface directionality", Predicting Perceptions: Proceedings of the 3rd International Conference on Appearance, 2012/29-31, 978-1-4716-6869-2.
- 48. Gandhi, Y., Patel, M., Mehta, V., Gadhvi, B. and Markana, A., Control design and analysis of active vehicle suspension using integral pole placement controller". Journal of Aeronautical and Automotive Engineering (JAAE), vol. 2, pp. 33 37, Jan. 2015
- 49. A. Yadav, V. Mehra, A. Markana, Makrand, L., Paralleled DC Boost Converters with Feedback Control using PSO Optimization Technique for Photovoltaic Module Application". International Journal of Computer Applications (IJCA), vol. 84, No. 16, pp. 12 18, Dec. 2013
- 50. Markana, A., Padhiyar, N., Moudgalya, K., Lexicographic optimization based model predictive control: Application to quadruple tank system", AIP Conference Proceedings, vol. 1298, pp. 467 472, 2010
- 51. Pathak, K. and Markana, A., Optimal Control of CSTR", Nirma University Journal of Engineering and Technology, vol.1, No. 2, July. 2010.
- 52. Shah, A., Markana A. and Parikh, N., Performance analysis of IMC based PID controller tuning on approximated process models", Nirma University Journal of Engineering and Technology, vol.1, No. 2, July. 2010.
- 53. Desai, V., Markana, A. and Pandya, V., Comparative analysis of series compensation for enhancement of transient stability of power system". IEEE International Conference on Computation of Power, Energy, Information and Communication, Chennai, India, April 2015.
- 54. Desai, V., Pandya, V. and Markana, A., Enhancement of transient stability of power system with variable series compensation". National conference on Recent Trends in Electrical and Electronics & Communication Engineering, organized by ITM Universe, Vadodara, India, April 2015.
- 55. Patel, S., Pandya, V., Markana, A. and Santosh, L., Optimal capacitor placement and sizing in radial distribution system". National conference on Recent Trends in Electrical and Electronics & Communication Engineering, organized by ITM Universe, Vadodara, India, April 2015.
- 56. Gandhi, Y., Patel, M., Mehta, V., Gadhvi, B. and Markana, A., Control design and analysis of active vehicle suspension using integral pole placement controller." International conference on Mechanical, Material, Industrial, Automotive, Aeronautical and Nano-Technology (MIANT-2015), organized by Krishi Sanskriti at Jawaharlal Nehru University, New Delhi, Feb. 2015.
- 57. Chhabria, S. and Markana, A., Servo control of wheeled inverted pendulum using pole placement controller". IAS Annual meeting 2014 at Vancouver, BC Canada, organized by IEEE Industry Applications Society, Oct. 2014.

PDPU 202/269

- 58. Velmurugan, N., Parikh, N. and Markana, A., Stick slip mitigation of drill string using model reduction and model based LQG controller." IAS Annual meeting 2013 at Orlando, USA, organized by IEEE Industry Applications Society, Octo. 2013.
- 59. Markana, A., Padhiyar, N. and Moudgalya, K., Prioritized Model Predictive Control for Quadruple Tank System". International conference on sustainable technologies for energy and environment in process industries & Indo-US joint International conference on energy and environment, organized by Indian Institute of Chemical Engineers, Doaba Regional Centre and NIT Jalandhar, Dec. 2012.
- 60. Hinduja, G. and Markana, A., Control of Multivariable Quadruple-Tank System: a Case Study". International conference on instrumentation (ICI-2009), Pune, Jan. 2010.
- 61. Markana, A., Parikh, N. and Shah, A., 2-DOF Controller Design for Polynomial and Sinewave Reference Signals using Auxiliary Aryabhatta's Identity Equation". International conference on instrumentation (ICI-2009), Pune, Jan. 2010.
- 62. Siddharth Joshi, Ankit Patel, Pinkal Patel, Vinod Patel, "Wind Energy A Brief Survey With Wind Turbine Simulations", IJJCET (International Joint Journal) Singapore. (Journal)
- 63. Siddharth Joshi, Pinkal Patel, Vinod Patel, Kaushal Patel, "Wind Energy Conversion System using PMSG", NUiCONE 2010 organized by Institute of Technology, Nirma University on 9th, 10th and 11th December 2010.
- 64. Siddharth Joshi, Pinkal Patel, Vinod Patel, "Wind Energy Conversion System Grid Connected Wind Turbine with PM Generator", ICSE11- International Conference on Science & Engineering, HUDA Sector 4, Rohtak, Haryana. (INDIA) held at Rohtak Gymkhana on 21st, 22nd and 23rd January, 2011.
- 65. Siddharth Joshi, Rhuta Mehta, Pinkal Patel, Vinod Patel, Kaushal Patel, "Wind Energy Conversion System PSIM Oriented Open and Close Loop Simulation", ICISET International Conference on Innovative Science & Engineering Technology 2011 held at VVP Engineering College, Rajkot on 8th and 9th April 2011.
- 66. Siddharth Joshi B. Pinkal Patel C. Vinod Patel D. Mihir Oza; 800kW Wind turbine detail modeling Wind turbine model with Pitch control, NCTM 2012, National Conference, Sankalchand Patel College of Engineering, Visnagar, January 20-21, 2012. (Won young Scientist Award)
- 67. Siddharth Joshi, Devang Shah, Pinkal J. Patel, Vinod Patel Wind Turbine Shut Down and Restart Operations A Test on 800kW WECS; International Journal of Advances in Engineering Sciences; http://journals.rgsociety.org/index.php/ijse; Rohtak.
- 68. Siddharth Joshi, Pinkal Patel and Vinod Patel, LVRT Effect On 800kw Grid Connected WECS Connected With 50km Line, Global J. of Engg. & Appl. Sciences, 2011: 1 (4), Review Paper: Siddharth et al., 2011: Pp.36-38.
- 69. Siddharth Joshi, Sanjay Narsiyan, Pinkal Patel, Vinod Patel, "LVRT phenomenon on 800kW Wind Energy Conversion System (Momentary L-L fault)", ITES-2012, International conference, V.V.P. Engineering College, Rajkot held on 22nd -23rd December, 2012. (Won session best paper award)Siddharth Joshi,
- 70. Siddharth Joshi, V. J. Pandya, "A Brief Survey on Wind Energy Conversion Systems & Modelling of PMBLDCG based Wind Turbine", National Conference on Power

PDPU 203/269

- Electronics Systems & Applications, PESA 2013, NIT, Rourkela, March 16th and 17th, 2013.
- 71. Siddharth Joshi, Astik Dhandhia, Dr. Vivek Pandya, "Momentary L-G Fault Analysis in 800kW Grid Tied Wind Energy Conversion System", National Conference, ITM Universe, Vadodra, January 17th and 18th, 2014.
- 72. Mr. Siddharth Joshi, Dr. Vivek Pandya, Dr. Bhavesh Bhalja, "PSIM based Simulation on Maximum Power Point Tracking and MPPT Efficiency for Wind and Solar Energy Conversion Standalone System", 2014 International Conference on Green Materials and Environmental Engineering (GMEE2014), Hong-kong.
- 73. Siddharth Joshi, Dr. Vivek Pandya, Dr. Bhavesh Bhalja, "Maximum Power Point Tracking and MPPT Efficiency for Wind and Solar Energy Conversion Standalone System PSIM based P&O Method", INDICON 2014 (IEEE), December 11 to 13, 2014 at YASHADA, Pune.
- 74. Nitin Prajapati & Vivek Patel, "Explicit Model Predictive Control of Fast Dynamic Systems" at International Journal of Research in Engineering and Technology (IJRET), pp. 692-695, January, 2014. Volume 2 Issue 4 April 2013, ISSN: 2319 116, Impact Factor 0.2130
- 75. Nitin Prajapati & Vivek Patel, "Explicit Model Predictive Control based Optimization of the Industrial Application" South Asian Research Centre (SARC) Conference Proceedings, 14th July 2013, Delhi, India

4. <u>Department of Industrial Engineering:</u>

- Number of papers published in peer reviewed journals (National / International): 25
- Books with ISBN with details of publishers: Nil
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): -
- Citation Index range / average: 10 (range)/9(average))
- Impact Factor range / average: 2 (range)/2.2(average))
- h-index: 2
- 1. M.B. Kiran, B. Ramamoorthy, V. Radhakrishnan., 1998. Evaluation of surface roughness by vision system. International Journal of machine Tools and Manufacture. Volume 38(5-6): pp 685-690.
- 2. M.B.Kiran, H.Ramakrishna and Prabhakar Kuppahalli, A Study on the Evolution of Surface Roughness Characterization, Manufacturing Technology Today, Volume 11, Issue 1-2, Jan-Feb 2012.
- 3. Shivanna D.M and M.B.Kiran, A Comparative Study to Assess the Effectiveness of Surface Texture Classification Algorithms, International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 1, Issue 7, September-2012.

PDPU 204/269

- 4. Ravindra Biradar, M.B.Kiran, "The Dynamics of Fixed Base and Free-Floating Robotic Manipulator", International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 1 (5), 2012, 1-9.
- 5. M.B.Kiran et.al., Texture Feature Analysis of Milled Components Using Vision System, Advanced Materials Research, pp 745-749,2014.
- 6. M.B.Kiran et.al., Evaluation of 3D Surface Roughness Parameters of EDM Components Using Vision System, Procedia Materials Science 5, 2132 2141,2014.
- M.B.Kiran et.al., 'Flexible manufacturing system modeling Petrinet Based approach'-A Survey, International Journal of Advanced Mechanical Engineering, pp. 741-746, Number 7, 2014.
- 8. M.B.Kiran et.al., 'Three Dimensional Surface Roughness Evaluation of Machined Components in Computer Integrated Manufacturing', International Journal of Latest Technology in Engineering, Management & Applied Science, pp187-193, Volume III, Issue VI, June 2014.
- 9. M.B.Kiran et.al., "A Survey on Out of Roundness Measuring Methods", Accepted for publication in International Journal of Research and Scientific Innovation" (Volume I Issue II), 2014.
- 10. M.B.Kiran et.al, In-process measurement of surface roughness of Milled components Using computer vision system, Journal of Mechanical Engineering Research and Technology, Volume 2, Number 1, pp.231-246,2014.
- 11. Dr D M Parikh; Scaling up through outsourcing using entrepreneurial & sustainable strategy- case study of Indian corporate. SANLALPA: Journal of management &Resaerch,vol-5 conference issue(Feb-2015),ISSN No. 2231-1904 and impact factor 2.372,201-206
- 12. D M Parikh; Business to Responsible Business a Sustainable Strategy of Survival & Growth for all, Indian Journal of Applied Research ,vol-3,issue-6 June 2013; IISN-2249-555X,51-54
- 13. D M Parikh, Facilitation of collateral free loan to improve financial linkages for start -up & Growth- A case study, Global Research Analysis ,vol-1,isuue-1 June-2012; ISSN No-2277-8160,44-46
- 14. D M Parikh; Innovation & Initiative in Infrastructure Financing: A perspective; Journal of Industrial Research; issue April-June-2008,3-23
- 15. D M Parikh; HRD-for Change and Innovation, Leather Research Industry Get-Together 2012.
- 16. D M Parikh; Industrial Engineer as a BDS Provider & Facilitator an Enlarged role in the Globalised Economy; International Conference on Industrial Engineering (ICIE-2011);48-50
- 17. Kumar, A., Clement, S. and Agrawal, V. P. (2011) Quality Modeling and Analysis of Electroplating System Using Graph Theory Matrix Approach, International Journal of Productivity and Quality Management, 8, 85-112. (Inder Science Publication)

PDPU 205/269

- 18. Kumar, A., Clement, S. and Agrawal, V. P. (2011) Concurrent Design of Electroplating System for X- Abilities: A Graph Theoretic Approach, International Journal of Industrial and Systems Engineering, 9, 350-371 (Inder Science Publication)
- 19. Kumar, A., Clement, S. and Agrawal, V. P. (2011) Optimum Selection and Ranking of Electroplating System Process Parameters: Taguchi-MADM Approach, International Journal of Applied Decision Science, 4, 341-361 (Inder Science publication)
- 20. Kumar, A., Clement, S. and Agrawal, V. P. (2010) Structural modeling and analysis of an effluent treatment process for electroplating A graph theoretic approach, Journal of Hazardous Materials, 179, 748-761. (Elsevier Publication, Impact factor: 4.144)
- 21. Kumar, A., Clement, S. And Agrawal, V. P. (2010) Attribute Based Design Specification, Comparison and Selection of Electroplating Waste Treatment System Using MADM Approach, Journal of Tribology and Surface Engineering, 1, 263-286. (Nova Publication, USA)
- 22. Kumar, A. and Agrawal, V. P. (2009) Attribute based specification, comparison and selection of electroplating system using MADM approach, Expert System with Application, 36, 10815-10827. (Elsevier Publication, Impact factor: 2.908)
- 23. Kumar, A. and Agrawal, V. P. (2008) Structural modelling and analysis of electroplating system: a graph theoretic system approach, International Journal of Surface Science and Engineering, 2, 520 540. (Inder Science publication)
- 24. Poonam Savsani ,"Comparative Study of Different Metaheuristics for the Trajectory Planning of a Robotic Arm", is published in the IEEE- Systems Journal.

5. Department of Mathematics and Computer Science:

- Number of papers published in peer reviewed journals/conferences: 41
- Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): NIL
- Citation Index 2 196 /39
- SNIP: 1.01887SJR: 0.66997
- Impact Factor 0.3 7.341/2.879
- h-index: 5
- 1. Jwngsar Brahma, Anirbid Sircar, 2014. "Estimation of the Effect of Anisotropy on Young's Moduli and Poisson's Ratios of Sedimentary Rocks using Core Sample in Western and Central part of Tripura, India". International Journal of Geoscience, Vol.5, Scientific Research, USA.
- 2. Anirbid Sircar, Jwngsar Brahma, 2014. "Estimation of Thomsen's Parameters in Western and Central Part of Tripura, India". Progress in Science in Engineering Research Journal, India.
- 3. Jwngsar Brahma, Anirbid Sircar, GP Kamakar, 2013. "Hydrocarbon Prospectivity in Central Part of Tripura, India Using an Integrated Approach". Journal of Geography and Geology, Vol. 5 No.3 Canadian Centre of Science and Education Ltd, Publishing, Canada.

PDPU 206/269

- 4. Jwngsar Brahma, Anirbid Sircar, GP Kamakar, 2013. "Pre Drill Pore Pressure Prediction Using Seismic Velocities Data on Flank and Synclinal part of Atharamura Anticline in the Eastern Tripura, India": Journal of Petroleum Exploration and Production technology, Vol. 2 issue 2, Springer Publications.
- 5. Jwngsar Brahma, 2012. "Estimation of Coda Wave Attenuation Quality Factor from Digital Seismogram Using Statistical Approach". Science and Technology, Vol.2 No.1,pp 1-7, Scientific and Academic Publishing, USA.
- 6. Jwngsar Brahma, 2011. "Seismic Site Characterization Using Shear Wave Velocities of Gandhinagar City, Gujarat, India". Science and Technology, Vol. 1, No.1, pp 17-23, Scientific and Academic Publishing, USA.
- 7. Paper Accepted –Mishra P. "A Quasi Newton Approach for Optimal Generation Scheduling" International Journal of Research and Scientific Innovation ISSN 2321-2705(online).
- 8. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2012. "Effect of change point and imperfect debugging in software reliability and its optimal release policy". Mathematical and Computer Modelling of Dynamical Systems, Vol. 18, Issue 5, Pg. 539-551 Taylor & Francis,
- 9. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2012. "Software Fault Prediction using Nonlinear Autoregressive with eXogenous Inputs (NARX) Network". Applied Intelligence, Vol. 37, No. 1, Pg. 121-129, Springer.
- 10. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2011. "Transfer Function Modelling in Software Reliability". Computing", Vol. 92, No. 1, Pg. 33-48, Springer..
- 11. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2011. "Application of fuzzy time series in prediction of time between failures & faults in software reliability assessment". Fuzzy Information and Engineering, Vol. 3, No. 3, Pg. 293-309, 2011.
- 12. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2012."An Improved Additive Model for Reliability Analysis of Software with Modular Structure", International Journal of Applied Mathematics & Informatics, Vol. 30, No. 3-4, Pg. 489-498.
- 13. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2011. "Best Subset Selection of ARMA and ARIMA Models for Software Reliability Estimation", International Journal of Modelling and Simulation, Vol. 31, No. 2.
- 14. S. Nigam, S. Chatterjee, J.B. Singh, L.N. Upadhyaya, 2012. "A Study of Single Multiplicative Neuron (SMN) Model for Software Reliability Prediction", published in Book Innovations in Intelligent Machines -3, Springer-Verlag Berlin Heidelberg 2012, Vol. SCI 442, Pg. 89-102.
- 15. Sahni M., Sahni R., "Functionally Graded Rotating Disc with Internal Pressure", Engineering and Automation Problems, No. 3, pp. 125-130, 2014
- 16. Sharma S., Sahni M., "Creep Analysis of Thin Rotating Disc Having Variable Thickness and Variable Density with Edge Loading", Annals of Faculty Engineering Hunedoara International Journal of Engineering, pp. 289 296, 2013.
- 17. Sharma, S., Singh, B. and Sahni, M., "Elastic Plastic Deformation of a Thin Rotating Solid Disk of Exponentially Varying Density", IJAMM, 2013.

PDPU 207/269

- 18. Sharma S., Sahni M., "Thermo Elastic-Plastic Transition of a Homogeneous Thick-Walled Circular Cylinder under External Pressure", Structural Integrity and Life, Vol. 13, No. 1, pp. 3 8, 2013.
- 19. Sharma S., Sahni M., Sanehlata, "Elastic-Plastic Transition of Non-Homogeneous Thick walled Cylinder under External Pressure", Applied Mathematical Sciences, Vol. 6, No. 122, pp. 6069 6074, 2012.
- 20. Sharma S., Sahni M., Kumar R., "Elastic-plastic Analysis of a Thin Rotating Disk of Exponentially Variable Thickness with Inclusion", WSEAS Transactions on Mathematics, Vol. 9, Issue 5, pp. 314 323, 2010.
- 21. Sharma S., Sahni M., Kumar R., "Thermo Creep Transition of Transversely Isotropic Thick-walled Rotating Cylinder under Internal Pressure", Int. J. Contemp. Math. Sciences, Vol. 5, No. 11, pp. 517 527, 2010.
- 22. Sharma S., Sahni M., Kumar R., "Thermo Elastic-plastic Transition of Transversely Isotropic Thick-walled Rotating Cylinder under Internal Pressure", Advances in Theoretical and Applied Mechanics, Vol. 2, No. 3, pp. 113 122, 2009.
- 23. Sharma S., Sahni M., "Elastic-plastic Transition of Transversely Isotropic Thin Rotating Disc", Contemporary Engineering Sciences, Vol. 2, No. 9, pp. 433 440, 2009.
- 24. Sharma S., Sahni M., "Creep Analysis of Thin Rotating Disc under Plane Stress with no Edge Load", WSEAS Transactions on Applied and Theoretical Mechanics, Vol. 3, Issue 8, pp. 725 738, 2008.
- 25. Sharma S., Sahni M., "Creep Transition of Transversely Isotropic Thick-walled Rotating Cylinder", Advances in Theoretical and Applied Mechanics, Vol. 1, No. 7, pp. 315 325, 2008.
- 26. Sharma S., Sahni M., Kumar R., "Elastic-plastic Transition of Transversely Isotropic Thick-walled Rotating Cylinder under Internal Pressure", Defense Science Journal, Vol. 59, No. 3, pp. 260-264, 2009.
- 27. Mankad, B.M., Sharma, R., Basu, S., Pal, P.K., 2012: "Altimeter data assimilation in the tropical Indian Ocean using water property conserving scheme". J. Earth Syst. Sci., 121, No.1, 251-262.
- 28. Mankad, B.M., Sharma, R., Pal, P.K., Basu, S., 2012: "Estimating depth of the 20°C isotherm from sea level in the Arabian Sea", Remote Sensing Letters, 3, 413–421.
- 29. Sharma, R., B. Mankad, N. Agarwal, R. Kumar, and S. Basu, 2012: "An assessment of two different satellite-derived precipitation products in relation to simulation of sea surface salinity in the tropical Indian Ocean", J. Geophys. Res., 117, C07001, doi:10.1029/2012JC008078
- 30. Ratheesh, S., B. Mankad, S. Basu, R. Kumar, and R. Sharma, 2013: "Assessment of satellite-derived sea surface salinity in the Indian Ocean", IEEE GeoSci. and Remote Sensing Letters, 10, No. 3,428-431.
- 31. Mankad, B.M., Sharma, R., Basu, S., Pal, P.K., 2012: "Intraseasonal thermocline variability in the equatorial Indian Ocean" (accepted in Indian Journal of GeoMarine Sciences).
- 32. Pandya, D. M., Tikekar, R. S.; Relativistic Anisotropic Fluid Distributions in Equilibrium in General Relativity, Mathematics Today, 24, 39-46 (2008).

PDPU 208/269

- 33. Brajesh Kumar, Neeru Adlakha and M. N. Mehta, "Two-Dimensional Finite Element Model to Study Calcium Distribution in Astrocytes in Presence of Excess Buffer", International Journal of Biomathematics, *world scientific*, 7(3), 1-11, 2014, SCI impact factor 0.633. ISSN: 1793-7159
- 34. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Closed form solution to problem of advection diffusion of ca²⁺ in astrocytes", accepted, IJAMM, 2014,
- 35. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Two dimensional finite element model to study calcium distribution in astrocytes in presence of VGCC and excess buffer", International Journal of Modeling, Simulation, and Scientific Computing, *world scientific*, vol 4(2), pp 1-15, 2013, ISSN: 1793-9615
- 36. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Finite Element Model to Study Calcium Diffusion in Astrocytes", International Journal of Pure and Applied Mathematics, 8(7):945–956 2012, ISSN 1314-3395
- 37. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Analytic Solution of Two Dimensional Advection Diffusion Equation Arising In Cytosolic Calcium Concentration Distribution", International Mathematical Forum Hikari, 2012, ISSN 1314-7536
- 38. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Finite Volume Model to Study the effect of ER flux on Cytosolic Calcium Distribution in Astrocytes", Journal of Computing, Volume 3, Issue 11,74-80, November 2011 Impact factor 0.21, ISSN 2151-9617
- 39. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Finite Volume Model to Study the Effect of Voltage Gated channel on Cytosolic Ca²⁺ Advection Diffusion", World Academy of Science, Engineering and Technology 80,782-786. 2011, ISSN: 2010-3778
- 40. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Finite Volume Model to Study the Effect of Buffer on Cytosolic Ca²⁺ Advection Diffusion", World Academy of Science, Engineering and Technology 75,983-986. 2011, ISSN: 2010-3778
- 41. Brajesh Kumar Jha, Neeru Adlakha and M. N. Mehta, "Solution Of Advection Diffusion Equation Arising In Cytosolic Calcium Concentration Distribution", Int. J. of Appl. Math and Mech. 7 (6): 72-79, 2011. ISSN: 0973-0184

6. <u>Department of Mechanical Engineering:</u>

- Number of papers published in peer reviewed journals/conferences (National / International): 80
- Books with ISBN with details of publishers: 1 ("Mechanical Design Optimization using Advanced Optimization Technique"; Springer publication, published in 2012 ISBN 978-1-4471-2748-2)
- Number listed in International Database (For e.g. Web of Science, Scopus,
- Humanities International Complete, Dare Database International Social
- Sciences Directory, EBSCO host, etc.): 91
- Citation Index range / average: 9.799 (768 (range)/78.375(average))

• SNIP: 37.123

• SJR: 22.229

PDPU 209/269

- Impact Factor range / average: 5.6146 (20.979 (range)/3.7365(average))
- h-index: 3-6
- 1. Kachhwaha,S. (2014)- "Development of reliability index for cogeneration cycle power plant using graph theoretic approach" International J Syst.Assur.Eng.Manag DOI 10.1007/s13198-014-0235-4 february
- 2. Kachhwaha,S. (2013)- "Exergy analysis of a vapor compression vapour absorption cascade system" International Journal of Air-conditioning and Refrigeration, Vol. 21, No. 4 (2013) 1350026-10.
- 3. Kachhwaha,S. (2013) -"Thermodynamic performance analysis of a vapor compression—absorption cascaded refrigeration system" Energy Conversion and Management, (75) pp: 685–700.
- 4. Kachhwaha,S (2013)-"Exergy analysis of a Vapour Compression–Absorption Cascaded Refrigeration System using modified Gouy–Stodola equation", Int. Journal Exergy. Vol 15. No 1, pp:1-23
- 5. Kachhwaha,S (2013)-"Experimental Investigation of E-Diesel Blends in a VCR C I Engine", Journal Engg. Sc. Mgmt. Ed., Vol-6(II), pp:107–115
- 6. Kachhwaha,S(2013) "Experimental Studies on a Scraped Surface Ice Slurry Generator", International Journal of Engineering Science and Innovative Technology (IJESIT) 1. Vol.2, Issue 4, PP. 117-131.
- 7. Kachhwaha,S (2013) -"Waste Cooking Oil: A promising feedstaock for biodiesel production through power ultrasound and hydrodynamic cavitation", Journal Scientific and Industrial Research, vol 72, pp 387-392.
- 8. Kachhwaha,S (2013) -" Exergy analysis and simulation of a 30MW cogeneration cycle", Frontiers of Mechanical Engineering. 8(2): pp 169–180.
- 9. Kachhwaha,S (2013) –" GTA-based framework for evaluating the role of design parameters in cogeneration cycle power plant efficiency", Ain Shams engineering Journal ,pp:273–284
- 10. Kachhwaha,S (2014) –"Performance Study of Cascade Refrigeration system Using Alternative Refrigerants", International Journal of Mechanical, Aerospace, industrial and Mechatronics Engineering . Vol. 8, NO: 3
- 11. Kachhwaha,S (2015) -"Gas Turbine Power Plant Cycles at High Temperatures" J. Scientific and Industrial Research, vol. -74 pp: 52-57.
- 12. Badheka V. (2014)-"Effect of Oxide-based Fluxes on Mechanical and Metallurgical Properties of Dissimilar Activating Flux Assisted-Tungsten Inert Gas Welds" Journal of Manufacturing Processes, pp. 137-143.
- 13. Badheka V. (2014)-"Friction Stir Welding of Al Alloys Used in Space Applications." A Compendium of Research Papers-2014, SAC, A'bad, Pp 197-201.
- 14. Badheka V. (2014)-"Effect of Activating Flux on Weld Bead Morphology of P-91 Steel Bead-On-Plate Welds by Flux Assisted Tungsten Inert Gas Welding Process." Journal of Manufacturing Processes pp. 48–57,

PDPU 210/269

- 15. BadhekaV. (2015) -"Influence of tool design and process parameters on dissimilar Friction stir welding of copper to AA6061-T651 joint", Int. J Adv Manuf. Technology, Springer, online DOI 10.1007/s00170-015-7176-1.
- 16. Badheka V.(2015)-"Effect of activating fluxes on weld bead morphology of P91 steel bead-on-plate welds by flux assisted tungsten inert gas welding process", Journal of Manufacturing Processes-pp: 48 57
- 17. Badheka V.(2015)-"Effects of oxide-based flux mixtures on the dissimilar A-TIG welding of carbon steel to stainless steel", International Journal of German Welding Society, Welding and Cutting. pp. 54-60
- 18. Badheka V.(2015)-"A Review on Dissimilar Friction Stir Welding of Copper to Aluminum: Process, Properties and Variants", journal on Materials and Manufacturing Processes- Taylor and Francis, Online DOI:10.1080/10426914.2015.1025971
- 19. Badheka V.(2014) "Effects of Tilt Angle on Properties of Dissimilar Friction Stir Welding Copper to Aluminum", journal on Materials and Manufacturing Processes-Taylor and Francis. Online DOI:10.1080/10426914.2014.994754
- 20. Mudgal A.(2011) -"A small scale multi-effect distillation (MED) unit for rural micro enterprises Part I design and fabrication", International journal of desalination, Elsevier pp: 15-26.
- 21. Mudgal A.(2011) –"A small scale multi-effect distillation (MED) unit for rural micro enterprises Part II Parametric studies and performance analysis", International journal of desalination, Elsevier. pp: 27-37
- 22. Mudgal A.(2011) –"A small scale multi-effect distillation (MED) unit for rural micro enterprises Part III Heat transfer aspects", International journal of desalination, Elsevier. Pp:38-46
- 23. Mudgal A.(2010) "Biochemical Mechanism of Salt Tolerance", International Journal of Botany. Vol. 6(2)pp :136-142
- 24. Mudgal A.(2010) –"Effect of Toxic Metals on Human Health", Open Nutraceuticals Journal. pp:94-99
- 25. Mudgal A (2010) –"Heavy Metals in Plants: Phytoremediation: Plants Used to Remediate Heavy Metal Pollution", Agric. Biol. Journal North America. pp: 40-46
- 26. Savsani V.(2014)-"Comparative Study of Different Metaheuristics for the Trajectory Planning of a Robotic Arm", IEEE Systems Journal, IEEE DOI 10.1109/JSYST.2014.2342292
- 27. Savsani V.(2014)-"A multi-objective improved teaching-learning based optimization algorithm (MO-ITLBO)", Information Sciences, Elsevier. doi:10.1016/j.ins.2014.05.049 (in press)
- 28. Savsani V.(2014)-" Effect of hybridizing Biogeography-Based Optimization (BBO) technique with Artificial Immune Algorithm (AIA) and Ant Colony Optimization (ACO)", Applied Soft Computing, Elsevier. pp: 542-553
- 29. Savsani V.(2014)-"Optimization of a plate-fin heat exchanger design through an improved multi-objective teaching-learning based optimization (MO-ITLBO) algorithm", Chemical Engineering Research and Design, Elsevier.

PDPU 211/269

- 30. Savsani V.(2013) "3D affine registration using Teaching-Learning Based Optimization", 3D research, Springer .pp: 1-6
- 31. Savsani V.(2014) "Implementation of modified artificial bee colony (ABC) optimization technique for minimum cost design of welded structures", International Journal for Simulation and Multidisciplinary Design Optimization, EDP science pp:1 to 10
- 32. Savsani V.(2013) –"Multi-objective design optimization of rolling element bearings using ABC, AIA and PSO technique", International Journal of Energy Optimization and Engineering, IGI. Pp: 102-125
- 33. Savsani V.(2012) "Teaching—learning-based optimization algorithm for unconstrained and constrained real-parameter optimization problems", Engineering Optimization, Taylor and Francis. pp: 1447 -1462
- 34. Savsani V.(2012) –"HBBABC: A Hybrid Optimization Algorithm Combining Biogeography Based Optimization (BBO) and Artificial Bee Colony (ABC) Optimization for Obtaining Global Solution of Discrete Design Problems", Computational Engineering Research. pp: 85 97
- 35. Savsani V.(2012) "Teaching-learning-based optimization: A novel optimization method for continuous non-linear large scale problems", Information Sciences, Elsevier. pp :1-15.
- 36. Savsani V.(2011) "Teaching-learning-based optimization: A novel method for constrained mechanical design optimization problems", Computer aided design, Elsevier. pp: 303-315.
- 37. Savsani V.(2010) -"Optimal weight design of a gear train using particle swarm optimization and simulated annealing algorithms", Mechanism and Machine Theory, Elsevier pp:531-541.
- 38. Savsani V.(2009) "Mechanical engineering design optimization using modified harmony elements algorithm", International Journal of Design Engineering, Infer science. pp: 116-135.
- 39. Savsani V.(2009) -"Discrete optimization of a gear train using biogeography based optimization", International Journal of Design Engineering, Inder science. pp:205-223
- 40. Savsani V.(2009) "Multi-objective design optimization of rolling element bearings using a modified particle swarm optimization technique", International Journal of Design Engineering, Inder science. pp: 412 433
- 41. Savsani, V. (2014) "Comparative Study of Different Metaheuristics for the Trajectory Planning of a Robotic Arm", IEEE Systems Journal , DOI:10.1109/JSYST.2014.2342292 · 1.75 .
- 42. Savsani, V. (2014) "A multi-objective improved teaching-learning based optimization algorithm (MO-ITLBO)" Information Sciences, Elsevier, DOI:10.1016/j.asoc.2014.03.011.
- 43. Savsani, V. (2014) "Effect of hybridizing Biogeography-Based Optimization (BBO) technique with Artificial Immune Algorithm (AIA) and Ant Colony Optimization (ACO)" Applied Soft Computing, Elsevier, Vol. 21, pp: 542-553.

PDPU 212/269

- 44. Patel,R. (2013) "Transport of interacting and evaporating liquid sprays in a gas-solid riser reactor" Chemical Engineering Science, pp. 433-444.
- 45. Patel, R. (2012) "Effect of Cracking in the Feed Injection Zone on Fluid Catalytic Cracking" AICHE Journal, PP: 1226-1235.
- 46. Patel, R. (2011) "Interactions of Flow and Reaction in Fluid Catalytic Cracking Risers" AICHE Journal, pp. 3122-3131.
- 47. Patel, R. (2010) "Role of Inter-particle Collision on Solids Acceleration in Risers" Particulogy, pp. 13-18.
- 48. Patel, J.(2010) "Optical Design of Two-Stage Solar Concentrator" Journal of Advances in Developmental Research, pp. 49-52.
- 49. Patel, J.(2012) "Review of Heat Transfer Enhancement Using Twisted tape" International Journal of Advanced Engineering Research and Studies, pp. 162-164.
- 50. Patel, J.(2012) "Review of solar water heating systems" International Journal of Advanced Engineering Research and Studies, pp. 178-185.
- 51. Patel, J.(2012) "Review of solar Distillation methods" International Journal of Advanced Engineering Research and Studies, pp. 150-161.
- 52. Patel, J.(2007) "A Study of Intermittent Solid Adsorption Refrigeration using Low Grade Thermal Energy" Research Link, pp: 248-252.
- 53. Patel, V.(2014) "A multi-objective improved teaching-learning based optimization algorithm (MO-ITLBO" Information Sciences, Elsevier, In Press doi:10.1016/j.ins.2014.05.049
- 54. Patel, V.(2014) "Optimization of a plate-fin heat exchanger design through an improved multi-objective teaching-learning based optimization (MO-ITLBO) algorithm" Chemical Engineering Research and Design, Elsevier, In Press.
- 55. Patel, V.(2014) "A multi-objective improved teaching-learning based optimization algorithm (MO-ITLBO) for unconstrained and constrained optimization problems" International Journal of Industrial Engineering Computations (Growing Science),pp: 1-22
- 56. Patel, V.(2010) "Thermodynamic optimization of cross-flow plate-fin heat exchangers using a particle swarm optimization technique" International Journal of Thermal Science (Elsevier), pp: 1712-1721.
- 57. Patel, V.(2010) "Design optimization of shell and tube heat exchangers using particle swarm optimization technique" Applied Thermal Engineering (Elsevier) ,pp: 1417-1425.
- 58. Patel, V.(2011) "Optimization of mechanical draft counter flow wet cooling tower using artificial bee colony algorithm" Energy Conversion & Management (Elsevier), pp. 2611-2622.
- 59. Patel, V.(2013) "Multi-objective optimization of two stage TEC using modified Teaching-learning-based optimization algorithm" Engineering Application of Artificial Intelligences (Elsevier), pp. 430-445.
- 60. Patel, V.(2013) "Multi-objective optimization of heat exchangers using modified Teaching-learning-based optimization algorithm" Applied Mathematical Modelling (Elsevier), pp. 1147-1162.
- 61. Patel, V.(2011) "Design optimization of shell and tube heat exchangers using swarm optimization algorithms" Journal of power and Energy (IMechE, UK), pp. 619-634.

PDPU 213/269

- 62. Patel, V.(2011) "Optimization of rotary regenerator using artificial bee colony algorithm" Journal of power and Energy (IMechE, UK), pp. 1088-1098.
- 63. Patel, V.(2012) "Multi-objective optimization of combined Brayton and inverse Brayton cycle using advanced optimization algorithms" Engineering Optimization (Taylor & Francis), pp: 965-983.
- 64. Patel, V.(2012) "An improved teaching-learning-based optimization (I-TLBO) algorithm for solving unconstrained optimization problems" Scientialranica (Elsevier), pp. 710-720.
- 65. Patel, V.(2012) "An elitist teaching-learning-based optimization algorithm for solving complex constrained optimization problems" International Journal of Industrial Engineering Computations (Growing Science), pp: 535-560.
- 66. Patel, V.(2013) "Comparative performance of an elitist teaching-learning-based optimization algorithm for solving unconstrained optimization problems" International Journal of Industrial Engineering Computations (Growing Science), pp. 29-50.
- 67. Patel, V.(2010) "CSO_ABC: A hybrid optimization algorithm for design optimization of compact heat exchangers" International journal of advances in thermal sciences (Serial Publication), pp: 165-170.
- 68. Patel, V.(2010) "Optimization of water pump switching problem using a Particle swam optimization algorithm" International journal of advances in thermal sciences, (Serial Publication), pp: 77-83.
- 69. Patel, V.(2010) "Thermodynamic Optimization of Cross Flow Plate-fin Heat Exchanger using Artificial Bee Colony (ABC) Algorithm" International journal of advances in thermal sciences, (Serial Publication), pp. 149-155.
- 70. Garlapati, N. (2012) "Development of Self Lubricating Cutting Tool Material for Machining Polymer Matrix Material" IJRMET Vol. 2, IssuE 1.pp: 21-24.
- 71. Gadhvi, B. (2015) "Control Design and Analysis of Active Vehicle Suspension using Integral Pole Placement Controller" Journal of Aeronautical and Automotive Engineering (JAAE), pp. 33-37.
- 72. Gadhvi, B. (2011) "An Excavation Force Calculations And Applications: An Analytical Approach" International Journal of Engineering Science and Technology, pp. 3831 3837.
- 73. Mehta, K. (2015) "Influence of tool design and process parameters on dissimilar friction stir welding of copper to AA6061-T651 joint" International Journal Advance Manufacturing Technology, Springer, DOI 10.1007/s00170-015-7176-1.
- 74. Mehta, K. (2015) "A Review on Dissimilar Friction Stir Welding of Copper to Aluminum: Process, Properties and Variants" Materials and Manufacturing Processes-Taylor and Francis, DOI:10.1080/10426914.2015.1025971
- 75. Mehta, K. (2014) "Effects of Tilt Angle on Properties of Dissimilar Friction Stir Welding Copper to Aluminum" Materials and Manufacturing Processes- Taylor and Francis, DOI:10.1080/10426914.2014.994754.
- 76. Patel, N. (2015) "Bending of Composite plate weakened by Square hole" International Journal of Mechanical Sciences, pp. 131-139.

PDPU 214/269

- 77. Patel, N. (2014) "Moment Distribution around Circular / Elliptical / Triangular Cutouts in Infinite Symmetric Laminated Plate" Mechanics of Advance Materials and Structure, pp: 290-297.
- 78. Patel, N. (2010) "Stress Distribution around Triangular Hole in Orthotropic Plate" Nirma University Journal of Engineering and Technology, pp. 59-63.
- 79. Patel, N. (2014) "Optimum design of laminates containing an elliptical hole" International Journal of Mechanical Sciences, Volume 85 pp: 76–87.
- 80. Patel, V.(2014) "Optimization of MIG welding Process Parameter using Taguchi Techniques" International Journal of Advance Engineer ing and Research Development (IJAERD), pp: 755-760.

7. Department of Science:

- Number of papers published in peer reviewed journals/conferences (national / international):127
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): 10
- Citation Index 60 (average)
- Impact Factor range / average SCI Impact factor : (0 7.53)/ 3.92
- h-index: 7 (Average)
- V. B. Ugale, K. K. Singh, N. M. Mishra & Prashant Kuma, 2013, "Comparative study of carbon fabric reinforced and glass fabric reinforced thin sandwich panels under impact and static Loading", Journal of Composite Material, December 12, 2013, 0021998313514874, I.F. 0.936
- 2. Manoj Kumar, P. S. Mukherjee, N. M. Misra, 2013, "Statistical Hypothesis Testing Of the Increase in Wear Debris Size Parameters and the Deterioration of Oil", International Journal of Engineering Inventions, Vol 2, No. 8 (May 2013), pp 01-08. (Publisher: www.ijeijournal.com; IF: Not stated)
- 3. M. Kumar, P. S. Mukherjee, N.M.Misra, 2013, "Advancement and current status of wear debris analysis for machine condition monitoring A review", Industrial Lubrication & Tribology, Vol 65, No 1, pp 3-11. (Publisher: Emerald Publ., UK; I.F. '2012: 0.402)
- 4. V. B.Ugale, K. K. Singh, N. M. Mishra, Prashant Kumar, 2013, "Experimental studies on thin sandwich panels under impact and static loading", Journal of Reinforced Plastics and Composites, Vol 32, No. 06, pp 420-434. (Publisher: SAGE Publications, USA; I.F.'2012 0.902)
- 5. T. Choudhury and N.M.Misra, 2011, "Role of Clay as Catalyst in Friedel-Craft Alkylation", Bulletin of Materials Science, 34 (6), pp. 1273-79. (Publisher: Springer, I.F.' 2011: 0.880)

PDPU 215/269

- 6. M.K.Mishra, N.M.Misra, 2011, "Thermal Decomposition Kinetics of Labile Chromium Complex with Benzoic Acid", E-Journal of Chemistry (http://www.e-journals.net), 8(2), pp. 513-516 (I.F.: Not stated)
- 7. T. Choudhury and N.M.Misra, 2010, "Thermal stability of PMMA clay hybrids", Bulletin of Materials Science, Springer, 33 (2), 165-168. (Publisher: Springer, I.F.' 2010: 0.944)
- 8. T. Choudhury and N.M.Misra, 2010, "Adsorption of dye on clay and its thermal studies", Materials Science: An Indian Journal, 6 (4), (Publisher: Trade Sc. Inc., India, I.F.: Not stated)
- 9. T. Choudhury and N.M.Misra, 2009, "Stone apple reinforced Clay composite", Materials Science: An Indian Journal, 5 (2) (Publisher: Trade Sc. Inc., India, I.F.: Not stated)
- 10. M. K. Mishra, N. M. Misra, R. K. Singh, and R. Mishra, 2008, "Preparation, spectral and thermal decomposition studies of chromium complex with benzoic acid", J. Inst. Chemists (India), 80 (5), 129-133. (Publisher: Institution of Chemists, India, I.F.: Not stated)
- 11. Amit K. Singh, P.S. Mukherjee, N.M.Mishra, 2006, "Interrelationship among viscosity, temperature and age of lubricant", Industrial Lubrication & Tribology, Vol 58, No 1, pp. 50-55.
- 12. M. K. Mishra, N. M. Misra, R. K. Singh, and R. Mishra, 2005, "Kinetic Characterization of Chromium Complexes with Benzoic and Salicylic Acid," J.Inst.Chemists (India) Vol. 77 (6), 173-177.
- 13. S.Kumar, P.S.Mukherjee, N.M.Mishra, 2005, "Online Conditioning of Engine Oil", Industrial Lubrication & Tribology, Vol 57, No 6, 260-67
- 14. S.Kumar, N.M.Mishra, P.S.Mukherjee, 2005,"Additives depletion and engine oil condition a case study", 'Industrial Lubrication & Tribology', 2 (57), pp. 69-72.
- M. K. Mishra, R. K. Singh, N. M. Misra, and R. Mishra, 2005, "Thermal Analysis of Chromium trioxide-salicylic acid complex", J. Institution of Chemists (India), 77 (4), 99-101.
- 16. Jagdish, Md.Nabiullah, B.M.P.Pingua, B.B.Dhar, N.M.Misra, 1997, "Reaction Kinetics and Shelf life of Permitted Explosives", Theory and Practice of Energetic Materials, (Ed. FengChanggen, OuYouxiang, ZengQingxuan), Beijing Institute of Technology Press, China, pp. 6-12.
- 17. H. B. Sahu, D. C. Panigrahi, and N. M. Mishra, 2004, "Assessment of spontaneous heating susceptibility of coal seams by differential scanning calorimetry", *J. Mines, Metals & Fuels*, 7&8 (Vol. 52), July August pp. 117-121

PDPU 216/269

- 18. M. K. Mishra, N. M. Misra, R. K. Singh and R. Mishra, 2004, "Thermal Analysis of Chromium trioxide-benzoic acid complex", J. Institution of Chemists (India), Vol. 76, Part 4, pp. 105-107
- 19. M. K. Mishra, N. M. Misra, R. K. Singh and S. P. Mishra, 2001, "Surface treated polypropylene fibres for use in concrete", *J. Chemtracks* 1&2 (Vol 3), 39-44
- 20. Jagdish, Md. Nabiullah, N. M. Misra and B.M. P. Pingua, 1997, "Storage characteristics of commercial explosives", Minetech, 18(3), 55-58
- 21. B. K. Singh, N. M. Misra and N. S. Rawat, 1994, "Sorption characteristics of phenols on fly ash and impregnated fly ash", Ind. J. Env. Hlth, 36(1), 1-7
- 22. B. K. Singh, N. M. Misra and N.S.Rawat,1993, "Fly ash as adsorbent for toxic organics-a review", Minetech, 14(4), 35-37
- 23. S. N. Yadav, N. M. Misra and V. S. Ojha, 1992, "Effect of sodium oleate, diesel oil and HEC on hydration of lime", Bulletin of Pure and Applied Sciences, 11C(1-2), 143-50
- 24. N. M. Misra, R. K. Khandal and P.K.Gangopadhyay,1986, "Kerala Kaolin as a cracking catalyst", Ind. J.Tech, 24, 1646-649
- 25. Bandyopadhyay, R., Direct synthesis of 3A molecular sieves from different sources of silica and alumina, Communicated to Materials Letters.
- 27. Sunita Barot, Maaz Nawab, Bandyopadhyay, R., Biofuel synthesis by Jatropha oil cracking using solid acid catalyst, International Journal of Research and Scientific Innovation, 1 (VII) (2014) 302.
- 28. Bandyopadhyay, R., Bandyopadhyay, M., Kubota, Y. and Sugi Y., Synthesis of AlPO₄ molecular sieves with AFI and AEL structures by dry-gel conversion method and catalytic application of their SAPO counterparts on isopropylation of biphenyl. Journal of Porous Materials 9 (2002) 83-95.
- 29. Bandyopadhyay, R., Kubota, Y. and Sugi Y., Synthesis of alumino, boro, and gallosilicate zeolites by steam-assisted conversion method and their characterization. In: Impact of zeolites and other porous materials on the new technologies at the beginning of the new millennium, Eds. Aiello, R., Giordano, G. and Testa, F. (Elsevier Science B.V.), Studies in Surface Science and Catalysis 142 (2002) 15-22.
- 30. Bandyopadhyay, M., Bandyopadhyay, R., Tawada, S., Kubota, Y. and Sugi Y., Catalytic performance of silicoaluminophosphate (SAPO) molecular sieves in the isopropylation of biphenyl. *Applied Catalysis* 225 (2002) 51-62.
- 31. Bandyopadhyay, R., Ahedi, R. K., Kubota, Y., Ogawa, M., Goto, Y., Fukushima, Y. and Sugi, Y., Synthesis of high-silica [Al]-SSZ-31 by steam-assisted conversion method and its catalytic performance in the isopropylation of biphenyl. *Journal of Materials Chemistry* 11 (2001) 1869-1874.

PDPU 217/269

- 32. Bandyopadhyay, R., Kubota, Y. Nakata, S. and Sugi Y., Utilization of dry-gel conversion method for the synthesis of gallosilicate zeolites beta, ZSM-5 and ZSM-12. In: Zeolites and Mesoporous Materials at the Dawn of the 21st Century, Eds. Galarneau, A., Di Renzo, F., Fajula, F. and Vedrine, J. (Elsevier Science B.V.), *Studies in Surface Science and Catalysis* 135 (2001) 331.
- 33. Bandyopadhyay, M., Bandyopadhyay, R., Kubota, Y. and Sugi Y. Synthesis of aluminophosphate molecular sieves by dry-gel conversion method. *Chemistry Letters* (2000) 1024-1025.
- 34. Bandyopadhyay, R., Kubota, Y., Ogawa, M., Sugimoto, N., Fukushima, Y. and Sugi Y., Synthesis of [Al]-SSZ-31 by dry-gel conversion (DGC) method. *Chemistry Letters* (2000) 300-301.
- 35. Bandyopadhyay, R., Kubota, Y., Sugimoto, N., Fukushima, Y. and Sugi Y., Synthesis of borosilicate zeolites by the dry gel conversion method and their characterization. *Microporous and Mesoporous Materials* 32 (1999) 81-91.
- 36. Bandyopadhyay, R., Kubota, Y. and Sugi Y., Synthesis of borosilicate zeolites by dry gel conversion (DGC) method. *Chemistry Letters* (1998) 813-814.
- 37. Bandyopadhyay, R., Kubota, Y., Tawada, S. and Sugi Y., Direct hydrothermal synthesis of B-SSZ-31 from silica and sodium borate using 1,3,3,6,6-pentamethyl-6-azoniabicyclo[3.2.1]octane hydroxide as structure-directing agent. *Catalysis Letters* 50 (1998) 153-158.
- 38. Bandyopadhyay, R., Sugi, Y., Kubota, Y. and Rao, B.S., Transalkylation reaction An alternative route to produce industrially important intermediates such as cymene. *Catalysis Today* 44 (1998) 245-252.
- 39. Singh, P.S., Shaikh, R.A., Bandyopadhyay, R. and Rao,, B.S. Alkylation of meta-diisopropylbenzene with isopropanol as a test reaction for large pore zeolites. In: Recent Advances in Basic and Applied Aspects of Industrial Catalysis, Eds. Prasada Rao, T.S.R. and Murali Dhar, G. (Elsevier Science B.V.), *Studies in Surface Science and Catalysis* 113 (1998) 473-478.
- 40. Shaikh, R.A., Singh, P.S., Bandyopadhyay, R., Kavedia, C.V., Mirajkar, S.P. and Rao, B.S., Aniline methylation over molecular sieves. In: Recent Advances in Basic and Applied Aspects of Industrial Catalysis, Eds. Prasada Rao, T.S.R. and Murali Dhar, G. (Elsevier Science B.V.), *Studies in Surface Science and Catalysis* 113 (1998) 637-642.
- 41. Bandyopadhyay, R., Singh, P.S. and Rao, B.S., Formation of N-methylaniline by transalkylation of aniline with N,N-dimethylaniline over zeolite Beta. *Applied Catalysis* 155 (1997) 27-39.
- 42. Bandyopadhyay, R., Singh, P.S. and Rao, B.S., Transalkylation of toluene with diisopropylbenzene over REY zeolite. *Reaction Kinetics and Catalysis Letters* 60 (1997) 171-177.
- 43. Bandyopadhyay, R., Singh, P.S. and Shaikh, R.A., Transalkylation of cumene with toluene over zeolite Beta. *Applied Catalysis* 135 (1996) 249-259.

PDPU 218/269

- 44. Singh, P.S., Bandyopadhyay, R. and Rao, B.S., Aniline methylation over AEL type molecular sieves. *Applied Catalysis* 136 (1996)177-189.
- 45. Singh, P.S., Bandyopadhyay, R., Hegde, S.G. and Rao, B.S., Vapor phase Beckmann rearrangement of cyclohexanone oxime over SAPO-11 molecular sieve. *Applied Catalysis* 136 (1996) 249-263.
- 46. Singh, P.S., Bandyopadhyay, R. and Rao, B.S., Characterization of SAPO-11 synthesized conventionally and in the presence of fluoride ions. *Journal of Chemical Society, Faraday Transaction* 92 (1996) 2017-2026.
- 47. Singh, P.S., Bandyopadhyay, R. and Rao, B.S., Spectroscopic studies of vanadium incorporated SAPO-11. *Journal of Molecular Catalysis* 104 (1995) 103-110.
- 48. Singh, P.S., Shaikh, R.A., Bandyopadhyay, R. and Rao, B.S., Synthesis of CoVPI-5 with bifunctional catalytic activity. *Journal of Chemical Society, Chemical Communication* (1995) 2255-2256.
- 49. Singh, P.S., Bandyopadhyay, R., Shaikh, R.A. and Rao, B.S., Selective acidic, oxidative and reductive reactions over ALPO-11 and Si or metal substituted ALPO-11. In: Zeolites: A Refined Tool for Designing Catalytic Sites, Eds. Bonneviot, L. and Kaliaguine, S. (Elsevier Science B.V.), *Studies in Surface Science and Catalysis* 97 (1995) 343-350.
- 50. Shaikh, R.A., Bandyopadhyay, R., Singh, P.S. and Rao, B.S., Aluminium gradient and catalytic properties of ZSM-5 zeolites. In: *Catalysis: Modern Trends*, Eds. Gupta, N.M. and Chakrabarty, D.K. (Narosa Publishing House, New Delhi), (1995) 91-94.
- 51. Shaikh, R.A., Bandyopadhyay, R., Singh, P.S. and Rao, B.S., Coke induced shape selectivity over silynated ZSM-5. In: *Catalysis: Present and Future*, Eds. Rao, P.K. and Beniwal, R.S. (Wiley Eastern Ltd., New Delhi), (1995)31-36.
- 52. Joshi, P.N., Bandyopadhyay, R., Awate, S.V., Shiralkar, V.P. and Rao B.S., Influence of physico-chemical parameters on n-hexane dehydrocyclization over Pt/LTL zeolites. *Reaction Kinetics and Catalysis Letters* 53 (1994) 231-236.
- 53. Anirban Das, Yoshio Takahashi, Asuka Tanaki (2015) "Application of X-ray Absorption Fine Structure (XAFS) spectroscopy to speciation of Lead (Pb) contaminants in plastics", Bulletin of chemical Society of Japan, 88, 341-345.
- 54. Tripathy G R, Das Anirban (2014) "Modeling geochemical data for source apportionment: Comparison of least square regression and inversion approaches", Journal of geochemical exploration, 144, 144-153.
- 55. Das Anirban, Chung Chuan-Hsiung, You Chen-Feng, Shen Min-Lin (2012) "Application of an improved ion exchange technique for the measurement of δ^{34} S values from microgram quantities of sulfur by MC-ICPMS", *Journal of Analytical Atomic Spectrometry*, 27 (12), 2088-2093

PDPU 219/269

- 56. Das Anirban, Chung Chuan-Hsiung, You Chen-Feng (2012). "Disproportionately high rates of sulfide oxidation from river basins of Taiwan orogeny", *Geophysical Research Letters*, 39, L12404, doi:10.1029/2012GL051549
- 57. Das Anirban, Pawar N. J., and Veizer Jan. "Sources of sulfur in Deccan Trap rivers: A reconnaissance isotope study". (Applied Geochemistry, 26, 301-307.
- 58. Kashiwabara T., Mitsunobu S., Das Anirban, Itai T., Tanimizu M. and Takahashi Yoshio (2008). "Oxidation states of Antimony and Arsenic in marine ferromanganese oxides related to their fractionation in oxic marine environment", *Chemistry Letters*, 37, 756-757.
- 59. Das Anirban, and Krishnaswami S. (2007) "Elemental geochemistry of river sediments from the Deccan Traps, India: Implications to sources of elements and their mobility during basaltwater interaction", *Chemical Geology*, 242, 232-254.
- 60. Das Anirban, and Krishnaswami S. (2006b) "Barium in Deccan Basalt Rivers: Its abundance. Relative mobility and flux". *Aquatic Geochemistry*, 12, 221-238.
 - 61. Das Anirban, Krishnaswami S., and Anil Kumar (2006a) "Sr and ⁸⁷Sr/⁸⁶Sr in rivers draining the Deccan Traps (India): Implications to weathering, Sr fluxes and the Marine ⁸⁷Sr/⁸⁶Sr record around K/T. *Geochem., Geophys., Geosyst*"., 7, Q06014, doi: 10.1029/2005gc001081.
 - 62. Das Anirban, Krishnaswami S., Sarin M. M., and Pande K. (2005a) "Chemical weathering of the Krishna basin and Western Ghats of the Deccan Traps, India: Rates of basalt weathering and their controls", *Geochim. Cosmochim. Acta* 69, 2067-2084
 - 63. Das Anirban, Krishnaswami S., and Bhattacharya S. K. (2005b) "Carbon isotope ratio of dissolved inorganic carbon (DIC) in rivers draining the Deccan Traps, India: Sources of DIC and their magnitudes", *Earth and Planet. Sci. Lett.*, 236, 419-429.
 - 64. Shukla P. N., Bhandari N., Das Anirban, Shukla A. D., and Ray J. S. (2001) "High Iridium concentration of alkaline rocks of Deccan and implications to K/T boundary", *Proc. Indian Acad. Sci. (Earth Planet. Sci.)* 110, 103-110.
 - 65. Rohit Srivastava, R. Ramesh, Naveen Gandhi, R. A. Jani and Ashutosh K. Singh (2015), "Monsoon onset signal in the stable oxygen and hydrogen isotope ratios of monsoon vapor", *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2015.02.062, pp. 117-124. (Impact Factor: 3.79)
 - 66. Rohit Srivastava, R. Ramesh and T. Narayana Rao (2015), "Stable isotopic differences between summer and winter monsoon rains over southern India", Journal of Atmospheric Chemistry, doi: DOI 10.1007/s10874-015-9297-1. (Impact Factor: 1.63)
 - 67. Rohit Srivastava, R. Ramesh and T. Narayana Rao (2012), "Relationship between stable oxygen isotope ratio and drop size distribution in tropical rainfall", *Journal of Atmospheric Chemistry*, doi: 10.1007/s10874-012-9227-4. (Impact Factor: 1.63)

PDPU 220/269

- 68. Naveen Gandhi, Rengaswami Ramesh, Rohit Srivastava, M.S. Sheshshayee, R. M. Dwivedi and Mini Raman (2010), Nitrogen uptake rates during spring in the NE Arabian Sea, *International Journal of Oceanography*, Vol. 2010, doi:10.1155/2010/127493.
- 69. Rohit Srivastava, R. Ramesh, R. A. Jani, N. Anilkumar and M. Sudhakar (2010), Stable oxygen, hydrogen isotope ratios and salinity variations of the surface Southern Indian Ocean waters, *Current Science*, Vol. 99, No. 10, 1395 pp. (Impact Factor: 0.83)
- 70. R. A. Jani, M. G. yadava, R. Srivastava and R. Ramesh (2009), "Stable isotopic signatures of rainfall events in the Western India", 11th ISMAS-TRICON, Hyderabad, India, 24th 28th Nov 2009. ISBN 978-81-904442-2-4. 311 pp.
- 71. R. Srivastava, R. Ramesh and R. A. Jani (2009), "Stable isotope studies of Atmospheric Water Vapour and Cloud", 11th ISMAS-TRICON, Hyderabad, India, 24th 28th Nov 2009. ISBN 978-81-904442-2-4. 530 pp.
- 72. T. Narayana Rao, B. Radhakrishna, Rohit Srivastava, T. Mohana Satyanarayana, D. Narayana Rao and R. Ramesh (2008), Inferring microphysical processes occurring in mesoscale convective systems from radar measurements and isotopic analysis, *Geophys. Res. Lett.*, *Vol. 35*, L09813, doi: 10.1029/2008GL033495. (Impact Factor: 4.46)
- 73. Rohit Srivastava, R. Ramesh, Satya Prakash, N. Anilkumar and M. Sudhakar, (2007), Spatial variation of oxygen isotopes and salinity in the Southern Indian Ocean, *Geophys. Res. Lett.*, *Vol. 34*, doi: 10.1029/2007GL031790. (Impact Factor: 4.46)
- 74. Satyam Shinde, Sanjay Gupta, Sanjeev Gupta and Prafulla Jha, *Lattice Dynamical Study of Yttrium monochalcogenides*, Computational Material Science (92), 69-75, (2014).
- 75. Nikita Rathod, Sanjeev Gupta, Satyam Shinde and P K Jha, Ab-initio first principles total energy and lattice dynamical calculations of PdC, Computational material Science, 70, 196-200 (2013).
- 76. Nikita Rathod, Sanjeev Gupta, Satyam Shinde and P K Jha, First-principles investigations of Thermophysical properties of cubic ZrC under high pressure, International Journal of Thermophysics, Vol-34, Issue 10, 2019-2016, 2013.
- 77. Satyam Shinde, Ankur Pandya and P.K. Jha, *Pressure induced stiffening and softening in Phosphide*, Indian Journal of Pure and Applied Physics, Vol.-48, August 2010, Page 543-549,2010.
- 78. Ankur Pandya, Satyam Shinde, P.K.Jha, *Hot electron scattering Rates via LO- Phonon emission in Two Dimensional GaAs1-xNx*, Indian Journal of Pure and Applied Physics, Vol-47,523-526, 2009.
- 79. Satyam Shinde and P K Jha, *Lattice dynamics of ferromagnetic superconductor UGe2*, Pramana-Journal of Physics, Vol-75, No.5, pp1-5, 2008.
- 80. Satyam Shinde, Ankur Pandya and P.K.Jha, Mechanical, Elastic and Anharmonic properties of Zn1-xCrxTe (0≤X≤1) diluted magnetic semiconductor, Indian Journal of Pure and Applied Physics, 44-148, 2006.
- 81. Mina Talati, Satyam Shinde, P. K. Jha, High Pressure Phase transition and anharmonic properties of Zn1-xMxSe (M=Cd, Fe, Mn) Diluted Magnetic Semiconductors, Physica *B*, 348, 235-241, 2004.

PDPU 221/269

- 82. Satyam Shinde, M.Talati, S.P.Sanyal and P.K.Jha, Theoretical Study of transverse acoustic phonons of GaSb at high pressure, Pramana, 63, 425-429.
- 83. Do aziridines require Lewis acids for cleavage with ionic nucleophiles? Alakesh Bisai, Ghanshyam Pandey, Manoj K. Pandey and Vinod K. Singh Tetrahedron Lett. 2003, 44 (31), 5839-5841. Elsevier, Science Direct. Impact factor-2.53
- 84. Regioselective ring opening of Aziridines with activated DMF complexes: a facile synthesis of β-haloamines, Manoj K. Pandey, Alakesh Bisai and Vinod K. Singh , *Tetrahedron Lett.* 2004, *45*, 9661-9663., Elsevier, Science Direct. Impact factor-2.53
- 85. Imino-ene reaction of N-tosyl arylaldimines with α-methylstyrene: application in synthesis of important amines, Manoj K. Pandey, Alakesh Bisai, Ankur Pandey and Vinod K. Singh, *Tetrahedron Lett.* 2005, 46, 5039-5041., Elsevier, Science Direct. Impact factor-2.53
- 86. Enantioselective turnover in glyoxylate-ene reactions catalyzed by chiral copper complexes, Manoj K. Pandey, Alakesh Bisai and Vinod K. Singh, *Tetrahedron Lett.* 2006, 47, 897-900, Elsevier, Science Direct. Impact factor-2.53
- 87. Ionic Liquids as Media for Nucleophilic Ring Opening Fluorination of Aziridines Shun Noritake, Norio Shibata, Hiroyuki Kawai, Manoj Kumar Pandey, Shuichi Nakamura, Takeshi Toru Heterocyclic. Commun, 2009, 15(2), 105-113. International Journal Heterocyclic chemistry. Impact factor-1.0
- 88. Novel chitosan/gold-MPA nanocomposite for sequence-specific oligonucleotide detection Shunsheng Caoa, Rajeev Mishra, Srikanth Pillac, Swapnil Tripathi, Manoj K. Pandey, Gopit Shahf, Ajay K. Mishra, Mani Prabaharanh, Shivani B. Mishra, Jin Xina, R.R. Pandey, Weiwei Wua, Avinash C. Pandey, Ashutosh Tiwari Carbohydrate Polymers 82 (2010) 189–194; Impact factor- 3.942
- 89. Influence of new fullerene derivatives with fluorocarbon substituent on performance of polymer solar cells" Ichiko Yamada, Manoj Pandey, Yasuhiko Hayashia*, Norio Shibata, Tesuo Soga, and Takeshi Toru; Physics Procedia; 14 (2011), 192–197.
- 90. Temperature induced structural, electrical and optical changes in solution processed perovskite material: Application in photovoltaics; Brijesh Tripathi, Parth Bhatt, Chandra Kanth P., Pankaj Yadav, Bhakti Desai, Manoj Kumar Pandey, Manoj Kumar; Solar Energy Materials & Solar Cells, 132(2015)615–62; Impact factor-5.34.
- 91. Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, Manoj Kumar, Investigating the charge transport kinetics in poly-crystalline silicon solar cells for low-concentration illumination by impedance spectroscopy, *Solar Energy Materials and Solar Cells* 133 (2015) 105-112. DOI: 10.1016/j.solmat.2014.10.031.
- 92. Brijesh Tripathi, Parth Bhatt, Chandra Kanth P, Pankaj Yadav, Bhakti Desai, Manoj Kumar Pandey, Manoj Kumar, Temperature Induced Structural, Electrical and Optical Changes in Solution Processed Perovskite Material: Application in photovoltaics, *Solar Energy Materials & Solar Cells* 132 (2015) 615–622.DOI: 10.1016/j.solmat.2014.10.017.
- 93. Brijesh Tripathi, Pankaj Yadav, Kavita Pandey, Pooja Kanade, Manjeet Kumar, Manoj Kumar, Investigating the role of graphene in the photovoltaic performance improvement of dye-sensitized solar cell, *Materials Science and Engineering B* 190 (2014) 111–118. DOI: 10.1016/j.mseb.2014.09.016.
- 94. Pooja Kanade, Pankaj Yadav, Manoj Kumar, Brijesh Tripathi*, Plasmon induced photon manipulation by Ag nanoparticle coupled graphene thin-film: Light trapping for photovoltaics, *Plasmonics* 10 (2015) 157-164 DOI: 10.1007/s11468-014-9790-4.
- 95. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Charge Transfer and Recombination Kinetics in Dye-Sensitized Solar Cell using Static and Dynamic Electrical

PDPU 222/269

- Characterization Techniques, *Solar Energy* 108 (2014) 107-116. DOI 10.1016/j.solener.2014.06.037. ISSN: 0038-092X.
- 96. Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, Manoj Kumar, Recombination kinetics in silicon solar cell under low-concentration: Electro-analytical characterization of space-charge and quasi-neutral regions, *Phys. Chem. Chem. Phys.* 16 (2014) 15469-15476 DOI:10.1039/C4CP01115E. ISSN: 1463-9076.
- 97. Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, Manoj Kumar, Effect of varying concentration and temperature on steady and dynamic parameters of low concentration photovoltaic energy system, *International Journal of Electrical Power & Energy Systems* 61 (2014) 101-110. DOI: 10.1016/j.ijepes.2014.03.016. ISSN: 0142-0615.
- 98. Brijesh Tripathi, Pankaj Yadav, Siddharth Rathod, Manoj Kumar, Performance analysis and comparison of two silicon material based photovoltaic technologies under actual climatic conditions in Western India, *Energy Conversion and Management* 80 (2014) 97-102. DOI: 10.1016/j.enconman.2014.01.013. ISSN: 0196-8904.
- 99. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Indrajit Mukhopadhyay, Plasmon Enhanced Light Trapping to Improve Efficiency of Dye-Sensitized Solar Cell, *Journal of Nanoscience and Nanotechnology* (JNN), 14 (2014) 2624-2629. ISSN: 1533-4880 (Print); EISSN: 1533-4899 (Online).
- 100. Pankaj Yadav, Brijesh Tripathi, Manoj Kumar, Exergy, Energy, and Dynamic Parameter Analyses of Indigenously Developed Low-Concentration Photovoltaic System, International Journal of Photoenergy, Volume 2013, Article ID 929235 (2013). ISSN: 1110-662X.
- 101. Pankaj Yadav, Brijesh Tripathi, Siddharth Rathod, Manoj Kumar, Real-time analysis of low-concentration photovoltaic systems: A review towards development of sustainable energy technology, Renewable and Sustainable Energy Reviews 28 (2013) 812-823. ISSN: 1364-0321.
- 102. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Effect of varying Illumination and Temperature on Steady State and Dynamic Parameters of Dye-Sensitized Solar Cell using AC Impedance Modeling, *International Journal of Photoenergy*, Volume 2013, Article ID 646407 (2013). ISSN: 1110-662X.
- 103. Brijesh Tripathi, Manoj Kumar, Effect of nanorod diameter on the short-circuit current density of Dye-sensitized solar cell, *J. Comput. Theor. Nanosci.* 10 (2013) 2361-2365. ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online).
- 104. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Plasmon-Enhanced Light Trapping to Improve Efficiency of TiO₂ Nanorod-Based Dye-Sensitized Solar Cell, *Plasmonics* 8 (2013) 1501-1507; DOI:10.1007/s11468-013-9564-4. [ISSN: 1557-1955 (print version) ISSN: 1557-1963 (electronic version)].
- 105. Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, Manoj Kumar, Estimation of steady state and dynamic parameters of low concentration photovoltaic system, *Solar Energy Materials and Solar Cells* 112 (2013) 65-72. [ISSN: 0927-0248].
- 106. Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, Manoj Kumar, Effect of temperature and concentration on commercial silicon module based low-concentration photovoltaic system, *Journal of Renewable and Sustainable Energy* 5 (2013) 013113 [ISSN: 1941-7012].
- 107. Powder XRD and Dielectric study of Gel grown Calcium Pyrophosphate crystals.Bharat Parekh, Ketan Parikh, & Mihir Joshi, AIP conference Proc. 1536, 1304 (2013).

PDPU 223/269

- 108. Growth and Characterization of L-tryprophan doped KDP crystals K. D. Parikh, D.J. Dave, B. B. Parekh & M. J. Joshi, AIP conference Proc. 1536, 837 (2013).
- 109. FT-IR and Thermal Studies of iron-nickel-manganese ternary levo-tartrate crystals S. J. Joshi, K. P. Tank, B. B. Parekh and M. J. Joshi, Journal of Thermal Analysis and Calorimetry, 10, Sept, 1-6, 2012.
- 110. Growth and characterization of L-alanine doped KDP crystals ,K. D. Parikh, D. J. Dave, B. B. Parekh, and M. J. Joshi, Cryst. Res. Technol. 45, 603 (2010).
- 111. Growth and Spectroscopic, Thermal, Dielectric and SHG Studies of L- Threonine Doped KDP Crystals, D. J. Dave; K. D. Parikh; B.B. Parekh; M. J. Joshi, Journal of optoelectronics and Advanced Materials, Vol. 11, No. 5, May, 28 2009.
- 112. In vitro Growth and Inhibition Studies of Monosodium Urate Monohydrate Crystals by Different Herbal Extracts, Bharat B. Parekh, Sonal R. Vasant, 2Kashmira P. Tank, Ashwinikumar Raut, Ashok D.B. Vaidya and Mihir J. Joshi, American Journal of Infectious Diseases 5 (3): 232-237, 2009.
- 113. Aspergillus niger assisted crystal growth of calcium tartrate: an alternative method to grow crystals, ,B. B. Parekh, V. S. Joshi, V. Pawar, V. S. Thaker, and M. J. Joshi, Cryst. Res. Technol. 44, No.1 (2009) 31 35.
- 114. Characterization of inhibitive study of gel-grown hydroxyapatte crystals at physiological temperature. ,Bharat Parekh, Mihir Joshi, Ashok Vaidya,Journal of Crystal Growth, 310 (2008) 1749-1753. (Proceeding of ICCG-15).
- 115. Thermal, FT-IR, and dielectric studies of gel grown sodium oxalate single crystals. B.B. Parekh, P.M. Vyas, S. R. Vasant and M. J. Joshi, Bull. Mater Sci., 31(2) (2008), 143-147.
- 116. Growth and Characterization of Gel Grown Calcium Pyrophosphate Tetrahydrate Crystals Bharat B. Parekh and Mihir J. Joshi, Crystal Research and Technology, 42(2) (2007) 127.
- 117. Growth and Characterization of 4-(2-hydroxyphenylamino)-pent-3-en-2-one Single Crystals, Bharat B. Parekh, Dushyant H. Purohit, P. Sagayaraj, H. S. Joshi and M.J. Joshi Crystal Research and Technology, 42(4) (2007) 407.
- 118. Modification of gel technique for micro-crystals of bio-materials: In situ growth and dissolution studies, Bharat B. Parekh, M. J. Joshi, A. D. B. Vaidya, Current Science, 93(3), (2007), 373-378.
- 119. Thermal, FT-IR and SHG efficiency studies of L-arginine doped KDP crystals K. D. Parikh, D. J. Dave, B. B. Parekh and M. J. Joshi, Bulletin of Materials Science, 30 (2) (2007) 105-112.
- 120. Dielectric study of Cu2+ doped calcium tartrate tetrahydrate crystals ,S. R. Suthar, S. J. Joshi, B. B. Parekh & M. J. Joshi ,Indian Journal of Pure and Applied Physics 45 (2007) 48-51.

PDPU 224/269

- 121. Analysis of N-H...O and O-H...O Hydrogen bonding in 4-(2-hydroxy-phenylamino)-pent-3-en-2-one, Rajnikant, Dinesh, Kamni, Purohit D.H., Joshi H.S., Parekh Bharat, Joshi M. J. and Kanwal Priyanka, Heterocyclic Compound Vol.12 (2006) 129.
- 122. Growth and Characterization of Gel Grown Pure and Mixed Iron-Manganese Levo-Tartrate Crystals, S. J. Joshi, B. B. Parekh, K. D. Vohra and M. J. Joshi Bulletin of Material Science 29(3) (2006) 307-312.
- 123. Investigation of Various Growth Parameters, FTIR and Thermal Studies of Gel Grown Pure and Mixed Levo-tartrates of Calcium and Strontium ,Ketan D. Parikh, Bharat B. Parekh, Dipak Dave and Mihir J. Joshi,Indian Journal Physics, 80 (7) (2006) 719-726.
- 124. Inhibition of the Growth of Urinary Calcium Hydrogen Phosphate Dihydrate Crystals with Aqueous Extracts of Tribulus terrestris and Bergenia ligulata.,Vimal S. Joshi, Bharat B. Parekh and Mihir J. Joshi, Ashok D. B. Vaidya,Urological Research, 33 (2005) 80.
- 125. The Inhibition of Growth of Urinary type Calcium Hydrogen Phosphate Dihydrate Crystals by Tartaric acid and Tamarind ,K.C. Joseph, Bharat B. Parekh and M.J. Joshi Current Science, 85 (2005) 1232.
- 126. Herbal Extracts of Tribulus terrestris and Bergenia ligulata Inhibit Growth of Calcium Oxalate Monohydrate Crystals in vitro, V.S. Joshi, B. B. Parekh, M. J. Joshi and A.B. Vaidya, Journal of Crystal Growth, 275(1-2), (2005), e-1403, 1408, (Proceeding of ICCG-14, Grenoble, France, 9-13th August 2004).
- 127. Dielectric Studies of Gel Grown Zinc Tartrate Crystals, R.M. Dabhi, Bharat B. Parekh and M.J. Joshi, Indian J. of Physics, 79(5) (2005) 503.

8.Department of Solar Energy

- Number of papers published in peer reviewed journals /conferences (national / international): 63
- Monographs: 01
- Chapters in Books: 01
- Books edited: 00
- Books with ISBN with details of publishers: 01
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)
- Citation Index range / average: 139-893
- SNIP 5-95/12
- Impact Factor range / average: 1.05-6.75/2.5
- h-index: 5
- 1. Elucidating the Role of Copper as Redox Additive and Dopant on the Performance of PANI based Supercapacitor, Kavita Pandey, Pankaj Yadav and Indrajit Mukhopadhyay*, PCCP 17, 878 (2015).
- 2. Schottky junction solar cells based on non-stoichiometric PbOx films, D B Patel and I Mukhopadhyay*, J. Phys. D: Appl. Phys. 48, 025102 (2015).

PDPU 225/269

- 3. In situ growth of CdTe nanostructures from a novel electrodeposition bath: tuning of electrical properties and reuse of ionic liquid, Khushbu R. Chauhan, Dipal B. Patel and Indrajit Mukhopadhyay*, New J. Chem. 39, 1979-1985(2015).
- 4. Diode characteristics of few-layer graphene/p-Si fabricated directly by chemical vapor deposition, Sanjay K. Behura*, Qiaoqin Yang, Akira Hirose, Sasmita Nayak, Omkar Jani, Indrajit Mukhopadhyay, J. Nanosci. Nanotech. 15, 1-6 (2015).
- 5. Impedance analysis of inherent redox active ionic liquid based photoelectrochemical cells: Charge transfer mechanism in the presence of additional redox couple, Dipal B. Patel, Khushbu R. Chauhan and Indrajit Mukhopadhyay*, ChemPhysChem (DOI: 10.1002/cphc.201402837).
- 6. Interplay between Enhanced Charge Storage and Charge Transfer Mechanism in Cu doped PANI: The Role of Surface Morphology, Kavita Pandey, Pankaj Yadav and Indrajit Mukhopadhyay*, J. Electroanal. Chem. (DOI: 10.1016/j.jelechem.2015.03.025).
- 7. Metal/InGaN Schottky Junction Solar Cells—An Analytical Approach, Pramila Mahala, S.K. Behura, ChennaDhanavantri, Abhijit Ray and Omkar Jani*, Appl. Phys. A118, 1459-1468(2015).
- 8. Junction and back contact properties of spray deposited M/SnS/In₂S₃/SnO₂:F/Glass (M = Cu, Graphite) devices: A consideration to improve photovoltaic performance,Malkeshkumar Patel and Abhijit Ray*, J. Electron. Mater.44, 558-567(2015).
- 9. Molar optimization of spray pyrolyzedSnS thin films for photoelectrochemical applications, Malkeshkumar Patel, Indrajit Mukhopadhyayand Abhijit Ray*, J. Alloys & Comp. 619, 458–463 (2015).
- 10. GaN/InxGa1-xN/GaN P-I-N Solar Cell with Indium Compositional Grading, Pramila Mahala, Sanjay K. Behura, Abhijit Ray, ChennaDhanavantri and Omkar Jani*, Opt. Quantum Electron. 47, 1117-1126(2015).
- 11. Parth Bhatt, Kavita Pandey, Pankaj Yadav, Brijesh Tripathi, Chandra Kanth P., Manoj Kumar Pandey, Manoj Kumar, Investigating the Charge Carrier Transport within the Hole-Transport Material Free Perovskite Solar Cell Processed in Ambient Air, *Solar Energy Materials and Solar Cells* 140 (2015) 320–327.
- 12. Pankaj Yadav, Kavita Pandey, Brijesh Tripathi, Manoj Kumar, Investigation of interface limited charge extraction and recombination in polycrystalline silicon solar cell: Using DC and AC characterization techniques, *Solar Energy* 116 (2015) 293-302.
- 13. Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, Manoj Kumar, Investigating the charge transport kinetics in poly-crystalline silicon solar cells for low-concentration illumination by impedance spectroscopy, *Solar Energy Materials and Solar Cells* 133 (2015) 105-112.
- 14. Brijesh Tripathi, Parth Bhatt, Chandra Kanth P, Pankaj Yadav, Bhakti Desai, Manoj Kumar Pandey, Manoj Kumar, Temperature Induced Structural, Electrical and Optical Changes in Solution Processed Perovskite Material: Application in photovoltaics, *Solar Energy Materials & Solar Cells* 132 (2015) 615–622

PDPU 226/269

- 15. Magnetron sputtered Cu doped sprayed SnS thin film for enhanced photoelectrochemical and heterojunction solar cells, Malkeshkumar Pateland Abhijit Ray*, RSC Advances 4 39343(2014).
- 16. Malkeshkumar Patel and Abhijit Ray*, Evaluation of back contact in SnS solar cells by impedance spectroscopy, ACS Appl. Mater. Interface 6 (2014) 10099-10106.
- 17. Brijesh Tripathi, Pankaj Yadav, Kavita Pandey, Pooja Kanade, Manjeet Kumar, Manoj Kumar, Investigating the role of graphene in the photovoltaic performance improvement of dye-sensitized solar cell, *Materials Science and Engineering B* 190 (2014) 111–118.
- 18. Pooja Kanade, Pankaj Yadav, Manoj Kumar, Brijesh Tripathi, Plasmon induced photon manipulation by Ag nanoparticle coupled graphene thin-film: Light trapping for photovoltaics, *Plasmonics* 10 (2015) 157-164.
- 19. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Charge Transfer and Recombination Kinetics in Dye-Sensitized Solar Cell using Static and Dynamic Electrical Characterization Techniques, *Solar Energy* 108 (2014) 107-116. DOI: 10.1016/j.solener.2014.06.037. ISSN: 0038-092X.
- 20. Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, Manoj Kumar, Recombination kinetics in silicon solar cell under low-concentration: Electro-analytical characterization of space-charge and quasi-neutral regions, *Phys. Chem. Chem. Phys.* 16 (2014) 15469-15476
- 21. Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, Manoj Kumar, Effect of varying concentration and temperature on steady and dynamic parameters of low concentration photovoltaic energy system, *International Journal of Electrical Power & Energy Systems* 61 (2014) 101-110.
- 22. Brijesh Tripathi, Pankaj Yadav, Siddharth Rathod, Manoj Kumar, Performance analysis and comparison of two silicon material based photovoltaic technologies under actual climatic conditions in Western India, *Energy Conversion and Management* 80 (2014) 97-102.
- 23. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Indrajit Mukhopadhyay, Plasmon Enhanced Light Trapping to Improve Efficiency of Dye-Sensitized Solar Cell, *Journal of Nanoscience and Nanotechnology* (JNN), 14 (2014) 2624-2629.
- 24. Controlled growth of polyaniline fractals on HOPG through potentiodynamic electropolymerization, Dhrubajyoti Bhattacharjya and Indrajit Mukhopadhyay*, Langmuir 28, 5893–5899, 2012.
- 25. Theoretical simulation of photovoltaic response of graphene-on-semiconductors, Sanjay Kumar Behura, Pramila Mahala, Abhijit Ray, Indrajit Mukhopadhyay*, Omkar Jani* Applied Physics A: Materials Science & Processing 111(4), 1159-1163, (2013).
- 26. Study of the junction and carrier lifetime properties of a spray-deposited CZTS thin-film solar cell, Malkesh kumar Patel, Indrajit Mukhopadhyay and Abhijit Ray, Semicond. Sci. Technol. 28, 055001, 2013.

PDPU 227/269

- 27. Vertically-oriented few-layer graphene as an electron field-emitter, Sanjay K. Behura¹, ², Indrajit Mukhopadhyay³, Akira Hirose⁴, Qiaoqin Yang^{*,1}, and Omkar Jani², Physica Status Solidi A: Applications and Materials Science 210(9), 1817-1821, (2013). (0.8)
- 28. Plasmon Enhanced Light Trapping to Improve Efficiency of Dye-Sensitized Solar Cell, Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Indrajit Mukhopadhyay* J. Nanosci. Nanotech. 14(3) 2624-2629 (2014).
- 29. Fabrication of bi-layer graphene and theoretical simulation for its possible application in thin film solar cell, Sanjay K. Behura^a, Pramila Mahala^b, Sasmita Nayak^a, Qiaoqin Yang^c, Indrajit Mukhopadhyay^{b,*}, Omkar Jani^a, J. Nanosci. Nanotech. 14(4) 2027-2032 (2014).
- 30. Transparent conductive MWCNTs-polymer composite for electrode applications, Sasmita Nayak^{1, 2}, Sanjay Kumar Behura², Sarama Bhattacharjee^{1,*},Bimal P. Singh¹, Omkar Jani², Indrajit Mukhopadhyay^{3,*}, J. Nanosci. Nanotech. 14(4) 2816-2822 (2014).
- 31. Influence of the magnitude and direction of electric field on the transport and growth property of deposited polyaniline films, Kavita Pandey, Pankaj Jadav and Indrajit Mukhopadhyay, J. Solid State Electrochemistry 18 (2), 453-463 (2014). (2.2)
- 32. Junction characteristics of chemically-derived graphene/p-Si heterojunction solar cell, Sanjay K Behura, Sasmita Nayak, Indrajit Mukhopadhyay and Omkar Jani, Carbon (2014), 67, 766-774. (5.6)
- 33. Preparation of CdTe thin film by Electrodeposition in butyl methyl imidazolium bath at 80 °C, K.R. Chauhan, Ian J. Burgess, Gap Soo Chang *, I. Mukhopadhyay *, J. Electroanal. Chem. 713, 70-76 (2014). (IF 2.7)
- 34. Elucidating different mass flow direction induced Polyaniline Ionic Liquid interface properties: insight gained from DC Voltammetry and Impedance Spectroscopy, KavitaPandey, PankajYadav, Indrajit Mukhopadhyay*, J. Phys. Chem. B, 118, 3235-3242, 2014.(IF 3.6)
- 35. Effect of electrode's geometric shape, thickness and porosity on the performance of dye sensitized solar cell, Dipal Patel, Khushbu Chauhan and Indrajit Mukhopadhyay* International Journal of Latest Technology in Engineering, Management and Applied Science, vol.3(1), 8-19, 2014.
- 36. Photoelectrochemical studies of nonstoichiometric nanostructured PbO_x using $Fe(CN)_6^{-4/-3}$ as an active electrolyte in ionic liquid, Dipal Patel and Indrajit Mukhopadhyay* International Journal of Advance Research in Science and Technology, 3(1), 44-50 (2014). (IF-2.7).
- 37. On the electrical and interface properties of nanostructured CdTe Schottky diodes electrodeposited from an ionic liquid medium, Khushbu R. Chauhan and Indrajit Mukhopadhyay*, J. Appl. Phys. 115, 224506 (2014). (IF-2.7)
- 38. Revealing the charge transport mechanism of a photoelectrochemical cell: Analysis using A.C. voltage perturbation, Dipal B. Patel, K. R. Chauhan and Indrajit Mukhopadhyay*, Phys. Chem. Chem. Phys., Phys. Chem. Chem. Phys., 16, 20900, 2014 (IF-4.198)

PDPU 228/269

- 39. Unrevealing the photoelectrochemical properties using ionic liquids: Cognizance of partially reversible redox activity, Dipal B. Patel, K. R. Chauhan and Indrajit Mukhopadhyay*, Phys. Chem. Chem. Phys., Phys. Chem. Chem. Phys. 16, 22375 (2014). (IF-4.198)
- 40. Influence of current collector electrode on the capacitive performance of electrodeposited PANI: insight gained from frequency and time domain analysis, Kavita Pandey, Pankaj Yadav and Indrajit Mukhopadhyay*, RSC Adv., 4, 53740 (2014).
- 41. A. K. Yadav, V. Mehra, Abhijit Ray, A. Markana and M. Lokhande, *Paralleled DC Boost Converters with Feedback Control using PSO Optimization Technique for Photovoltaic Module Application*, Int. J. Comp. Appl. 84 (2013) 12-18.
- 42. Pramila Mahala, Abhijit Ray, Omkar Jani and Chenna Dhanavantri, *Theoretical study on the effect of graded In_yGa_{1-y}N layer on p-GaN/In_yGa_{1-y}N/n-GaN p-i-n Solar Cell, Phys. Status Solidi A 12 (2013) 2656-2661.*
- 43. A. K. Yadav, V. Mehra, Abhijit Ray, M. Lokhande, *Operation of Paralleled DC-DC Converters Taking into Account Cable Resistances for Load Sharing Applications*, Int. J. Adv. in Engg. & Technol., 6 (2013) 2134-2144.
- 44. M. Patel, I. Mukhopadhyay and Abhijit Ray, *Annealing influence over structural and optical properties of sprayed SnS thin films*, Optical Materials 35 (2013) 1693–1699.
- 45. P. Mahala, S. K. Behura, A. S. Kushwaha, Abhijit Ray, O. Jani and C. Dhanavantri, *A study on the 2D simulation of Pt/ InGaN/ GaN/ metal Schottky junction solar cell*, Semicond. Sci. & Technol. 28 (2013) 055012.
- 46. M. Patel, I. Mukhopadhyay and Abhijit Ray, *Study of junction and carrier lifetime properties of spray deposited CZTS thin-film solar cell*, Semicond. Sci. & Technol. 28 (2013) 055001.
- 47. S.K. Behura, P. Mahala, I. Mukhopadhyay, Abhijit Ray and O. Jani, *Theoretical simulation of photovoltaic response of Graphene-on-Semiconductors*, Applied Physics A, 111 (2013) 1159.
- 48. B. Tripathi, M. Patel, Abhijit Ray and M. Kumar, *Influence of optical properties of ZnO thin-films deposited by spray pyrolysis and RF magnetron sputtering on the output performance of silicon solar cell*, IOP Conf. Ser.: Mater. Sci. Eng. 43 (2013) 012002.
- 49. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Theoretical upper limit of short-circuit current density of TiO₂ nanorod based dye-sensitized solar cell, *Results in Physics* 3 (2013) 182-186.
- 50. Pankaj Yadav, Brijesh Tripathi, Manoj Kumar, Exergy, Energy, and Dynamic Parameter Analyses of Indigenously Developed Low-Concentration Photovoltaic System, *International Journal of Photoenergy*, Volume 2013, Article ID 929235 (2013). ISSN: 1110-662X.
- 51. Pankaj Yadav, Brijesh Tripathi, Siddharth Rathod, Manoj Kumar, Real-time analysis of low-concentration photovoltaic systems: A review towards development of sustainable

PDPU 229/269

- energy technology, *Renewable and Sustainable Energy Reviews* 28 (2013) 812-823. ISSN: 1364-0321.
- 52. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Effect of varying Illumination and Temperature on Steady State and Dynamic Parameters of Dye-Sensitized Solar Cell using AC Impedance Modeling, *International Journal of Photoenergy*, Volume 2013, Article ID 646407 (2013). ISSN: 1110-662X
- 53. Brijesh Tripathi*, Manoj Kumar, Application of Metal Nano-particle Embedded Dielectric Thin-Film to Improve Efficiency of dye-Sensitized Solar Cell, Journal of Nano Energy and Power Research, 2 (2013) 48-53. ISSN: 2153-6740
- 54. Brijesh Tripathi, Manoj Kumar, Effect of nanorod diameter on the short-circuit current density of Dye-sensitized solar cell, J. Comput. Theor. Nanosci. 10 (2013) 2361-2365. ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online)
- 55. Brijesh Tripathi, Pankaj Yadav, Manoj Kumar, Plasmon-Enhanced Light Trapping to Improve Efficiency of TiO₂ Nanorod-Based Dye-Sensitized Solar Cell, Plasmonics 8 (2013) 1501-1507; DOI:10.1007/s11468-013-9564-4. [ISSN: 1557-1955 (print version) ISSN: 1557-1963 (electronic version)]
- 56. Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, Manoj Kumar, Estimation of steady state and dynamic parameters of low concentration photovoltaic system, Solar Energy Materials and Solar Cells 112 (2013) 65-72. [ISSN: 0927-0248]
- 57. Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, Manoj Kumar, Effect of temperature and concentration on commercial silicon module based low-concentration photovoltaic system, Journal of Renewable and Sustainable Energy 5 (2013) 013113
- 58. M. Patel, I. Mukhopadhyay and Abhijit Ray, Structural, electrical and optical properties of spray deposited CZTS thin films in non-equilibrium growth condition, Jour. Phys. D: Appl. Phys. 45 (2012) 445103-10pp.
- 59. M. Patel and Abhijit Ray; Enhancement of output performance of Cu₂ZnSnS₄ thin film solar cells A one dimensional numerical optimization approach and comparison to experiments Physica B: Cond. Mat. 407 (2012) 4391-4397.
- 60. O. Jani, P. Mahala, S. K. Behura, Abhijit Ray and C. Dhanavantri, Effect of Indium concentration on Metal/n-InxGa1-xN Schottky Junction Solar Cell under low level injection; AIP Conf. Proc. 1451 (2012) 85-87.
- 61. M. Patel, Abhijit Ray, B. Tripathi and M. Kumar, A study of the applicability of ZnO thinfilms as anti-reflection coating on Cu2ZnSnS4 thin-films solar cell, AIP Conf. Proc. 1451 (2012) 97-99.
- 62. Hari S. Sahoo and Abhijit Ray; Simulation of IPV effect in In-doped c-Si with optimized Indium concentration and layer thickness, Physica B: Cond. Mat., 406 (2011) 4221-4226.
- 63. S. Behura, P. Mahala and Abhijit Ray; A model on the effect of injection levels over the open-circuit voltage of Schottky barrier solar cells, J. Electron Device, 10 (2011) pp. 471-482.

PDPU 230/269

23. Details of patents and income generated

Patent Applications filed by Dr Vishvesh J Badheka

- 1) Patent application of welding torch designed for Narrow Gap Gas Metal Arc Welding has been filed at Indian Patent Office, New Delhi. Application number 629/Del/2007 dated 22/03/2007.
- 2) Patent application of "Narrow Gap Gas Metal Arc Welding Torch Oscillation Device" has been filed at Indian Patent Office, New Delhi. Application no. 2797/Del/2008-11/12/2008.

24. Areas of consultancy and income generated:

Details are given in Vol 1- 3.5.1 (Annexure 3.5.1)

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad

Sr.No.	Faculty Name	laboratories / institutions	Year
1	Dr. Jatin Patel	University of Saskatchewan, Canada	2014
2	Dr. Manas Bhui	University of Saskatchewan, Canada	2014
3	Dr. Vishvesh Bhadeka	University of Saskatchewan, Canada	2014
4	Mr. Vipin Shukla	Texas A&M University, USA	2014
5	Dr. Rajesh Patel	Kangan Institute, Australia	2013
6	Dr. Pratik Shah	Kangan Institute, Australia	2013
		Workshop on World class university,	
7	Mr. T. P. Singh	Malaysia	2014
8	Dr.Anurag Mudgal	Royal Academy of Engineering, UK under Newton Fund scheme (reference NRCP/1415/189) Duration: 19-05-2015	2015
		Chubu Research Foundation (JSPS)	
9	Dr. Abhijit Ray	Foreign Researcher Fellowship, Japan	2015
10.	Mr. Apoorva Dave	University of Sasketchewan	2015

PDPU 231/269

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Sr No.	Editorial boards of national and international journals	Faculty Name
1	Institution of Civil Engineers	Dr.H.B.Raghavendra
2	International Journal of Civil Engineering Research	Dr. Debasis Sarkar
3	Editorial Board Member of SESI Journal, India.	Dr. Indrajit Mukhopadhyay
4	Reviewer, Journal of Urban Climate, Elsevier	Dr. Anurag Kandya
5	Reviewer, Journal of Engineering Structure, Elsevier	Dr. H.R. Dhananjaya

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

Faculty of School of Technology, have been attending number of Faculty Development/Orientation Programs. Details are given below.

Department of Chemical Engineering:

Dr. Pravin Kodgire:

- attended 67th Annual Session of Indian Institute of Chemical Engineers, 'CHEMCON-2014' an international conference on " Chemical Engineering-Emerging Dimensions and Challenges Ahead" (INDO-JAPAN session) (December 27- 30, 2014), Dr SSB University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh, India
- One day Workshop on "Enhancing Drug Solubility and Bioavailability Using Nanotechnology" on Friday, 10th October 2014, CII house, Ahmedabad
- 3rd International conference on advances in nanotechnology and nanomaterials -ICANN 2013' to be held on 1-3 Dec. 2013 at Indian Institute of Technology, Guwahati, Assam
- participated 66th Annual Session of Indian Institute of Chemical Engineers, 'CHEMCON-2013' an international conference on "Innovative Approaches For Food Security and Health Care For a Better Tomorrow" (INDO-US and INDO-Canadian sessions) (December 27- 30, 2013), ICT, Mumbai, Maharashtra, India

PDPU 232/269

- participated ISTE approved short term training program (STTP) workshop on 'Laboratory Development: Orientation, Design Methodology and Protocols' (February 16 - 20, 2013) held at Chemical Engineering Department of M S University of Baroda, Vadodara, Gujarat, India
- participated ISTE approved Workshop on "Outcomes Based Engineering Education for Enhanced Employability" 9/2/2013 at PDPU campus
- participated 65th Annual Session of Indian Institute of Chemical Engineers, 'CHEMCON-2012' an international conference on 'Sustainable Technologies for Energy and Environment in Process Industries' (December 27- 30, 2012) held at NIT, Jalandhar, Punjab, India
- attended 5 day summer school organized by Petrotech Society on 'Petroleum Refining and Petrochemicals', 4th 8th June 2012, Gurgaon, Haryana, India

Dr. Dash, S. K:

- Post Combustion CO2 Capture with Activated MDEA: Experimental and Thermodynamic Modeling of Phase Equilibrium Using Aspen Plus. CHEMCON-2011, MSRIT, Bangalore, Dec, 2011.
- Absorption into Activated AMP Solvent Used for Post Combustion CO2 Capture from Coal Based Power Plants: Experimental investigation and modeling. CHEMCON-2011, MSRIT, Bangalore, Dec, 2011.
- Post-Combustion CO2-Capture: Thermodynamic study of CO2 in Piperazine Activated Concentrated Aqueous 2-Amino-2-Methyl-1-propanol. Poster at GLS10 (10th International Conference on Gas-Liquid and Gas-Liquid-Solid Reactor Engineering, www.gls10.org), Universidade do Minho, Braga, Portugal. 26-29 June, 2011
- Absorption of Carbon Dioxide in Piperazine Activated Concentrated Aqueous 2-Amino-2-methyl-1-propanol Solvent. 10th International Conference on Gas-Liquid and Gas-Liquid-Solid Reactor Engineering, 26-29 June, 2011, Universidade do Minho, Portugal.
- An Electrolyte NRTL Model for the VLE of CO2 in 2-Amino-2-Methyl-1-Propanol Activated with Piperazine. CHEMCON-2010, Annamalai University, Tamil Nadu, Dec, 2010.

Department of Civil Engineering:

Dr.Debashish Sircar:

 Attended a conference & presented a paper Application of Structural Equation Modeling for ProjectRisk Time Cost Behaviour and Optimization for Underground Corridor Metro Rail"
 Proceedings of National Seminar on Role

PDPU 233/269

of Management Science in Decision Making, Technology, Nagpur,2009. Institute of Management

• Attended a conference & presented a paper on Evaluating Crane Safety Factors for Construction of Underground Metro Rail Project" International Conference on Safety, IIT Gandhinagar, [Dec. 2014]

Department of Electrical Engineering:

Dr. Vivek Pandya:

- Attended Workshop on grid operation and Monitoring and Equipment health assessment on June 3, 2014 at IIT Bombay, Powai, Mumbai.
- Attended Seminar on "Smart Grid Development in Gujarat" at the event 'Glorious Gujarat-Vision 2020' at Sabarmati Riverfront, Ahmedabad on Sunday, January 12, 2014.
- Attended 2 days Regional workshop on "Smart Grids" organized by GETCO at PDPU on 7th and 8th February, 2014.

Dr. Jitendra Jamnani:

- Attended 2 days Regional workshop on "Smart Grids" organized by GETCO at PDPU on 7th and 8th February, 2014.
- Attended training programme on ISO Certification of University during February 11 to 13, 2014.
- Attended Seminar on "Smart Grid Development in Gujarat" at the event 'Glorious Gujarat-Vision 2020' at Sabarmati Riverfront, Ahmedabad on Sunday, January 12, 2014.
- Attended Workshop on grid operation and Monitoring and Equipment health assessment on June 3, 2014 at IIT Bombay, Powai, Mumbai.

Mr. Anil Marakana:

- Participated actively in workshop on Outcome based Engineering Education for Enhanced Employability, organized by ISTE chapter, PDPU, Gandhinagar on 09th Feb. 2013.
- Participated in two day seminar on "Awareness on green energy and conservation" organized by Pandit Deendayal Petroleum University on 17th and 18th Sept. 2013.
- Participated in one day workshop on "Energy savings using solar appliances" organized by Pandit Deendayal Petroleum University on 25th Oct. 2013.
- Attended International workshop/conference on Renewable energy at Istanbul,

PDPU 234/269

Turkey, on 05th Nov to 10th Nov. 2012 organized by International Finance Corporation (IFC), World Bank group.

Dr. Pratik Shah:

- Participated actively in workshop on Outcome based Engineering Education for Enhanced Employability, organized by ISTE chapter, PDPU, Gandhinagar on 09th Feb. 2013.
- Attended two day workshop on MSP430 DSP Micro-controller (21-22 August, 2014) at PDPU

Mr. Astik Dhandhia:

• Attended 5 Days STTP on "Advanced Engineering Optimization Through Intelligent Techniques" at SVNIT Surat during 7-11 January 2013.

Mr. Siddharth Joshi:

- Attended STTP on Renewable energy on Feb. 14th to 18th 2011 at BVM Engineering College, V.V. nagar.
- Attended STTP at Nirma University on Condition Monitoring of Electrical machines on Dec. 26th to Dec. 31st, 2011 in Electrical Engineering Dept.
- Attended a FDP on "Power System Protection", at Birla Vishwakarma Mahavidhyalaya during 17th to 22nd June, 2013.
- Attended a TEQIP sponsored one week short term training program on "Modeling and Optimization Techniques for Engineering Applications (MOTEA)" from 19-23 May 2014 at SVNIT, Surat.

Mr. Nitin Prajapati:

 Attended One Week ISTE Coordinators Workshop on Control Systems at IIT Kharagpur During 15-19 September 2014.

Mr. Vipin Shukla:

- Attended Siemens Mechatronic Systems Certification Program 3rd Aug 2015 to 7th Aug 2015, IITRAM, MANINAGAR. Gujarat.
- Attended 13th ESARDA Course on Nuclear Safeguard and Non-proliferation, Chulalongkorn university, Bangkok, Thailand, 6th October 2014 to 10th October 2014.
- Attended Summer Certificate In Nuclear Security offered by Texas A&M University, College Station, Texas, 26th May 2014 to 16th July 2014.

PDPU 235/269

- Attended Institute of Nuclear Materials Management 54th Annual Meeting 2013,
 Palm Springs, California USA, 13th July 2013 to 19th July 2013.
- Attended Introduction to Techniques of Measurement for Nuclear Security program at Texas A&M University, College Station, Texas, USA 20th July 2013 to 1st Aug 2013.
- Attended "Nuclear Security Summer Technical Training" at Sandia National Laboratory, Albuquerque, New Mexico, USA 1st Aug 2013 to 7th Aug 2013.
- Attended workshop on "Severe Accident Analysis and Management, 1st Feb 2013 to 3rd Feb 2013, IIT Kanpur.
- Attended Workshop on "Computational Methods in Engineering using MATLAB" IIT Gandhinagar, 21st December 2012 to 23th December 2012.

Mr. Gaurav Khare:

 Attended 01 day workshop on "Intellectual Property Rights Awareness" conducted by Technology Business Incubator of NIT-Calicut at NIT Calicut on 5th October 2013.

Mr. Ravi Botta:

- Participated in "Application of Power Electronics to Renewable Energy Systems and Micro Grids" workshop conducted by Dept. of EEE, NIT Trichy during Feb-2015.
- Participated in "Off-shore Wind Farms & Smart Grids" workshop conducted by Dept. of EEE, NIT Trichy during April-2015.
- Participated in "Programmable Logic controllers and Variable speed drives" workshop conducted by Dept. of EEE, NIT Trichy during July-2014.
- Participated in short-term course on "FACTS Controllers" conducted by Dept. of EE, NIT Trichy during july-2014.

Mr. Elijha Toppo:

 Attended a 5 days STTP at SVNIT on Implementation of Power Electronic Systems from 1st to 5th July, 2013

Mr. K Satya Raja Sekhar:

• Attended 6 days STTP on "Power Electronic Systems" At Svnit

Mr.Bandopant Pawar:

- Attended 2 days workshop on "PLC and Automation" organized by WCE on 11th and 12th January, 2013.
- Attended 2 days workshop on "Smart Grid and renewable Energy sources" organized by CPRI on 09th and 10th January, 2015.

PDPU 236/269

Department of Industrial Engineering:

Dr.M.B.Kiran:

- Attended Six sigma Green belt Training (2015).
- Attended Lean Six sigma Black belt Training (2015).
- Attended MINITAB training (2015).
- Attended Lean Management Training (2015).

Dr.Abhishek Kumar:

- Attended workshop on advances in welding, cutting & automation organized by Rajeev machine tools at AMA Management Center, Ahmedabad on May 16th and 17th 2014.
- Attended International Conference on Friction Based process at IISc, Bangalore from 3-5th Sept. 2014.
- Attended International Institute of Welding- National Welding Seminar at Tatanagar from 22nd 24th Jan. 2015.

Dr.D.M.Parikh:

- Techniques of Project Appraisal;5th 17th August 1985;Management Development Institute (MDI) New Delhi
- Computed Model For Feasibility Analysis & Reporting (COMFAR);1st -5th November 1993;Entrepreneurship Development Institute of India (EDI) Ahmedabad
- Computer orientation;22nd December 1994;Datapro Information Technology Ahmedabad
- Merchant Banking;30th January to 11th February 1995;Bankers Training College, Reserve Bank of India (RBI), Bombay
- Equipment leasing;19th to 22th June 1995;Jawaharlal Nehru Institute For Development Banking (JNIDB), Hyderabad
- Windows and MS office;28th August to 9th November 1995;Softrak Technology Exports Ltd, Ahmedabad
- Technical Analysis;4th to 8th November 1996;UTI Institute Of Capital Market, New Bombay
- Infrastructure Development and Finance;16th to 21st February 1998;Indian Institute of Management, Ahmedabad
- Diploma In PPM Using MSP; August 2008; CADD center project management, Ahmedabad
- Intelligent Manufacturing with Focus on Precision Engineering;28th April 2012; By Center For Entrepreneurship Development, Ahmedabad
- Spreadsheet Application in financial Management;26th-28th April 2012;NIM, Nirma University, Ahmedabad
- Training of Trainers (ToT) on "MSME Umbrella Program";1st-8th July 2012

PDPU 237/269

- At National Institute for Micro, small & Medium Enterprise (NI-MSME), Hyderabad
- Intelligence Manufacturing & SME;11th 13th January 2013;INDEXTb, Gandhinagar.
- National Workshop on "Development of policy Framework for Innovation ,Student Entrepreneurship & IPR;21st & 22nd November 2014;Gujarat Technological University, Ahmedabad
- Business Ethics for Good Corporate Governance & Sustainability;6th 7th Feb 2015, Gujarat Technological University, Ahmedabad

Department of Mechanical Engineering:

Prof. Surendra Singh Kachhwaha:

• Proceedings of International Conference on Chemical Industry (ICCI 2014); Bharti Publication, New Delhi, 2014 and Won the Best paper presentation award.

Dr Vishvesh J. Badheka:

- International Conference on Friction Based Processes, 3-5 Sept 2014, IISc, Bangalore
- International welding Congress IC 2014 at Delhi from 9th April to 11th April 14

Dr. Jatin Patel:

• International Congress on Renewable Energy (ICORE)

Mr. Vivek Patel:

• International conference on friction stir based processes (ICFP) at IISc Bangalore

Mr. Kush Mehta:

• International conference on friction based processes at IISc, Bangalore.

Department of Solar Energy:

Prof. Indrajit Mukhopadhyay:

- 1000 Teachers Training Programme, ISTE, NMEICT, IIT-Bombay/December 2011.
- 1000 Teachers Training Programme in Analog Electronics, ISTE, NMEICT, IIT-Kharagpur/4-14 June 2013.
- Workshop on BIPV in PDPU

PDPU 238/269

28. Student projects

• Percentage of students who have done in-house projects including interdepartmental projects

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount (Rs.)
Fabrication and Electrical Characterization of the CH3NH3PbI3 Based Perovskite Solar Cells	Mr. Kaushik Natarajan	Dr. Manoj Kumar	1/28/2015	1,10,000.00
Development and decoration of nanoparticles for Surface Plasmon mediated enhancement of efficiency in a:Si Solar cells	Mr. Ankit Bhatt	Dr. Abhjit Ray	1/28/2015	70,000.00
Deposition of Graphene monolayer through Chemical Vapour Deposition at Atmospheric Pressure	Ms. Chandni Shah	Dr. Indrajit Mukhopadhyay	1/28/2015	2,10,000.00
Reuse of Materials in Geotechnical Applications	Mr. Shubham Mishra Mr. Akash Gupta Mr. Arijit Samanta Mr. Nipun Verma	Dr. Trudeep N. Dave	1/28/2015	65,000.00
Investigations of tool design on dissimilar copper-aluminium materials by energy efficient FSW technology	Mr. Razin Desai Mr. Prashant Meena	Mr. Kush Mehta	12/26/2014	1,00,000.00
self healing OF Engineered Cementitious composites (ECC) under natural environment with different percentage of fibers	Mr. Ajay Gelot Mr. Jaykrishna Patel Mr. Aniket Raj Mr. Bhaumik Merchant	Ms. Niragi Dave	1/28/2015	19,000.00

PDPU 239/269

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount (Rs.)
Design and Development of Compressed Air Engine as an alternative to Fossil Fuel Engine	Mr. Raj Gopalachari Mr. Kunal Kotak	Dr. Vimal Savsani	12/26/2014	46,000.00
Participation in Shell Eco Marathon Asia 2015	Mr. Saurabh Shukla Mr. Keyur Suthar	Mr. Vatsal Shah	1/28/2015	1,00,000.00
Experimental Analysis of Parallel Electric Hybrid Powertrain with Electronic Clutch for Gasoline Engine.	Mr. Chaitanya Dave Mr. Deep Vaghani Mr. Harsh Desai	Dr.Vimal Savsani	3/31/2015	95,500.00
Design and Development of UNI-WHEEL VEHICLE	Mr. Subir Thakur Mr. Darshit Patel Ms .Chandni Bhuva Mr. Shloka Shah	Dr. Vimal Savsani	1/28/2015	50,000.00
Experimental Study of Rankine Cycle with Scroll Expander	Mr. Rahi ShahMr. Darshit Parmar	Dr. Surendra Singh Kachhwaha	12/26/2014	1,00,000.00
Optimization of Electrical discharge machining (EDM) drilling parameters using neural – genetic approach for techno – commercial evaluation.	Mr. Aditya Singh Mr. Setu Dave Mr. Saurabh Srivastava Mr. Nimesh Thakkar	Mr. Jay Vora	1/28/2015	70,000.00
Design & Development of a Solar-electric hybrid drivetrain and prototype on a carbon fibre monocoque chassis platform	Mr. Vedant	Mr. Bhargav Gadhavi	1/28/2015	75,000.00
BIPV based DC Nanogrid for Façade(Building) Integration	Mr. Alpesh Desai	Dr. Indrajit.Mukhopad hyay	1/28/2015	90000.00

PDPU 240/269

Project Name	Student Investigator(s)	Project Guide	Sanction Date	Sanction Amount (Rs.)
Study of Light Confinement Properties of Metal Nanoparticle trapped on Graphene Thin-Films for Solar Photovoltaic Applications	Ms. Pooja Kanade	Dr. Manoj Kumar	12/24/2013	60,000.00
Production of biodiesel by using Colsolvents	Mr. Javishk Shah Ms. Nikita Koka Mr. Happy Patel	Dr. Himanshu Choksi	2/7/2014	2,20,000.00
Synthesis and characterization of Charge carrier transporting materials for enhancement of energy harvesting and their applications in devices	Mr. Parth Patel Ms. Maitrayee Trivedi	Dr. Manoj Pandey	2/7/2014	1,95,000.00
An approach towards green synthesis by Designing Novel synthetic methodologies using copper and Iron based catalysts for cross dehydrogenative coupling by CH activation	Ms. Jessica Patel Mr. Vipul Patel	Dr. Manoj Pandey	2/7/2014	2,25,000
Development of a small scale Solar Vapour Absorption Refrigeration System and analyzing its feasibility for commercial use	Mr. Animesh Mathur Mr. Swapnil Choudary Mr. Anup Sharma Mr. Prashant Arya Suprabha Sharda	Dr. Jatin Patel	1/29/2014	1,80,000.00
Design and Development of Small Scale Solar Forced Convection Solar Drying System and Analysing it's feasibility for Commercial Purpose	Mr. Karan Prajapati Mr. Ruchik Thaker	Dr. Jatin Patel	12/26/2014	1,00,000.00

[•] percentage of students doing projects in collaboration with other universities / industry / institutes

Nil

PDPU 241/269

29. Awards / recognitions received at the national and international level byFaculty

Faculty of SoT have received number of Awards and recognitions as narrated below.

Chemical Engineering

- Sukanta Kumar Dash received best paper presentation in advanced separation process at CHEMCON-2013 at institute of chemical Technology (ICT), Mumbai-December, 2013
- Abhishek Kumar received the following awards:
 - Oral presentation entitled "E-waste Generation, Environmental Effects and Recycling" has been selected for the "Young Scientist Award" for the best presentation in the 3rd Bihar Science Conference.
 - Paper submitted to ECMA Global Learning conference on challenges and strategies to meet off road emission norms, 13-14 Nov, Radisson Blu New Delhi, was selected for 2nd prize.
- Himanshu Choksi received 1st prize in the paper presentation competition in the ICCI -2014

Mechanical Engineering:

Dr Vishvesh J Badheka, Associate Professor received following awards for his research constirbutions

- Dr Vikram Sarabhai Award for the year 2009-10 for 'Friction Stir Welding of Aluminum and its Alloys'; from Gujarat Council on Science and Technology (GUJCOST), Government of Gujarat; The award consists of cash price of Rs One lack, a memento and a citation, declared on 7/3/2011
- Best oral presentation award out of 62 presented papers at National Welding Seminar, held at Mumbai, in Feb 2009. Title of the paper "Microstructral Investigation of weld metal in low carbon steel welded by NG-GMAW"
- Panthaki Memorial Award 2010 for best research paper on Non ferrous material, at National Welding Seminar held at Vizag, Dec 2010. Title of the paper "Development of welding procedures for joining of Al-Mg-Si alloy and Al-Mg alloy for marine application.

National and international recognition received by the faculty from reputed professional bodies and agencies:

Dr Vishvesh J Badheka qualified International Welding Engineer, conducted by International Institute of welding.

PDPU 242/269

Department of Science:

Dr. Manoj K. Pandey:

- "Young Scientist Award" under Fast track scheme from Department of Science & Technology (DST, Registration No. 199/2010) New Delhi for his project entitled "Synthesis of Sumanene and Corannulene derivative and its application in various fields of chemistry". Total Cost of the Project is Rs 18, 80,000.00 for three years.
- VBL Postdoctoral research fellowship 2009-2010, NIT, Nagoya, Japan.

Dr. Anirban Das:

Awards:

- Postdoctoral Fellow (2011-2012); Department of Earth Sciences, National Cheng Kung University, Tainan (funded by National Science Council, Taiwan).
- Research Fellow (Academic Level B) (2010-2011), School of Earth and Environmental Sciences, James Cook University, Australia.(On lien from PDPU)

Recognition:

- Das Anirban, Chung Chuan-Hsiung, You Chen-Feng, Shen Min-Lin (2012) Application of an improved ion exchange technique for the measurement of δ34S values from microgram quantities of sulfur by MC-ICPMS, Journal of Analytical Atomic Spectrometry, 27 (12), 2088-2093 (This article was invited to compete for a cover page by the Journal, which is published by Royal Chemical society, London)
- Das Anirban, Chung Chuan-Hsiung, You Chen-Feng (2012). Disproportionately high rates of sulfide oxidation from river basins of Taiwan orogeny, Geophysical Research Letters, 39, L12404, doi: 10.1029/2012GL051549
 (This article was selected as "Research Spotlight" by the Journal, which is published by American geophysical Union, USA)

• Doctoral / post doctoral fellows

SoT students have received the following awards:

Sr.No	Name of the scholar	Award received	Year
1	Sanjay Kumar Behura, Dept. of Solar Energy	Commonwealth Fellowship, University of Saskatchewan	2011
2	Khusbu Chauhan, Dept. of Solar Energy	Commonwealth Fellowship, University of Saskatchewan	2012
3	Sanjay Kumar Behura, Dept. of Solar Energy	Post Doctoral Fellowship, University of Illinois at Chicago	2014

PDPU 243/269

Self Evaluation Report – Volume II					
4	Malkeshkumar Patel, Dept.	Post Doctoral Fellowship,	2015		
	of Solar Energy	Incheon University, Korea			

Students

Nil

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Department of Chemical Engineering:

National

- Organized a one day seminar on "Awareness on Biodiesel Production and Applications" at School Of Technology, 2013. (Funding source: PDPU).
- Organized a one day workshop "Computational Fluid Dynamics: Fundamentals and Engineering Applications",2014. (Funding source: SAL-PDPU)
- Organized a one day workshop on Piping and pipeline engineering: fundamentals and applications, 2014. (Funding source: PDPU).
- International conference on chemical Industries', (a part of pre vibrant 2015 event in association with GOG and GCA.,2014. (Funding source: Reliance Industries Ltd, GACL,NEPL, UPL,GNFC, IndexTB, Green Enviro, GERMI).

Department of Civil Engineering

National

- Hydrological data management in Gujarat: Present state and trends, 2013.
- River Restoring in India, 2013
- Energy saving through effective use of green building materials and technology, 2013.
- application of GIS in Civil Engineering, 2013.

Department of Electrical Engineering

National

- Induction Program for Electrical Sub Inspector at PDPU in 2013. (Funded by CEICED,GUJARAT).
- Coordinated and conducted a Scilab workshop at PDPU and supported by IIT Bombay, funded by National Mission on Education through ICT, MHRD, Government of India, in 2013.(Funded by National Mission on Education through ICT, MHRD, Government of India, in 2013).
- Organized two days workshop on Linear algebra, Data Acquisition and Computer based Control using a graphical programming Language LabVIEW, in collaboration with IEEE Gujarat Section at PDPU, in 2012.(Funded by PDPU –IEEE GUJARAT)

PDPU 244/269

 Organized workshop on Latex by IEEE student branch, PDPU in 2015.(Funded by PDPU –IEEE GUJARAT)

Department of Industrial Engineering

National

- Total Quality Management in 2014.(Funded by PDPU).
- Quality Management System (Module C), 2014.(Funded by PDPU).
- Flawless process adapted by the popular Mumbai Dabbawallas in delivering more than 2,00,000 Tiffin to different places on a daily basis, in 2014. (Funded by PDPU).
- Quality management (Module –C) in 2015.(Funded by PDPU).
- Minitab workshop in 2015.(Funded by PDPU).
- Statistical Process Control, in 2015.(Funded by PDPU).
- 5S Understanding and Implementation, in 2015.(Funded by PDPU).

Department of Mathematics and Computer Science

National

- National Seminar on Applications of Mathematics in Engineering, 2014. (Funded by PDPU).
- Elementary Techniques using MATLAB, 2014.(Funded by PDPU).

Department of Mechanical Engineering:

National

- Two day workshop on CREO software, in 2014 under MECHINERZO club of the department.
- One day workshop in Industrial applications of evaporative cooling, in 2015 under MECHINERZO club of the department.
- Two Day workshop Pressure Vessel design as per ASME" in 2015 under ASME chapter of the department.
- One day workshop on Energy Conservation Awareness in 2015 under ISHRE chapter of the department.
- One day workshop on Research Opportunities and Wind resource assessment in 2015, under MECHINERZO club of the department.
- Two Day workshop Finite Element Analysis in 2015, under MECHINERZO club of the department.
- One day workshop on: Computer Aided Thermal System Analysis in 2015, under MECHINERZO club of the department.
- One day workshop opportunities and trends in applied energy" in 2015, under MECHINERZO club of the department.

PDPU 245/269

 One day workshop Fundamentals of Vehicle Dynamics in 2015, under ASME chapter of the department.

Department of Solar Energy:

Department of Solar Energy organized -

- International Congress in Renewable Energy, 2012.
- Workshop on Smart Grid Development, 2012.
- ADB-Japan New and Renewable Energy Workshop: Smart Community Technologies, 2012.

31. Code of ethics for research followed by the departments

Code of ethics for research is important because, it helps in defining research objectives, values that are essential for collaborative work such as trust, accountability and mutual respect, accountable to the public and moral and social values. Research Advisory Board is responsible for formulating and overseeing implementation of policies related to Code of ethics for research. ORSP Charter defines guidelines for university research activites.

Structure and composition of the Research Advisory Board (RAB) of the University is given below.

Composition of Research Advisory Board Members

Sr. Nos.	Name	Designation	Organization
1.	Prof. H.B.Raghavendra	Director General	Pandit Deendayal Petroleum University
2.	Dr. A. V. Chainulu	Scientist –F	Department of Scientific & Industrial Research
3.	Shri R.K. Vij	DGM (Reservoir)	ONGC Ahmedabad Assets
4.	Dr. Chandra Rai	Director/ Eberly Chair	Mewbourne School of Petroleum & Geological Engineering The University of Oklahoma
5.	Dr. Vijay K. Madisetti	Professor	School of Electrical & Computer Engineering Georgia Tech
6.	Prof N.R. Dave	Educational Advisor	Pandit Deendayal Petroleum University
7.	Prof. VC Shah	Advisor-CSC	Pandit Deendayal Petroleum University
8.	Dr. B. G. Patel	Provost (Vice- Chancellor)	Charotar University of Science & Technology (CHARUSAT)
9.	Dr. Akshai Agarwal	Vice-Chancellor	Gujarat Technological University
10.	Dr. Bharat H. Desai	Professor	Jawaharlal Nehru Chair in International Environment Law, JNU

PDPU 246/269

Sr. Nos.	Name	Designation	Organization
11.	Sh. Kumarpal Desai	Padmashree	An eminent Litterateur
12.	Dr. T Harinarayana	Director	GERMI
13.	Dr. Avinash Chandra	Chairman & Managing Director	Petrobiz Consultant (P) Ltd
14.	Dr. D.M. Kale	Director General	ONGC Energy Centre
15.	Dr. H.B Raghavendra	Director	School of Technology, PDPU
16.	Prof. Tarun Shah	Registrar	Pandit Deendayal Petroleum University
17.	Dr. Indrajit Mukhopadhyay	Coordinator, ORSP	Pandit Deendayal Petroleum University

In its Evaluation meeting RAB takes note of different policies and implement them for facilitated research and development activities in its various schools.

Research Ethics:

- advancing funds for sanctioned projects -
- providing seed money
- simplification of procedures related to sanctions / purchases to be made by the investigators
- autonomy to the principal investigator/coordinator for utilizing overhead charges-
- timely release of grants
- timely auditing
- submission of utilization certificate to the funding authorities
- The strengths and culture of the participants must be respected and utilized whenever possible.
- Written permission must be obtained from the partners before beginning the research projects.
- Permission from all individual participants must be obtained prior to collecting personal information.
- The confidentially of all individuals, if required must be respected
- All research results, analyses and interpretations must first be reviewed by the participants to ensure accuracy and avoid misunderstanding.
- The participants must be involved in making decisions about the publication and the distribution of all or parts of the research results
- Anti-plagiarism

32. Student profile programme-wise:

Student profile programme-wise (2010-14):

Name of the	Applications	Selected	Pass Percentage	
Programme	Received		Male	Female
B.Tech.	4522	180	82	100

PDPU 247/269

Student profile programme-wise (2011-15):

Name of the	Applications Received	Selected	Pass Percentage	
Programme	Received		Male	Female
B.Tech.	5664	420	81	100

Student profile programme-wise (2012-14):

Name of the	Applications Received	Selected	Pass Percentage	
Programme	Received		Male	Female
M.Tech.	221	5	100	100

Student profile programme-wise (2013-15):

Name of the	Applications	Selected	Pass Percentage	
Programme	Received		Male	Female
M.Tech.	381	82	100	100

33. Diversity of students

Name of the program	% of the students from the same university	% of the students from the other university within state	% of the students from universities outside the state	% of the students from other countries
B.Tech.	00	58%	42%	00
M.Tech.	00	91.11 %	8.89 %	00
Ph.D	00	87.50 %	12.50 %	00

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

None of our students have appeared for Civil services and Defense Services examinations. The following table shows the data about other competitive examinations.

Student Progression	Percentage against enrolled
NET	0
SET	0
GATE	28
GMAT	2

PDPU 248/269

35.Student progression

Student Progression	Percentage against enrolled
UG to PG	Nil
PG to Mphill	NA
PG to Ph.D.	Nil
Ph.D. to Post doctoral	NA
Employed	40%, through Campus selection.
 Campus selection 	
Other than campus recruitment	

36. Diversity of staff

Percentage of faculty who are graduates			
From the same University	1%		
From other Universities	60%		
within the state			
From Universities within	39%		
from other states			
From Universities outside	Nil		
the country			

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

Following faculties were awarded Ph.D. during the assessment period.

Year 2014- 2015	Name of the Faculty	Research Topic	Supervisor	Degree M.Tech/ Ph.D
19/08/2014	Brijesh Tripathi	Theoretical and experimental studies of titanium dioxide based dye-sensitized solar cells	Dr. Manoj Kumar	Ph.D.
13/11/2013	Jatin Patel	Design Development and Invetsigations of solar powered two stage parabolic solar collector.	Dr.L.N.Patel	Ph.D.
03/03/2015	Jwngsar. Brahma	Geological and Geophysical Integrated Study of Western and Central Tripura for Identification of Hydrocarbon Plays and Prospects	Dr. Anirbid Sircar	Ph.D.
16/02/2015	Anurag Kandya	Characterization of Urban Heat Islands over Megacity	Prof. Dr. Manju Mohan	Ph.D.

PDPU 249/269

Self Evaluation Report - Volume II				
11/11/2014	Poonam Savasani	Delhi and Simulating its effect on Building Energy Consumption with Mitigation Strategies Investigation of advanced metaheuristic for the trajectory optimization of a robotic arm.	Prof. R. L. Jhala	Ph.D.

38.Present details of departmental infrastructural facilities with regard to a.Library

Number of Titles: 1818Number of Volumes: 9114International E-Journals: 274

• Database: 7

National Journals: 50International Journals: 7

• International E-Journals : 274

• CDs: 350

b.Internet facilities for staff and students

• Internet bandwidth: 250 Mbps with 1:1 contention ratio

• Computers: 174

c.Total number of class rooms:

21

d.Class rooms with ICT facility:

21

e.Students' laboratories :

53

f. Research laboratories:

18

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university:
- b) from other institutions/universities:

Ph.D. Students List

Sr No.	Candidate Name	Name of the Department
1.	MsSunita Barot	Science
2.	Mr. Jignesh Gaurang	Electrical Engg

PDPU 250/269

3.	Mr. Astikkumar Hishorchandra Dhandhia	Electrical Engg
4.	Mr. Harsh K.Brahmbhatt	Science
5.	Mr. Chandrakant	Science
6.	Mr. Heistrene Leena S.	Electrical Engg
7.	Mr. Nikhil J. Chotai	Mechanical Engg
8.	Mr Jaspalsinh B. Dabhi	Mechanical Engg
9.	Mr. Bhargav J. Gadhvi	Mechanical Engg
10.	Mr. Gaurang Joshi	Mechanical Engg
11.	Mr. Kush P. Mehta	Mechanical Engg
12.	Mr. Bhavesh K. Patel	Mechanical Engg
13.	Mr. Jaydeep Patel	Mechanical Engg
14.	Mr. Vipul D. Patel	Mechanical Engg
15.	Mr. Vivek V. Patel	Mechanical Engg
16.	Mr. Pritesh J. Prajapati	Mechanical Engg
17.	Mr. Harikrishnasinh G. Rana	Mechanical Engg
18.	Mr. Garlapati Nagababu Rangarao	Mechanical Engg
19.	Mr. Ghanshyam G. Tejani	Mechanical Engg
20.	Mr. Jay J. Vora	Mechanical Engg
21.	Mr. Maaz Kureshi	Science Department
22.	Mr. Maaz Nawab	Science Department
23.	Mr. Sukumar Mandal	Science Department
24.	Ms. Khusbu Patel	Science Department
25.	Mr. Mitesh Solanki	Science Department
26.	Mr. Nischal Joshi	Science Department
27.	Ms. Kangana Bhatt	Chemical Engg
28.	Mr. Himanshu Choksi	Chemical Engg.
29.	Ms. Anvita Sharma	Chemical Engg.
30.	Mr. Apurva H. Dave	Civil Engg
31.	Mr. Rajat C. Mishra	Civil Engg
32.	Ms. Anal A. Sheth	Civil Engg
33.	Mr. Apurva G. Sheth	Civil Engg
34.	Mr. Chavda ashok jivrajbhai	Elecrical
35.	Mr. Prajapati nitinkumar rasiklal	Elecrical
36.	Mr. Vyas kaustubh atulkumar	Elecrical
37.	Mr. Bhatt naimish sanatkumar	Civil
38.	Mr. Jain akshay omprakash jain	Civil
39.	Mr. Manvinder singh	Civil
40.	Mr. Kumar abhishek ram pravesh	Chemical
41.	Mr. Saini bharti kalian	Chemical
42.	Mr. Balchandani sweta chetananand	Chemical
43.	Mr. Modi bhaumik rajeshkumar	Mechanical

PDPU 251/269

44.	Mr. Motwani karan hiralal	Mechanical
45.	Mr. Patel vivek bhagvandas	Mechanical
46.	Mr. Patel dhiren ramanbhai	Mechanical
47.	Mr. Pandya jay kiritbhai	Mechanical
48.	Mr. Mohanty bibhabasu bijaya kumar mohanty	Science
49.	Mr. Dhake nirmalkumar krushnkant	Maths
50.	Mr. Satisha Venkatesh Prabhu	Mechanical
51.	Mr. Mustakim S. Bukhari	Mechanical
52.	Mr. Rakshith R. Shettigar	Science-Chem.
53.	Mr. Karamata Meera R.	Electectrical
54.	Mr. Parmar Kanubhai Kalidas	Chem. Engg.
55.	Mr. Asha T. Achuthan	Chemistry
56.	Mr. Vikram Rathore	Physics
57.	Ms. Lokapavana H. M.	Civil
58.	Mr. S Rajesh	Mech.
59.	Mr. Oza Ankit Dilipkumar	Ind.
60.	Mr. G. Vaitheeswaran	Physics
61.	Mr. Balbir Singh	Mech.
62.	Mr. Abhimanyu kumar Yadav	Solar
63.	Ms. Pramila Mahala	Solar
64.	Mr. Cliff Kant	Solar
65.	Mr. Pankaj kumar Yadav	Solar
66.	Mr. Pandey Kavita Ashokkumar	Solar
67.	Mr. Anand singh	Solar
68.	Mr. Parth Bhatt	Solar
69.	Mr. Jani margi mukeshbhai	Solar
70.	Mr. Nisarg Shah	Solar
71.	Mr. Raval Dhyey D.	Solar
72.	Mr. Chavda Arvind Dhirajlal	Solar
73.	Mr. Dixit Sandeep	Solar
74.	Mr. Waldiya Manmohan Singh	Solar
75.	Chandni Shah	Solar
76.	Priyanka Marathey	Solar

PDPU 252/269

77.	Chauhan Mihirsinh Kishorsinh	Solar
78.	Bhatt Vishwa Dharmendrakumar	Solar
79.	Leena Madhukarrao Borkar	Chemical
80.	Girish G. M.	Civil
81.	Shivam Kapoor	Civil
82.	Modi Raj Rakesh	Civil
83.	Gohel Jishnu Rajeshbhai	Civil
84.	Bhatt Srushti	Mechanical
85.	Prajapati Parth Preshkumar	Mechanical
86.	Gaurav Aggarwal	Mechanical
87.	Patel Jessica Suresh	Science
88.	Trivedi Maitrayee Umeshbhai	Science
89.	Thakkar Ridhhiben Yogeshkumar	Science
90.	Tejvani Sanjaykumar Vasudev	Science
91.	Shah Hiral Kamleshkumar	Physics
92.	Zeel Prafullchandra Purohit	Physics
93.	Patel Hiralben Pravinbhai	Environmental Science
94.	Trivedi Mumukshu Harisiddha	Mathematics
95.	Dave Devanshi Dilipkumar	Mathematics
96.	Shaikh Azharuddin Sarfuddin	Mathematics
97.	Mehta Parth Dinesh	Mathematics

40. Number of post graduate students getting financial assistance from the university.

Year	Number of M.Tech	Number of Ph.D.	
	Students	Students	
2013	38	6	
2014	39	8	
2015	53	14	

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Yes, a systematic process is followed for designing and development of curriculum. The focus is on factoring in all those academic areas which would prepare our students for Industry, different walks of society and life. The curricula are developed and reviewed by respective Boards of Studies under the direction of the various Faculties

PDPU 253/269

(Management/Engineering & Technology/Liberal Studies) who in turn work under the umbrella of PDPU Academic Council which is a blend of senior academia and industry/professional experts. The broad role of the **Academic Council** as clearly defined in the Act and the Statutes of PDPU as follows:

- Prescribes and sanctions the number of academic programmes in the University and their intake for each academic year.
- Approves curricula and syllabi for the courses and studies in various schools of the University
- Formulates the rules and regulations for academic matters including the structure of student evaluation, conduct of examination and ratification of results;
- Reviews and monitor the standards of instruction, education, training and research carried on or imparted in the University;
- Approves recognition and equivalence of the certificates, diplomas and degrees of other Universities and Institutions from where PDPU intakes it's students;
- The new programmes/curricula are formally approved by the Academic Council after detailed deliberations and the minutes of the meetings are duly recorded.

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

The concerned Boards based on the recommendations received from the Departmental/School Faculty Council, review the same and recommend to the respective Faculty. The Faculty in turn after due deliberation recommends the matter to PDPU Academic Council for deliberation and approval.

The constitution and functioning of respective academic bodies (that includes members from peer institutions, industry and profession) ensures that adequate need-assessment is undertaken with incorporation of necessary feedback towards course curriculum design and development.

PDPU 254/269

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

The feedbacks provided by the students are shared with the faculties. Based on the feedback received the faculties try to bring changes in the teaching methodology.

Students are asked to give their feedback regarding the teachers' teaching techniques.

The feedback is noted and conveyed to the faculty so that they can make improvements as required.

Third party feedback system by students for faculties is used through computer software. This feedback is shared by higher authorities with faculties to discuss positively and to provide suggestions for improvement if any.

c. alumni and employers on the programmes offered and how does the department utilize t he feedback?

The feedback from the alumni, employers and industries are regularly invited and departments take them positively. Such suggestions are incorporated during Board of studies meeting for curriculum design.

43.List the distinguished alumni of the department (maximum 10)

Sr. No	Name of the Alumni	Programme of study at the Institute	Present designation of the Alumni
1	Mr Darshan Dave	Civil	GACL
2	Mr Rushang Dave	Civil	GACL
3	Mr. Nitin Jaswani	Electrical	GACL
4	Ms. Priyanka Sehgal	Electrical	GACL
5	Mr.Aditya Agarwal	Electrical	Relience
6	Mr. Darshan Yadav	Mechanical	GACL
7	Mr. Uttam Singh	Mechanical	GIFT City

44.Give details of student enrichment programmes (special lectures / workshops /(seminar) involving external experts.

For details, please refer Annexure 44.

45. List the teaching methods adopted by the faculty for different programmes.

- Explanation in classroom with real life examples and case studies
- Showing course related videos in the classroom

PDPU 255/269

- Project based learning
- Assignments
- Simulators for solving numerical examples.
- Supplementary Video lectures/Animations
- Field visits complimenting theory lectures
- Quizzes
- Language lab assignments
- Student Seminars
- Laboratory projects

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? by the faculty for different programmes.

To assess the academic performance of students, a continuous evaluation system is followed. At the end of each semester, each student is awarded a letter grade in each of his/her courses by the concerned instructor, based on his/her performance in midsemester examination, end-semester examination, quizzes, tests, assignments, tutorials, laboratory work, seminars, projects, etc, and also on regularity of attendance in classes. The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, performance in viva voce examinations, and group discussions, the quality of work as prescribed through laboratory journals and an end-semester test that contains an experiment and/ or a written examination.

The course has some set of objectives and certain outcomes are expected. These set of objectives and outcome are achieved by BoS meetings, alumni meets and industry interactions. Inputs/feedback received from the same are incorporated for the upgradation of course and monitoring the learning outcomes. Each course of the programme is structured based on the engineering attributes set by the guidelines discussed in Graduate Attributes (GA). The monitoring of programme is done by the proper mapping of Programme Learning Outcomes (PLOs) and Course Learning Objectives (CLOs).

47. Highlight the participation of students and faculty in extension activities.

Student participationin extension activities:

Students of SoT have been participating in Workshops, Industrial Visits and Training programs. Please refer Annexure 44 (Volume -2-NAAC).

PDPU 256/269

Faculty participation in extension activities:

Department of Chemical Engineering

Dr. Pravin Kodgire:

- International conference on chemical Industries', (a part of pre vibrant 2015 event in association with GOG and GCA.)
- Organized a one day workshop "Computational Fluid Dynamics: Fundamentals and Engineering Applications",29-30th March, 2014.
- One day seminar "piping and pipeline engineering: fundamentals and applications", On the pdpu Campus, Gandhinagar, Seminar 1st August 2014.

Dr. S K Dash:

- International conference on chemical Industries', (a part of pre vibrant 2015 event in association with GOG and GCA).
- Organized a National symposium 'Advancements and Design trends in Chemical Engineering' on 11th April, 2014.

Mr. Himanshu Choksi:

• Organized a one day seminar on "Awareness on Biodiesel Production and Applications" at School Of Technology, PDPU, (30th July 2013).

Ms. Anvita Sharma:

• Organized a National symposium 'Advancements and Design trends in Chemical Engineering' on 11th April, 2014.

Mr. Abhishek Kumar:

• Organized a National symposium 'Advancements and Design trends in Chemical Engineering' on 11th April, 2014.

Ms. Sweta Balchandani:

• Organized a National symposium 'Advancements and Design trends in Chemical Engineering' on 11th April, 2014.

Department of Civil Engineering:

Dr. Debasis Sarkar:

PDPU 257/269

Dr. Debasis Sarkar Delivered "Guest Lecture" on "Project Risk Management: A
Case Study of Delhi Metro" in MDP Programme on "Project Risk Uncertainty &
Complexity" on April 6-9th, 2015 at IIM Ahmedabad.

Department of Electrical Engineering:

Dr. Vivek Pandya:

- Delivered expert talk on "Power System-Back To Basics "at Shankersingh Vaghela Bapu Institute of Technology, Vasan, Gandhinagar on 25/11/2014.
- Delivered expert talk on "How to do Research?: Tips,Tricks & Techniques" "at Marwadi Education Foundation's Group of Institutions Rajkot on 8/8/2014.
- Delivered expert talk on "Trends and Innovations in Electrical Power Engineering" at Nirma University, Ahmedabad on 30/6/2014-11/7/2014.

Dr. Jitendra Jamnani:

- Delivered expert lecture on "Reactive power compensation and voltage control in power systems" at Institute of Technology, Nirma University Ahmedabad on 13/3/2015
- Delivered Expert lecture on "Energy Efficient Induction Motors" during STTP on "Advancements in Operation, Control, Testing and Protection of Electrical Systems" at MEFGI, Rajkot on 6/8/2014.
- Delivered Expert talk on "High Performance Energy Efficient Induction Motor" during STTP on "*Trends and Innovations in Electrical Power Engineering*" held at Institute of Technology, Nirma University, Ahmedabad on 10/7/2014.

Dr Pratik Shah:

- Expert Lecture at Chandubhai S Patel Institute of Technology, Changa on "Digital Image Processing and its Applications on 2/9/2013.
- Invited as Chair at National Conference on Emerging Trends in Engineering, Technology and Management 2015 for the Electronic and Communication Track at Indus Institute of Technology & Engineering, Indus University on 30/1/2015.

Mr. Anilkumar Markana

 Delivered expert talk on "Control System in a LABVIEW," in the STTP LabView and its applications to an EngineeringSystems at LDRP Institute of Technology & Research, Gandhinagar

Department of Industrial Engineering:

Dr.M.B.Kiran:

• Industrial Visit: Electrotherm, India Ltd on 28th and 30th June 2014.

PDPU 258/269

- Industrial Visit: Ferromatik Milacron India Pvt. Ltd. on 5th July, 2014.
- Industrial Visit: Hindustan Coca-Cola beverages Pvt. Ltd. 28th April, 2015
- Industrial Visit: KHS Machinery, 2nd July, 2015

Dr.Abhishek Kumar:

- Industrial Visit: Electrotherm, India Ltd on 28th and 30th June 2014.
- Industrial Visit: Ferromatik Milacron India Pvt. Ltd. on 5th July, 2014.
- Industrial Visit: Hindustan Coca-Cola beverages Pvt. Ltd. 28th April, 2015
- Industrial Visit: KHS Machinery, 2nd July, 2015

Dr.D.M.Parikh:

International Training Program

- International Training Program on "SME Banking & Financial Services" during 2nd September – 2nd October 2013 at EDI funded by Ministry of External Affairs GOI.
- International Training Program on "Industrial & Infrastructure Project Preparation & Appraisal" during 03rd March –11thApril 2014 at EDI funded by Ministry of External Affairs GOI.
- In house Credit Appraisal training for credit officers of Bhutan Development Bank, at Bhutan during 28th July 13th August 2014

National Training Programs

- "Credit Risk Assessment based Project Appraisal & Entrepreneur Assessment" during 22nd 27rd October 2007 at EDI, Ahmedabad.
- "Credit Risk Assessment based Project Appraisal & Entrepreneur Assessment" during 20th to 25th October 2008 at EDI, Ahmedabad.
- "Credit Risk Assessment based Project Appraisal & Entrepreneur Assessment"
 during 25th 30th October 2010 at EDI; Ahmedabad.
- "Credit Creation, Credit Analysis, Credit Delivery and Entrepreneur Assessment" during 30th December 2013 4th January 2014 at EDI, Ahmedabad.
- Project Appraisal, Monitoring & Follow-Up during 20th

 24thNovember 2012 for NEDFi: Guwahati.
- Team Member of Post graduate program in Corporate Entrepreneurship & Management (PGCEM) for "officers of Zydus group during 2008 at EDI, Ahmedabad.

PDPU 259/269

Department of Mechanical Engineering

Prof. Surendra Singh Kachhwaha:

• Delivered an invited talk on "Modeling and Analysis of Thermal Systems" at STTP on "Modeling and analysis of Mechanical Systems" Mechanical Engineering Department, Marwadi Education Foundation, Rajkot (Dec. 23, 2014).

Dr.Anurag Mudgal:

• A workshop was conducted at Gujarat Technological University (GTU) campus, Chandkheda on 18-04-2015. About 40 students of M Tech and PhD programme attended the workshop. The topic of the workshop was "Design of heat exchanger and Heat transfer aspects in multiple effect distillation (MED) for water purification".

Dr Vishvesh J Badheka:

- Advances in welding' expert talk delivered on 22nd April 14, at SPB.Patel Engineering College, for PG students.
- 'Open Ended problem in Material Science & Metallurgy- DBTT, Fatigue, Hardness'
 were presented at Gujarat Power Engineering Research Institute, GPERI, on 8th Aug
 2014 for UG students of mechanical engineering.
- 'Fundamentals of Welding Processes' were presented at C S Patel, Institute of Technology- Changa, on 9th Aug 2014 for UG students of mechanical engineering.
- Presented Invited talk on "Metallurgical Factors Affecting Corrosion in Petroleum and Chemical Industries" at International conference on chemical industries (ICCI), 22-23 Aug 2014, PDPU
- Delivered expert lectures on 'GMAW-FCAW- Resistance welding- Wear & Surfacing' under International Welding Engineer (IWE) course leading to Diploma, conducted by The Indian Institute of Welding (IIW),Baroda Branch on 11th Nov 14.
- 'Advances in activated flux processes' at National Welding Seminar held between 21st to 23rd Jan 2015 at Jamshedpur
- 'Welding Metallurgy' for PG students and faculty member of Mechanical Engineering Dept, Shankersinh Vaghela Bapu Institute of Technology, 30th Jan 2014
- 'Basics Welding Processes' for UG students and faculty member of Mechanical Engineering Dept, Shankersinh Vaghela Bapu Institute of Technology, 20th Feb 2014.

PDPU 260/269

- 'Advanced Welding Processes' for UG students and faculty member of Production Engineering Dept, Birla Visvakarma Mahavidyalaya, Vallab Vidyanagar, 14th Feb 2014
- 'Advanced Welding Technology' for PG students and faculty member of Mechanical Engineering Dept, A.D.Patel Institute of Technology, Vallab Vidyanagar 14th Feb 2014
- 'Advanced Welding Processes- FSW, MCAW, ATIG' for UG students and faculty member of Mechanical Engineering Dept, Nirma University, Ahmedbad, 27th Feb 2014

Dr. Jatin Patel:

- Concentrated Solar Thermal Technology, Short Term Training Program on Energy Conservation, 16th – 21st August-2010, LDRP Institute of Technology and Research, Gandhinagar, Gujarat
- Concentrated Solar Thermal Power Plant, A Two Day Seminar on Awareness on Green Energy & Energy Conservation, Pandit Deendayal Petroleum University, Gandhinagar during 17-18 September 2013
- Solar Terminology and Solar Collectors, Shankersinh Vaghela Bapu Institute of Technology, Vasan, Dist. Gandhinagar, Gujarat, 7th February, 2014
- Computer Aided Thermal System Analysis (Using Engineering Equation Solver-EES),
 Two Days Hands-on Experience on Latex tool and EES, Shankersinh Vaghela Bapu
 Institute of Technology, Vasan, Dist. Gandhinagar, Gujarat
- Solar Thermal Heat Conservation, Regional seminar at L. D. R. P. Institute of Technology and Research, Gandhinagar., 14th march, 2015

Mr. Bhargav Gadhvi:

Expert lecture on "Forced Vibrations and Appliations"; at Shankarsinh Vaghela Bapu Institute of Technology, Gandhinagar, on 20/03/2015.

48. Give details of "beyond syllabus scholarly activities" of the department.

1. SOT has various clubs and a Guest Lecture Committee that together ensure learning beyond the scope of syllabus. The clubs operate as student led initiatives supported by respective subject faculty to organize weekly discussions, debates presentations and other exercises purposefully selecting topics and subjects beyond the syllabus. Moreover organizing sector/functional area specific annual roundtables/conclaves provide for a number of industry professionals to interact with the students and faculty on

PDPU 261/269

contemporary professional, industrial and academic issues. Students are encouraged to prepare and submit research papers and projects at National and International seminars and conferences.

- 2. Added courses relating to renewable energies Project Management Certification Course.
- 3. For PG additionally Research Training and Methods are introduced to motivate students towards research and its applications.
- 4. Research groups are identified and members of the groups are encouraged to continue research in their area by funding by PDPU along with students ---to submit proposals for different funding agencies. Several training programs for the students are arranged by each department to add value to their degree like
- 5. Computer Aided Design Courses (Civil and Mech. Engg. Dept.))
- 6. Lab View Courses (Electrical Engg. Dept)

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

School of Technology has helped PDPU in bagging Prestigious ISO and SIRO awards. School of Technology is instrumental in getting Pandit Deendayal Petroleum University (PDPU) approved by the Government of India, Ministry of Finance, Department of Revenue (Central Board of Direct Taxes) for claiming exemption under section 35(1)(ii) of Income Tax Act on the donations/ grants received for scientific research activities done by its faculty members and students.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Throughout the year, the institute organizes many advanced workshops, seminars and conclaves for advance learners.

The advanced learners are encouraged to participate in inter university competitions and the faculty advisors cater to their needs for additional counselling and help. These students also get identified as capable at handing challenging projects. These students are encouraged to write and publish/present this work and university has always supported them in attending the seminars at both National and International level. Such students are

PDPU 262/269

offered opportunities for 'Exchange Programmes' with international institutions with which the University has a MoU. The students are also provided opportunities to interact with industry stalwarts during their visit to the University and some of them get an opportunity for an internship or placement with the organization.

The university offers International Exposure Programs and also International students exchange programs through which the advanced learners are given the opportunity to interact with faculty and students of other International Institutes of repute and thus can enrich their knowledge in global context.

This is also done at department level through inviting experts of various subjects as member of board of studies, at institute level through BOS of FOET and through academic council at university level.

The advanced students are encouraged for participation in competitive examinations and events, model making, extra project works, participation in research works of the department. Such students are also involved in the event management activities to bring out their talents.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- 1. Recognition from accreditation organizations (viz. ISO, SIRO,..)
- 2. Providing Value Based Education for students
- 3. Experienced and Qualified Faculty Members.
- 4. Excellent Infrastructure-including Laboratory Equipments
- 5. Excellent industry-institute interaction through execution of projects

Weaknesses

- 1. Instability of the faculty because of the more opportunities
- 2. Faculty quarters are not available in the Campus because of which Faculty is unable to pursue Research Activity after the working hours.

PDPU 263/269

- 3. To Recruit Academicians with Doctorate degree from reputed institutions is taking more time.
- 4. Limited Advanced Research Laboratories
- 5. Limited number of faculties have industrial experience.

Opportunities

- 1. Placed in well connected Geographical Location
- 2. Collaboration with reputed National and International Organizations
- 3. Many on-going Research projects
- 4. Many faculties have memberships in international professional societies.
- 5. Encouraging student research projects.

Challenges

- 1. To attract and retain experienced faculty members
- 2. To get 100% placement
- 3. To make every student Industry ready engineer
- 4. Strive hard to enrich the school -SOT.
- 5. Rapid challenges in the area of technology require faculty members constantly upgrade their skills.

52. Future plans of the department.

- Accreditation for all programs (UG and PG) by concerned bodies (viz. NAAC, NBA)
- 2. Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research has accord recognition to Pandit Deendayal Petroleum University (PDPU), Gandhinagar as Scientific and Industrial Research Organization (SIRO). The University is in the process of Development of faculty group for excellence in the upcoming areas.
- 3. Accreditation for laboratories of school by agency like NABL

PDPU 264/269

The school is already on the way of exploring the possibilities of consultancy and research. In lining with it authenticated third party assessment of labs and equipments like National Accreditation Board for Testing and Calibration Laboratories (NABL) is proposed. Narmada development Department, Government of Gujarat and Public work Department Engineers team have visited our laboratories to empanel for material consulting purposes.

Substantial research work is being done by faculty groups in the area of clean energy, project management, risk analysis and solar energy specialization. The long term planning has been initiated to occupy empty space in the field of applied research in few selected and burning issues like Energy & infrastructure, Climate change & Environment and Automobile & Automotives. Two research groups are taking shape to deal with bio-diesel possibilities and Cooling and desalination using low grade thermal energy.

4. <u>Up gradation of library and information centre in line with our research and</u> academic requirement

It is very much obvious that without hurdle free access of literature and latest updations through standard and peer reviewed journals, research can't keep going. The school will enhance its library and information centre to fulfil the prerequisite requirement of free flow of latest information and research going around the world. Our library is already equipped with 9114 volumes of 1881 titles of books, 57 journals and 274 international E Journals. We are also in the process of procuring software regarding lecture capture and learning.

5. <u>Development of Centre for patent submission and simulating growth of research publication</u>

One research group is already engaged in developing new welding techniques and has filed for two patents too. The school is planning to make a time bound strategy to achieve target of filing patents and research publications. An independent centre will be proposed to take care for this activity. The school may propose few more channels like ORSP that may offer some financial back up for the projects and ideas

PDPU 265/269

of students that are really worth. This will create a healthy competition among students.

6. Student strength and faculty strength enhancement

In accordance with over all development in the field of academics and research it will be ensured that the school will gradually strengthen number of students as well as faculties in the years to come. At present the school is running 5 UG and 5 PG courses that take about 1800 students. This figure will be increased to 4000 with PhDs facility in all the courses. As on the date SOT is having 102 faculties.

7. New programs and consistent curriculum in line with technology development

To support the previous point few new programs and different module courses will be proposed time to time as per the applicability and demand of the time and society. The following programs are in the pipeline.

- Chemical Engineering (PG Program)
- Computer Science (UG Program)

8. Portfolios development for each student and faculty

The University has already developed campus management system (CMS) through which attendance of students and faculty/ staff and students results etc are being monitored. Further it provides hassle free way of communicating and approaching interdepartmental and intradepartmental activities and thought process. Institute Research information management system (RIMS) provides opportunities lying in the research area and update faculty and students. It will further be expanded by developing portfolios of each of the faculty and student. There will be a separate webpage devoted to specific faculty and student that will be having all the academic/professional information about him.

9. Switching over to international curricula and bonding flexible basket of courses in each program

This will be ensured in due course that our students will set at par with the best education system of Engineering in the world. This will be done by providing them

PDPU 266/269

a basket of courses as per global scenario. The advisory committee for different subjects will intervene and set the best fit and applicable syllabus that is acceptable worldwide in the industries. Further freedom of selecting the subjects of taste will also be diversified and extended to the students.

10. <u>Development of teaching material and teaching learning process through</u> student centric and FDP module

The school will explore few more and relevant teaching learning processes to make engineering education more practical at the level of understanding and applicability. The already existing mode of classroom centric teaching will further be expanded to student centric teaching learning and distance learning mode.

The already existing student and faculty exchange program will be strengthened and such possibilities with few other, renowned foreign universities will be explored more rigorously.

11. Placement process of students

The school is very much concerned with final outcome i.e placement of its students. To achieve this, practical and hand on experience is a must for the students to learn. Further many students may be motivated to take up live industrial projects and being associated with many available power and energy sector industries, as we, being an enterprise, are in the best position for it. Further students may be asked to undergo summer trainings as Civic & Social Service Internship (CSSI), industry orientation, and Industrial training, to provide them a better understanding and challenges of Indian society and industry as career options.

PDPU 267/269



PANDIT DEENDAYAL PETROLEUM UNIVERSITY

Established by the Gujarat Legislature Act No.14 of 2007 Recognized by the University Grants Commission, New Delhi u/s 2(f) of the UGC Act, 1956

Declaration

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Director General

Place: Gandhinagar

Date: 16th September 2015

PDPU 268/269