THE OFFICIAL MAGAZINE FOR DEPARTMENT OF PETROLEUM ENGINEERING

DPE MIRROR

JANUARY 2024

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COVER PHOTOGRAPH BY : **DR. UTTAM KUMAR BHUI**

- Cover Story
- GATE Performance
- Placements

- News
- Technical Article
- Non-Technical Article

HIGHLIGHTS

- Convocation
- MoU's
- Conferences
- Student Chapter Activities

The present issue consists of events from August 2022 to January 2024

DIRECTOR's & HOD's DESK

Prof. (Dr.) Anirbid Sircar
Director
School of Energy Technology

It is with great pleasure to welcome you to this edition of the DPE Mirror. As we navigate through the pages of accomplishments, advancements, and aspirations, it is evident that our department continues to stand as a beacon of excellence in the field of petroleum engineering.

DPE's Mirror is for the students and by the students, so we will be grateful for your assistance by sending us shots/pictures of your industrial training work, etc. And we might just use it in the future issue of the DPE Mirror.

I extend my gratitude to the entire PDEU faculty, students, staff, and alumni—for your unwavering dedication and contributions. Together, we continue to shape the future of petroleum engineering.

Dr. Uttam Kumar Bhui
HoD
Department of Petroleum Engineering
School of Energy Technology

In the past year, our department has achieved significant milestones, both in academia and research. The relentless dedication of our faculty and the unwavering commitment of our students have resulted in groundbreaking contributions to the realm of petroleum engineering. From publications in esteemed journals to securing Gate ranks, these accomplishments underscore our commitment to pushing the boundaries of knowledge.

At the heart of our department lies a culture of innovation. We have fostered an environment that encourages exploration, embraces challenges, and catalyses inventive solutions.

I also would like to cordially congratulate the team of DPE Mirror. We hope you are enlightened and enjoy reading this issue as well

EDITOR'S DESK

Dr. Namrata Bist Rawat

Mr. Gaurav Hazarika

Every year brings opportunities, last year was no different, we achieved and conquered some major milestones. Our department in the School of Energy Technology has set the bar high for the upcoming batches.

During the process of writing the first draft of the magazine, it became evident that the department had achieved major goals. From Gate exams to conferences, from an online event to a fest, field trips to industrial visits, publications to awards, and from internships to placements, the magazine provides a holistic view of the recent events and activities in the department. Although the conversion from school to a department was difficult the student's and faculty's unwavering dedication towards excellence has been excellent. In the pages ahead we have tried to tap as many events as possible along have focussed on honesty and truthfulness in delivering the content.

We would like to thank all the students on the Editorial Team for their determination while drafting the magazine. Without their help, this could not have been delivered on time. Also, the individuals of the department play a major role as without them this magazine would be meaningless.

"It is the achiever whose hymn is sung; the singer is just a messenger."

EDITORIAL TEAM

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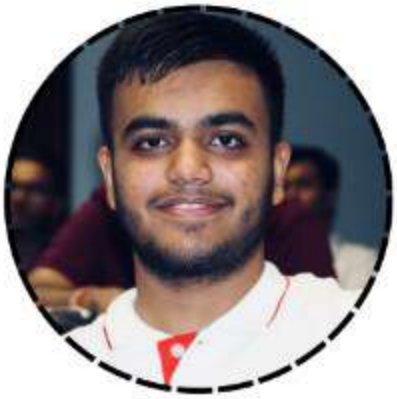
Pratham Kumar

Vivek Kumar Yadav

Tithee Bhavsar

Ananya Verma

Misha Sablok



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CONTENT

07
Cover Story
The Evolution of School of Energy Technology

10
Media Blitz
News related to PDEU

13
GATE Achievements
GATE Achievers of 2023

14
Placements
Notable Placements from department of Petroleum Engineering (Batch 2019-23)

17
Conferences
ICAWTM-2023
ICGHGD-2023
IOGCA-2023
DST-TEC (Conference and Hackathon)

19
Convocation
Convocation 10
Convocation 11

21
MoU's
Notable MoU's signed between PDEU and various Universities & Companies

22
Student Centric Activities
Rural Internship
Industrial orientation
Industrial Training
Geological Field Trip

25
Student Chapter Events
FIPI
SEG-SPG-EAGE
SPE
IADC

51
Testimonials
OKHLAHOMA Student Exchange
GOTECH Conference

52
Technical Article
Revolutionizing Upstream Oil and Gas: Unleashing the Power of Data Integrity Technology

54
Non-Technical Article
"From Drill Bits to Wit: Pete and Derrick's Hilarious Oilfield Odyssey"
"Holographic Universe- A String Theory Axiom"

COVER STORY

Written by: Anand Pal
Edited by: Yuvraj Kaswan

"The Evolution of School of Energy Technology & Department of Petroleum Technology"

It is in the nature of the living world to evolve as quickly as possible, where the process takes time but the outcome, marvelous. The human race on its journey till today has demanded energy to sustain, prosper and live. The species has learned to derive it from whatever source possible. Today there are many different sources of energy available, let them be in the form of Renewable or Non Renewable Resources.

Looking into the history of the energy sources hydrocarbons have always dominated the field. May it be in the form of coal, natural gas, peat, petrol, diesel etc. Crude was first discovered somewhere in China around 4th BC, since then the exploitation of reserves and complimenting of crude has begun. Looking forward to the infinite applications and importance of petroleum, an energy provider, our university was named Pandit Deendayal Petroleum University. After, the great Shri Pandit Deendayal Upadhyay Ji and Petroleum which has led the world in an unwavering way.

The University's motto stands clear as "Creating Energy Ambassador". Today when we look in the energy sector we see not just one but many different sources of energy. Broadly divided into two sectors namely Renewable including solar energy, wind energy, geothermal energy, hydro-power, ocean energy, bio-energy etc and Non-Renewable Sources such as crude, coal etc. This is one of the best examples of evolution, where we have learned to harness various kinds of energy to fulfill our needs. Petroleum reserves are limited therefore other sources become extremely important for survival.

Pandit Deendayal Petroleum University Name Changed to Pandit Deendayal Energy University on PM Narendra Modi's Recommendation

This point was stated by the Hon'ble Prime Minister Shri Narendra Modi Ji, during his speech on the occasion of 8th Convocation of the University. As the university had already introduced courses in the different energy sectors, hence the rechristening was inevitable. PM asked the Gujarat Government to rename the university from Pandit Deendayal Petroleum University to Pandit Deendayal Energy University by amending laws.

Along with the change in the name of university it was probable that our school also upgraded itself, from School of Petroleum Technology to School of Energy Technology. Housing different departments such as Bachelors and Masters in Petroleum, Petrochemical, Chemical, Electrical, Mechanical, Nuclear,Chemistry(B.Sc) and Physics(B.Sc). The evolution of our school gave birth to our Department, i.e, Department of Petroleum engineering.

Our Department stands strong with best faculties and an outstanding alumni base. Although it has been down sized but it fits perfectly in the big picture. Our department has provided the world with determined engineers and will continue to do so in the upcoming future.

MEDIA BLITZ

Written by: Misha & Swattik
Edited by: Vivek Yadav

PDEU GETS A++ IN NAAC RATING

DATE: 8/10/2022

Pandit Deendayal Energy University (PDEU) became the first private university in Gujarat to receive a National Assessment and Accreditation Council (NAAC) grade of A++ with a CGPA of 3.52/4 on October 8, 2022, following a peer team visit. The state government has declared the university a Centre of Excellence. This achievement marks an improvement from the 'A' grade it received in 2016, now extended for five years."


OUTSTANDING GREEN ENERGY INITIATIVES IN GUJARAT

ડૉ. એસ. સુંદર મનોહરન

ઊર્જા શિક્ષણ, ઊર્જા સંશોધન અને અધ્યયન ક્ષેત્રે અગ્રેસર પંડિત દીનદયાલ એનર્જી યુનિવર્સિટી

PRIDE

GREEN ENERGY INITIATIVE OF PDEU

DATE- 19/02/2023

Director General Prof. Dr. S Manoharan Sundar has been felicitated with Divya Bhaskar's "Pride of Gujarat" award under the "Outstanding Green Energy Initiatives in Gujarat" category.

GUJARAT'S FIRST VANADIUM FLOW BATTERY FACILITY AT PDEU

DATE- 27/11/2023

Dr. Sundar Manoharan is known for his virtues as a Mentor, Teacher, Leader and an Innovator. Researchers at Pandit Deendayal Energy University (PDEU) have successful deployed the state's first vanadium redox flow battery (VRFB) system that can improve the lifespans of EV charging station.

"Battery energy storage technology is crucial for scalable renewable energy deployment, and it must be paired with storage to manage energy dispatch during peak demand periods." said Dr Manoharan.

"Compared to lithium, vanadium scores highly on many counts. The rechargeable flow employs vanadium ions in different oxidation states to store chemical potential energy." He added.

A Conference and Hackathon organised by Department of Science and Technology (DST) - Technology Enabling Centre (TEC) at PDEU

DST-sponsored Technology Enabling Centre at PDEU is hosting a Conference on November 1, 2023, featuring expert talks on demonstrative technologies in Energy, Health, and Water. The event includes participants from institutes, MSMEs, and industries, and concludes with a grand interstate Hackathon focused on Water Technology and Innovation, promoting knowledge exchange between academia and industry.

INDIA'S ENERGY NEEDS TO DOUBLE BY END OF DECADE: MUKESH AMBANI

DATE- 22/11/2023

Speaking at the 11th convocation of Pandit Deendayal Energy University (PDEU), Mukesh Ambani, who heads the nation's most valuable company Reliance Industries Ltd, said the Indian economy will become a USD 40 trillion economy by 2047 from the current USD 3.5 trillion. "And to fuel this growth, the country will need enormous amounts of energy - clean, green energy that won't choke mother nature for the sake of human progress," he said. "In fact, India's energy requirement is set to double just by the end of this decade."

FORMER PRESIDENT SHRI RAM NATH KOVIND INSPIRES AT INDIA RESTRUCTURING CONFERENCE

DATE- 25/11/2023

Shri Ram Nath Kovind, the respected Former President of India, graced the International Conference on Restructuring, Revamping, and Rebuilding Independent India with his presence. His insights on reforms in Agriculture, Administration, Economy, and Entrepreneurship are a guiding light for our journey ahead.

NEW INDIA VIBRANT HACKATHON 2023 GRAND FINALE
DATE- 25/11/2023

The exhilarating Hackathon 2023 Grand Finale at PDEU. In the presence of esteemed guests—Shri Rushikesh bhai Patel, Dr. Kuber bhai Dindor, and Shri Praful bhai Pansheriya. An extravaganza of innovation orchestrated by Gujarat Knowledge Society under SSIP 2.0.

DIGNITARIES DHARMENDRA PRADHAN AND JASON CLARE BOOST PDEU'S ENERGY INNOVATION AGENDA
DATE- 25/11/2023

Dharmendra Pradhan ✓ ...
4h · 🌐

Pleased to visit Pandit Deendayal Energy University along with Minister Jason Clare. .

A world class multidisciplinary university, PDEU emphasising on problem-solving, practice of fundamentals, industry exposure, among others to prepare smart and skilful professionals for the critical energy sector. It is a laboratory of holistic education and NEP implementation.

Graced by the visit of Mr. Dharmendra Pradhan (Minister of Education and Minister of Skill Development & Entrepreneurship, Government of India) and Mr. Jason Clare (Minister for Education - Australia), PDEU is honoured by their presence, reinforcing our dedication to energy sector innovation. Their visit bolsters our pursuit of excellence in shaping future energy professionals.

DR. MUKESH AMBANI, PRESIDENT & CHAIRMAN OF BOARD OF GOVERNORS, PDEU VISITED PDEU CAMPUS ON 10TH JANUARY 2024 DURING VIBRANT GUJARAT CONFERENCE

GATE ACHIEVERS 2023

Written by: Harsh Jani
Edited by: Vivek Yadav

Mahammadtaukir karigar
AIR 1
BATCH OF 2017

Bhuminkumar Baariya
AIR 2
BATCH OF 2017

Dipesh Patel
AIR 10
BATCH OF 2019

Nitirajsinh Chauhan
AIR 12
BATCH OF 2019

Panchal Shlok
AIR-37
BATCH OF 2019

Parth Patel
AIR 64
BATCH OF 2019

Ayush Katyare
AIR 76
BATCH OF 2019

Devansh Gajjar
AIR 96
BATCH OF 2020

Jatin Panchal
AIR 203
BATCH OF 2020

Hardevsinh Sindha
AIR 220
BATCH OF 2020

Daksh Joshi
AIR 243
BATCH OF 2020

Lokesh Dadheech
AIR 263
BATCH OF 2020

Harsh Patni
AIR 394
BATCH OF 2020

Vraj Patel
AIR 421
BATCH OF 2020

DPE PLACEMENTS 2022-23

Written by: Misha & Swattik
Edited by: Vivek Yadav

DIPAM J. JADAV
AEE (DRILLING)

HARSHKUMAR S. RATHOD
AEE (PRODUCTION)

JAY N. PARMAR
AEE (DRILLING)

KAUSHIK H. GOGADANI
AEE (PRODUCTION)

KRUTARTHSINH M. TADVI
AEE (DRILLING)

PARTH S. PATADIYA
AEE (PRODUCTION)

TIRTH K. SHAH
AEE (DRILLING)

Oil and Natural Gas Corporation Ltd.

ANUGRUH B. SINGLA

ISHITA D. PATEL

KOMAL S. SINGH

Shell Business Operations

HITAKSHI U. KUBAVAT

KULDIP S. DHOKIYA

Seros Energy Pvt. Ltd.

ESHAAN VERMA

NEEL B. KUKADIYA

RITEN R. SHAH

AG&P CGD India Pvt. Ltd.

AMAN KARN

JATIN D. NAKRANI

Hindustan Unilever Ltd.

VIKAS S. SHARMA

Airoil Flaregas Pvt. Ltd.

DIPESH L. PATEL

HLS Asia Pvt. Ltd.

ARCHIT JAIN

Halliburton

RAJ V. JANSARI

Oil India Limited


DARSHAK R. KATARIYA


NAYAN K. GHODADARA


NITIRAJSINH A. CHAUHAN


PRANAVKUMAR D. PATEL


UTSAV V. PATEL

Tata Consultancy Services


DHRUV G. PATEL


MILIND R. PATEL


NABARUPA DEBNATH


SAHIL PATEL


TIRTH M. PATEL

Torrent Gas (Pvt. Ltd.)


CHIRAG S. RATHOD


HENILKUMAR R. PATEL


MANISHBHAI K. JOSHI


PRATIK R. PANCHAL


SOHIL D. DHANANI

Shelf Drilling


AKASH TIWARI


KUNAL J. NAGDEV


MD. SALIF NARMAWALA


NEERAJ V. VINZODA


URMIKKUMAR V. PATEL

IRM Energy Limited


ANIKET V. PATEL


ANKITKUMAR B. PATEL


DIGJAY D. MANIYA


FENIL S. PATEL


PARTH V. PATEL


KEYUR K. MORADIYA


NAYAN K. GHODADARA


PALAKBHAI V. PATEL


HARMIT P. PARIKH


HIT D. PATEL

Sabarmati Gas Limited

ARPITKUMAR R. PATEL

MANAV D. PATEL

NITIRAJSINH A. CHAUHAN

PRAKASH B. VAZA

SHREYASKUMAR V. PATEL

SHUBHAM B. PATEL

Reliance Industries Limited (RIL)

HARSHIL R. MODI

KEVIN S. PATEL

PAL P. PATEL

TIRTH A. PATEL

RV Group of Companies

AAKASHDEEP M. BHATT

HARPALSINH M. PADHIYAR

RITEN R. SHAH

SMIT M. MODI

Cognizant

NIHARIKA CHANDRA

SMIT D. JAVIYA

RISHABH R. GUPTA

Allied Engineers

AKASH J. SONI

DHRUMIT R. SAVALIYA

POOJA D. BHATIA

Imperial OilField Chemicals Pvt. Ltd.

NATIONAL AND INTERNATIONAL CONFERENCES

Written by: Ananya Verma
Edited by: Pratham Kumar

"ADVANCES IN WATER TREATMENT AND MANAGEMENT"

Pandit Deendayal Energy University organized the 2nd International Conference on "Advances in Water Treatment and Management" (ICAWTM-23) on 10th and 11th of March 2023. The international conference gave latitude for sharing and exchanging research ideas and opinions, gaining inspiration for future research, and broadening knowledge about various fields in water treatment and management amongst the members of Indian research communities, together with researchers from United Kingdom, Spain, Netherlands, Israeli, Singapore, Denmark, and other countries. Along with 2 Guest Lecture and 3 invited talks, 123 abstracts were selected from 174 abstracts from different states of India and countries. These selected abstracts were presented during the conference.

"GREEN HYDROGEN FOR GLOBAL DECARBONIZATION "(ICGHGD-2023)

The 1st International Conference on Green Hydrogen for Global Decarbonization (ICGHGD-2023) took place on March 17th, 2023. The theme of the conference being "Green Hydrogen: Cleaner and Zero Emission Fuel for a Sustainable Green Economy". The conference aimed to converge international hydrogen leaders and executives, experts, and scientists to deliberate and brainstorm recent technological advancements in the entire hydrogen value chain.

Focusing on the reduction of carbon emission, carbon capture, utilization and storage (CCUS) plays a vital role on greenhouse gas control. Therefore, one of the important themes of the conference was CCUS. The conference focused on Innovations, New Technologies, Investments and Green Hydrogen issues and carbon capture, utilization and storage (CCUS).

"OIL & GAS CHEMISTRY, CHEMICALS AND ADDITIVES CONFERENCE (IOGCA 2023) "

The 6th international IOGCA conference was organized in PDEU on 12th & 13th September 2023. A scrupulously designed two-day event created opportunities for the participants to evolve their ideas and cogitation as they listen to a fastidious panel discussion along with thought-arousing speakers' session on importance of chemistry and chemicals in upstream i.e. in Drilling, Cementation, Well Completion, Production, Well Intervention, EOR etc. and in downstream for different processes involved in refining and distribution of finished and value-added products.

The conference was devised for industry professionals involved or interested in solutions for multiple challenges in Oil and Gas production, processing, refining, handling and value addition through chemicals and chemistry.

"DST-TEC (CONFERENCE AND HACKATHON)"

DST-TEC conference and hackathon took place on November 1st and 2nd, 2023. On the 1st of November, the conference started with an inaugural speech by the Director General PDEU, followed by a captivating colloque on renewable enenrgy, sustainable energy, Energy storage and devices by various industry specialists like Dr. Anil K Dubey, Dr. Aastha Pandey, prof. Dinesh Kumar, Dr. Soumen Dey, and Dr. Ravinder Kaur. The second session of the event comprised of stall showcasing. Various innovative and creative stalls were displayed.

On November 2nd a Hackathon, themed "Water" was organized with key focus on Desalination and water treatment, waste water treatment, water pollution. The hackathon engaged students from various universities. The event concluded with a price distribution session.

CONVOCATIONS

Written by: Rajvi Suthar
Edited by: Pratham Kumar

"10th Convocation"

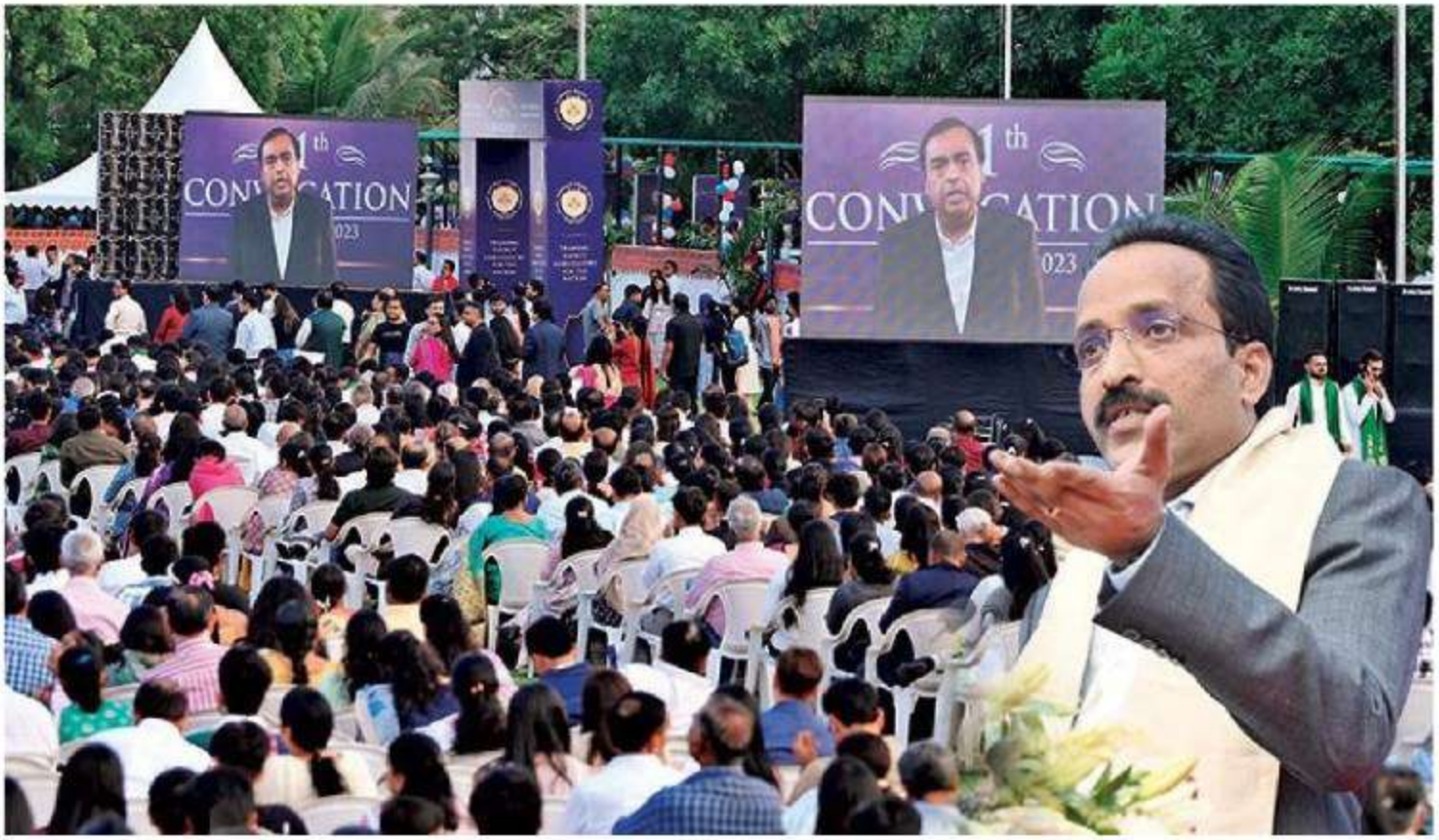
The 10th convocation of Pandit Deendayal Energy University was an exceptional milestone, symbolizing a decade of academic achievement and innovation within the university's vibrant community. Unfolding on the 22nd of November 2022 at 4:30 pm on the picturesque university campus, the event was a celebration of academic excellence and the commencement of new journeys for the graduating class. Adding an extra layer of prestige to this momentous occasion was the distinguished presence of Shri N. Chandrasekaran, Chairman of Tata Sons, who graciously accepted the role of chief guest. Shri Chandrasekaran's leadership and vision had been instrumental in driving one of India's largest and most respected conglomerates, making his insights invaluable to the aspiring graduates of the university's various departments. As the sun set on that special day, the convocation not only honored the achievements of the departing students but also served as a platform for inspiration, encouraging them to carry the torch of innovation and excellence into the next phase of their professional lives. The event was anticipated to be a harmonious blend of tradition and forward-thinking, echoing the university's commitment to fostering leaders in the fields of energy and technology.

India well placed to lead green energy transition, says Natarajan Chandrasekaran

He further said technological advancements have already made and should continue to make such energy transitions more affordable

"11th Convocation"

The 11th convocation of Pandit Deendayal Energy University was a momentous affair, an intersection of academic excellence, and the limitless possibilities that lay ahead in the realm of energy and technology. Set against the backdrop of the university campus, this significant event unfolded on the 2nd of December 2023 at 4:30 pm, casting a golden glow on the achievements of the graduating students. What elevated the occasion to greater heights was the gracious presence of Dr. S. Somanath, the distinguished Chairman of the Indian Space Research Organisation (ISRO), who had accepted the esteemed role of chief guest. Dr. Somanath's leadership and groundbreaking contributions to the field of space exploration made him a beacon of inspiration for the graduating cohort, aligning seamlessly with the university's commitment to innovation and excellence in the energy sector. As the campus buzzed with excitement, this convocation not only marked the culmination of academic pursuits for the departing students but also symbolized the commencement of a journey fueled by knowledge, passion, and the visionary insights shared by Dr. S. Somanath. The ceremony was a celebration of intellectual achievements, a testament to the students' dedication, and a stepping stone towards a future where the principles of energy, technology, and innovation converged seamlessly.



MOUS

Written by: Rahul Sharma
Edited by: Pratham Kumar

"The university pursues active partnerships and collaborates with foreign universities through MOUs (Memorandum of Understanding). Partnership includes summer student Exchange Program, and Co-operation in academics."

Currently active partnerships include:

- Washington & Jefferson College
- University of Bahrain
- University of Alberta
- Oklahoma University
- Georgia Institute of Technology
- University of Saskatchewan
- Western University
- University of Manitoba
- Directorate General of Hydrocarbons (DGH)
- University of Tulsa
- University of Houston
- Texas A&M
- University of Regina
- University of Trinidad & Tobago
- University of Wollongong
- Memorial University
- Edith Cowan University
- Aban Offshore

STUDENT CENTRIC ACTIVITES

Written by: Saksham Ojha
Edited by: Neel Rana

Rural Internship

Any course's true academic worth may only be attained when it is combined with industry orientation, global exposure, field trips, and internships. In this regard, it has become mandatory to know and understand rural life and its demography. It is in this reference, Department of Petroleum Engineering , under the aegis of Pandit Deendayal Energy University, has introduced Summer Rural Internship (SRI) as a course in B.Tech Petroleum Engineering Programme for students.

The below pictures show rural internship exposure to the students of Batch 2020 & 2021

Industrial Orientation

The objective of industrial orientation is to expose students to various operations of industry for enhancing their understanding about application of science and engineering principles studied in first two years of B. Tech programme, to develop students' understanding about industry operations to facilitate their academic and research learning for the 3rd and 4th year B. Tech programme and to expose students to the latest technology deployment for quality and cost-effective outputs.

The below pictures show industrial orientation exposure to the students of Batch 2020 & 2021

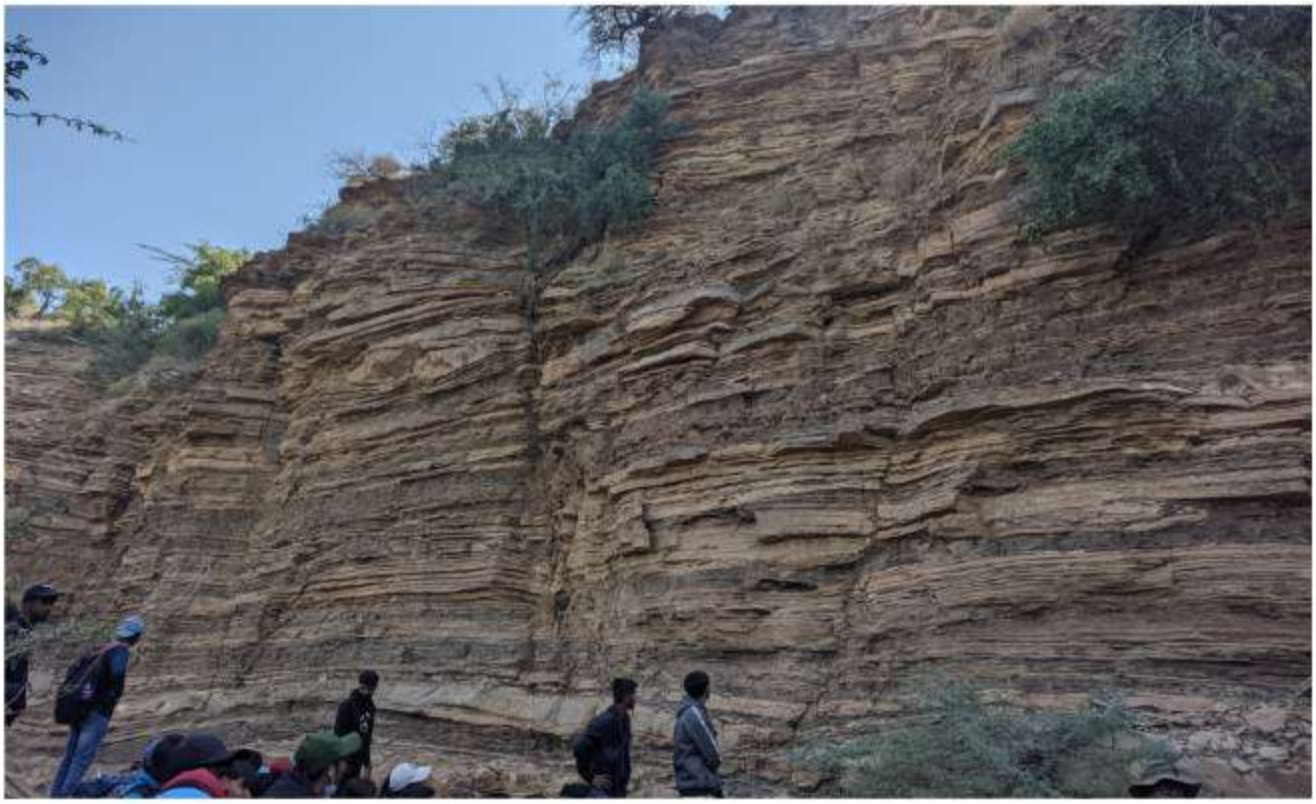
Industrial Training

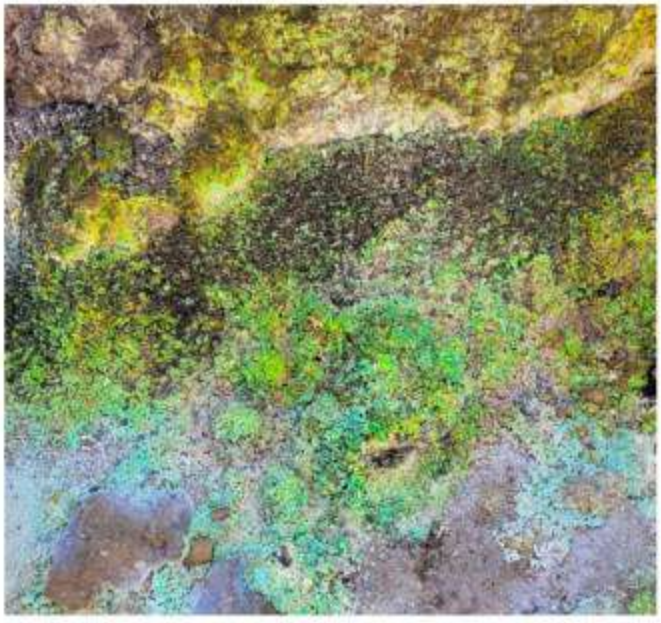
The students are required to undergo 6 to 8 weeks of Industrial Training in the non-teaching period of the Third year of the B.Tech. Program as partial requirement for the award of the degree. This training can be carried out either in Industry, at an R&D organization, or Schools of Technology/Departments of Universities. The comprehensive evaluations/examinations of every internship/ orientation are held soon after its completion. The reputed organizations where our students did there Industrial Training are ONGC, Vedanta Cairn, Halliburton, Sun Petro, DGH, L&T Energy and Hydrocarbon etc.

Geological Field Trip

As a part of the B.Tech curriculum, students underwent the Geological Field Trip for better understanding of Geological characteristics of rock mineralogy. Such trips provide students with the opportunity to visualise, experience and discuss information and also provide a break from your normal routine and experience more hands-on learning.

The below pictures show geological field trip exposure to the students of Batch 2021





STUDENT CHAPTER EVENTS

Written by: Aastha & Harsh P.
Edited by: Yash Kumar

FIPI Events

TechnoAltar 7.0

Guest Lecture on "Introduction to Material Balance"

The educational event, titled "Introduction to Material Balance," was a valuable initiative designed to offer participants a thorough grasp of material balance concepts. The session focused on practical applications, demonstrating how to use the t-Navigator software to enhance understanding.

The session, led by Mr. Shantanu Brajesh, a seasoned Account Manager at RDF India, was informative and skillfully conducted. Renowned for his professionalism and expertise, he shared valuable industry insights, showcasing excellent communication and strategic thinking. His guidance added significant value to the session, contributing to an enriching learning experience. The workshop focused on unravelling material balance intricacies, highlighting the powerful t-Navigator software. He demonstrated its user-friendly interface, showcasing how it streamlines complex calculations, saving time and enhancing accuracy.

Inaugural ceremony

The inaugural ceremony was graced by the eminent personalities of the Oil and Gas Industry . The ceremony was commenced with the lighting of the lamp by the dignitaries, followed by the roadmap of events of TechnoAltar 7.0 shared by the President of FIPI PDEU SC, Miss Pooja Bhatia. A beautiful cultural dance performance, Bharatnatyam, showcased by Ms. Tanmayee Rapuri was the cherry on the cake.

FIPI PDEU SC was grateful by the presence of Mr. Gaurav Hazarika, and Faculty Advisor Dr. Vivek Ramalingam, Dr. Anirbid Sircar (Director of SOET) and Dr. Uttam K Bhui (HOD). With the TechnoAltar 7.0's theme being 'The missing piece of your energy jigsaw' Shri Amit Kulkarni sir's words adhered to the theme and also included FIPI India. We were also elated by the presence of Shri Swapnil Mishra, Shri Shantanu Brajesh, Shri Lakin Nayak and Smt. Deepali Kumar.

Prastutikaran - A Technical Paper Presentation Competition

FIPI PDEU SC organized a Technical Paper Presentation competition entitled Prastutikaran as a part of our annual event TechnoAltar 7.0, which gave all the young Petro minds an excellent opportunity to present their research papers. Panels for different domains like upstream-downstream and energy were created. A separate panel for 1st-year students was created to cultivate their presentation skills.

Emblazon - A Technical Poster Presentation Competition

FIPI PDEU SC organized a Cascade of events as a part of TechnoAltar 7.0, among which one of the engrossing events was Emblazon-The Technical Poster Presentation Competition, wherein participants transcribed their unprecedented designs in the form of striking posters. The competition aimed at dilating the key subject knowledge and presentation skills of the participants. The event was hosted separately for Upstream and downstream petroleum and energy participants.

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ContouGeo

The event was divided into two rounds:

Round 1 :- A Geology Quiz in collaboration with IPE that aimed to evaluate participants' knowledge of geological concepts, minerals, and earth sciences. Contestants had to demonstrate their understanding of rock formations, plate tectonics, and geological processes. Participant's enthusiasm and competitive spirit were evident during this round. The geology quiz provided a platform for them to showcase their geological knowledge.

Round 2 :- This round had two categories and with time constraint which was dedicated to assessing participants' general knowledge of the oil and gas industry.

- General knowledge About Oil and Gas
- Identification of Fold Fault and Construction of Topographic structure from contour Map.

Techniqa

A learning loop is requisite for development and growth. Therefore, FIPI PDEU SC organised a technical quiz competition which was mainly organized for the first and the second-year students to test their learning and give them the chance to boost their knowledge.

Bid-2-Win

As a part of TechnoAltar 7.0, FIPI PDEU SC organized an offline block bidding competition, 'Bid-2-Win'. A bidding competition that assessed participants' bidding and technical skills in order to bid on a block, provided them an understanding of the oil and gas industry's bidding process and politics.

Energy Shark Tank

As the startup waves are rippling through the country, some sharks hungry for ideas have reached out to the shores of PDEU. So, the FIPI PDEU SC organized Energy Shark Tank, as a part of TechnoAltar 7.0.

Energy Shark Tank focused on inculcating the leadership and business skills in individuals as well as invigorating their inner entrepreneur. The judging panel included Mr. Rutvik Dasadia, who is the Founder and Director at Booz Electric Mobility which is South East Asia's first & only Electric Kick Scooter operator company; Mr. Purvin Mariyankari, Director of AEIDA and has a work experience of over a decade in the areas of Taxation, Business Development for start-ups, concentrated in International trade and transportation regulatory compliance; Dr. Aashish Joshi who is currently serving as an Associate professor in Business administration department at SLS PDEU & Mr. Aakash Raval, Co-Founder at Beluga Consultancy services and also has worked with Evosys.

Logger's Hunt

A Log Interpretation Competition. This event consisted of two rounds. Each team was of 2 to 3 members. The first round was a quiz on an online platform. The qualifiers from the first round, went on to the second round where they were given well logs. The students had to interpret the well logs and had to explain the interpretation to the judges using a power point presentation. To make the event more intriguing, the fastest finger round was conducted as a final round. The event was valued by the members, they likewise discovered it to be instructive & fascinating.

Award Ceremony

FIPI PDEU SC commemorated the Award Ceremony to honour all the winning participants of TechnoAltar 7.0 with prizes and gratify them for their time, dedication, and interest in the competitions.

The program was enlightened in the presence of the respective dignitaries such as Dr. Anirbid Sircar, Director SOET, Dr. Vivek Ramalingam, Dr. Bala Subramanian, Dr. Dr. Lakshman Rao Jeeru. We were elated to launch FIPI PDEU's annual magazine 'Aspire'. Later, Ms. Pooja Bhatia, President of FIPI PDEU SC shared her indelible experience of organizing and heading the memorable TechnoAltar 7.0. Succeeding, there was a brief description of all the competitions eventuated under the TechnoAltar 7.0 based on the theme "The missing piece of your energy jigsaw".

C2C Week

In order to bridge the gap between academics and industry, FIPI PDEU SC hosted an event called "C2C Week- Campus to Company Week" that simulates an exhaustive placement drive. This week-long event, had been created especially for students intending to apply for campus placements in the future, participants were encouraged by C2C Week to push themselves, take on new challenges, and show off their skills and potential.

It seeks to give students the knowledge, self-assurance, and exposure they need to succeed in their future professional aspirations.

Guest Lecture on "Careers in Management Technology and Beyond"

FIPI PDEU SC organized a highly enlightening seminar titled "Careers in Management Technology and Beyond." The distinguished speaker for the event was Mr. Abhishek Singh Gautam, Chief Marketing Officer at IMS.

The primary objective of the seminar was to provide valuable insights into the dynamic field of Management Technology, exploring diverse career opportunities and shedding light on the evolving landscape of the industry. He provided an overview of the latest trends and developments in Management Technology, offering attendees a glimpse into the rapidly changing landscape of the industry.

The seminar received an overwhelmingly positive response from the audience, who appreciated the depth of information shared by Mr. Abhishek Singh Gautam. Attendees expressed their gratitude for the opportunity to gain insights from an industry leader and found the session to be highly beneficial for their career aspirations.

Participants in C2C Week had moved through number of rounds, each of which simulates a crucial element of a true placement drive. The technical knowledge, problem-solving capabilities, communication talents, and overall readiness for the corporate world were carefully evaluated during these rounds. These rounds consist of:

1. **Resume Screening** : The first round involved a thorough screening of resumes submitted by participating students. This phase aimed to assess their academic achievements, extracurricular activities, and relevant experiences. The objective was to shortlist candidates who demonstrated a strong foundation in petroleum engineering and the potential to thrive in the industry which had been evaluated based on their presentation. This round emulates the initial screening process conducted by recruiters.
2. **Aptitude Test** : The aptitude test served as the second phase, testing the quantitative, logical, and analytical skills of the candidates. It aimed to evaluate their problem-solving abilities, critical thinking, and aptitude for handling challenges frequently encountered in the petroleum industry. This round simulates the common written examination conducted during placement drives. This round played a crucial role in identifying candidates with strong cognitive abilities.

3. **Group Discussion Round :** The group discussion round provided students with a platform to articulate their ideas, engage in meaningful discussions, and showcase their communication and teamwork skills. This round replicates the group discussion round often conducted to evaluate candidates' ability to express their viewpoints and engage in constructive debates. The topics discussed were related to current industry trends and challenges, allowing candidates to demonstrate their knowledge and ability to work collaboratively.

4. **Practical Assessment Round** : The practical assessment round was a handson phase where candidates were given industry-relevant tasks or problems to solve. This round promotes software & professional skills among the students that is much required in current digital world and also provides an extra edge in the placements.

This round assessed their technical skills and the application of theoretical knowledge to real-world scenarios. It was a critical step in identifying candidates capable of translating their academic learning into practical solutions.

5. **Personal Interview** : The final round of C2C Week involved face-to-face interviews with industry professionals. Participants who qualify the previous rounds had undergo intense interviews with industry professionals. It also simulates the final stage of the placement process, ensuring participants' readiness to join an organization. Candidates were evaluated on their technical knowledge, problem-solving skills, and their fit within the company culture. This round provided a platform for students to express their passion for the petroleum engineering field and understand the expectations of potential employers.

C2C Podcast

FIPI PDEU launched an online podcast series for petroleum engineering graduates across the country to listen to interview experiences of various companies in the petroleum industry with the aim of sharing the experiences of our already placed seniors over various companies and learning from their experiences, staying prepared for interviews, internships, and transitions that might come when a person goes from **campus life to a corporate life**. There are 5 episodes of C2C Podcast uploaded on the official YouTube channel of FIPI PDEU SC.

Guest Lectures by FIPI PDEU SC

Topper Talk

The "Topper Talk" session proved to be an invaluable opportunity for participants seeking academic success, with a particular focus on excelling in competitive exams like GATE. This informative and inspiring session revolved around strategies and study techniques that enable high achievement. The speaker's insights and guidance offered participants a roadmap to score well in challenging exams, instilling confidence and motivation. We were honoured to have Mr. Bhumin Baraiya as our guest speaker who is an exceptional achiever and secured AIR 2 in a GATE Exam. The session was a powerful source of knowledge and encouragement, equipping participants with the tools and motivation to aim for top marks in their forthcoming exams.

Footsteps to data science using Python

FIPI PDEU SC organized a guest lecture on 'Footsteps to data science using Python'. It was an enlightening workshop that delved into the vital intersection of data science and the petroleum industry, using Python as a key tool. This workshop laid a fundamental objective - to demystify Python, the programming language often perceived as intricate and intimidating, making it approachable and comprehensible to all participants, irrespective of their prior programming experience. This foundational understanding of Python was not merely a preliminary step but a cornerstone that unlocked the intricacies and nuances of data science within the context of the petroleum sector. Under the guidance of Mr. Jaiyesh Chahar who was our guest of honour, this event was enriching and elaborative in experience.

Geomechanics in a Nutshell

FIPI PDEU SC conducted a two-day workshop named "Geomechanics in a Nutshell". The workshop was enriched by the insightful address by Dr. Dharmendra Kumar, a distinguished research scientist from the Reservoir Geomechanics and Seismicity Research Group at the University of Oklahoma, USA. His expertise added depth and resonance to the proceedings. The workshop had a clear focus on geomechanics and its practical applications within the petroleum industry. It commenced with a foundational exploration of what geomechanics is, how it works, and why it matters. A significant portion of the workshop delved into the intricacies of Geo-mechanical Controls on Well Interference, commonly known as "Frac-hits". Things like how the pressure in the reservoir changes, how it can reactivate old fractures, and how the rock behaves under pressure were discussed.

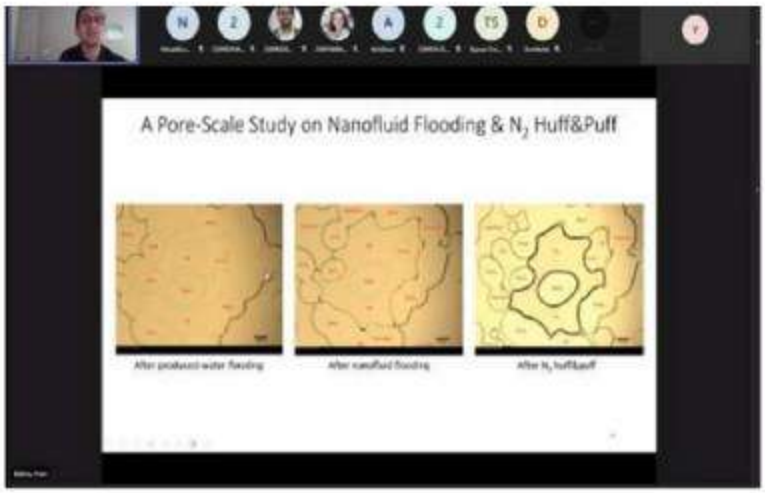
Carbon Capturing Utilization and Storage

The FIPI PDEU SC hosted a highly informative one-day workshop focusing on Carbon Capturing and Storage Utilization, featuring Mr. Divya Shah as the esteemed guest speaker. A CCUS consultant at Wood USA and former Secretary of FIPI PDEU, brought extensive expertise to the session. The workshop centred on the crucial subject of carbon capturing, with a specific emphasis on storage utilization. Attendees had the privilege of delving into discussions led by Mr. Shah, gaining valuable insights into the techniques and importance of effectively capturing carbon emissions and efficiently utilizing storage methods. Of notable interest were the discussions surrounding carbon capturing technologies and the strategic utilization of storage, highlighting the critical role these processes play in mitigating environmental impact. His expertise provided attendees with a deeper understanding of the nuances of carbon capturing, emphasizing the significance of storage utilization in combating environmental challenges.

EOR Technologies via Microfluidics

The FIPI PDEU SC organized an insightful session on "EOR Technologies via Microfluidics," featuring Dr. Prem Bikkina, Associate Professor at Oklahoma State University, as the distinguished guest.

The event provided a comprehensive focus on the vital topic of Enhanced Oil Recovery (EOR) and its intersection with microfluidics. His expertise guided attendees through an exploration of innovative techniques, emphasizing the pivotal role of microfluidics in optimizing oil recovery processes. Attendees gained valuable insights into EOR methodologies, particularly the integration of microfluidics, which emerged as a key technology in enhancing oil extraction. His expertise illuminated the potential of microfluidics to revolutionize Enhanced Oil Recovery techniques. It served as a platform for learning and discussion, fostering a deeper understanding of cutting-edge EOR methodologies empowered by microfluidics.



Social Initiative

Social initiative events hold immense importance as they provide an opportunity to make a positive impact on society and address important issues. Therefore, With the aim to raise awareness about the importance of animal welfare, to foster a sense of responsibility towards these voiceless beings, and to inspire others to be actively involved in creating a better future for animals, FIPI PDEU SC organised a social initiative at Jivdaya Charitable Trust, Non-government animal welfare organization at Ahmedabad. Petroleum Enthusiast Students visited this animal welfare trust and spent time with beautiful animals and birds to provoke a thought amongst people that together, we can strive towards a more compassionate and inclusive society.

SEG EVENTS

Edited by: Yash Kumar & Pratham Kumar

SEG WEEK

To survive in today's competitive world, one must be immaculate in every area to stay in the race. In light of this, the SEG-SPG-EAGE PDEU Student Chapters arranged the "SEG WEEK 7.0". It was scheduled from 10th – 12th October 2023. The SEG WEEK 7.0 activities assist in the development of creativity, critical thinking, presentation and writing skills, and the intensification of technical knowledge of entrants in a professional manner, as well as the exploration of adroitness that will be useful in the near future.

TEACH ME A POINT

While we teach, we learn new things, It also provides you an opportunity to learn in detail about a core subject which is a part of the curriculum and develop effective teaching skill. So, As a part of SEG Week 7.0, We feel elated to conduct "Teach me a point 1.0". This event focused on reverse class. This event was a unique opportunity for participant to increase their teaching method in particular topic. The participant needed to prepare for the topic given and teach their point to the judges and the listeners. This competition helped the participants to enhance their confidence level and teaching skills while exploring about various topics.

TECHNOVATE

As a part of SEG Week 7.0, We, the SEG-SPG-EAGE PDEU Student Chapters conducted an amazing event "TECHNOVATE 3.0" - The Presentation Competition. All the participants have to present a presentation on the "Trending Technologies of Oil and Gas". The event helped participants to enhance their knowledge of the oil and gas industry and they were also able to improve their Presentation and communication skills. Teams presented on different technologies like on Managed Pressure Drilling, Artificial Gas Lifts, Long Stroke Pumping Units and many more in the Technovate. The top 3 teams were awarded worth 4000/- cash prizes. Dr. Paul Naveen was the judge of the event. After all the presentation, sir has also given suggestions to teams to improve their skills and appreciate their efforts.

VALEDICTORY

It is with great nostalgia and a sense of fulfillment that we recount the Valedictory Ceremony that took place on the 19th of April 2023. This event marked the closing of an extraordinary chapter for SEG-SPG-EAGE PDEU Student Chapters, as we bid farewell to the outgoing committee and welcomed a new era of leadership.

The evening kicked off with a poignant address from the outgoing President, who took the audience on a journey down memory lane. Reflecting on the challenges faced and victories achieved throughout the academic year, the President shared anecdotes and stories that encapsulated the essence of the team's dedication and perseverance. It was a moment of reliving the shared experiences that defined our collective journey.

A heartfelt moment ensued as each member of the outgoing committee was presented with a Letter of Appreciation. These letters, tangible tokens of gratitude, were a testament to the commitment, hard work, and leadership demonstrated by each member. The room resonated with applause, acknowledging the unwavering dedication that had been the backbone of SEG-SPG-EAGE PDEU Student Chapters.

Uttam Kumar Bhui, our esteemed mentor, graced the occasion with reflections on the growth witnessed throughout the year. Bhui Sir's guidance and mentorship were acknowledged as integral to the success of the chapter. His words, a beacon of wisdom, resonated with the outgoing committee, inspiring them to carry the torch forward and continue the legacy that had been established.

As the evening progressed, the torch was symbolically passed to a new set of leaders. The introduction of the new committee members marked the beginning of a new chapter in the history of SEG-SPG-EAGE PDEU Student Chapters. The excitement in the air was palpable as the new leaders embraced their roles and responsibilities, ready to carry forward the vision of the organization.

In conclusion, the Valedictory Ceremony was not just a farewell but a celebration of the journey undertaken and the milestones achieved. As we transitioned from one chapter to another, we carried forward the lessons learned, the bonds forged, and the collective determination to continue the journey towards excellence.

Edited by: Yash Kumar &
Pratham Kumar

SPE EVENTS

PDEU SPE FEST DAY 1

The first day of the grand PDEU SPE Fest was glorified by the Inaugural ceremony, honoured by the presence of Shri Amogh Chitrao, Consulting Petroleum Geologist, Shri. Kanhaiya K. Jha, HoD, Reservoir Engineering, MOPNG, Shri Rahul Bali, Chairperson, SPE New Delhi Section, Dr. Anirbid Sircar, Director, SOET, PDEU, Dr. BhawaniSingh G Desai, Associate Professor, Dr. Uttam Kumar Bhui, HoD, Petroleum, and several prominent dignitaries and members of the SPE India Section. The Ceremony commenced with a short video on the brief history of the aims and achievements of this esteemed institution. The video was followed by the introduction of the PDEU SPE Fest 2022 and an enlightening speech by given by the Achit Jain, President, SPE PDEU Student Chapter. The lamp lighting was followed by a brief introduction of the dignitaries. The dignitaries then shared their words of wisdom and addressed the ceremony. The ceremony concluded with Dr. Anirbid Sircar, Director, SPT, PDEU, presenting the dignitaries with a memento as a gesture of appreciation.

The Inaugural Ceremony was followed by the Panel Discussion event moderated by Dr. Anirbid Sircar, commenced with the introduction of the topic, "Energy Transition: Oil and Gas in a Shifting ESG Landscape." The dignitaries Dr. RK Vij, Dr. Praghnesh Bhatt, Mr. Anand Gupta, Prof. Shalivahan, Dr. Abhijeet Ray placed their valuable points, discussing the various outcomes while showcasing their experience and inspiring the budding petroleum engineers. The awe- inspiring discourse, flourishing with knowledge and proficiency soon dissolved with heartfelt gratitude and respect.

With an attempt to incline students towards the Oil and Gas Domain, 'Energy Mania: Acknowledging Torchbearers'; a quiz-based competition was designed for school pupils to test their understanding of the current energy sector and its sustenance with an entertaining and educational approach.

Post lunch, the second Panel discussion commenced on the topic, "Revitalizing late-life assets, mature fields, and aging facilities. The session provided valuable insights on the stimulation processes and their viability with respect to the geological and formation aspects. The post lunch session for 'Bid your Block: Block Bidding Contest' familiarized participants with the Oil and Gas bidding processes such as the NELP, HELP, and DSF in the upstream sector. Participants analysed the most prospective block from the provided geologic data. The final round for 'Catechize: International Quiz competition' was organized, rendering a platform to students all over the world to test their comprehensive understanding of the petroleum and chemical industry.

Concluding the end of a glorious day, the networking night served as an opportunity to network with peers, superiors, dignitaries, and industry professionals. All participants and committee members enjoyed the end of a successful day, gaining valuable insights from the experiences shared by their superiors.

PDEU SPE FEST DAY 2

On the second day of the biggest oil and gas petrovaganza PSF'22, the day commenced with an enlivening event "Mud-O-Gee Drilling mud Preparation Competition" where participants got a platform to examine and showcase their skills and caliber in mud preparation. This competition helped the participants in enhancing their knowledge about various properties and compositions for Drilling mud.

After Mud-O-Gee, we continued with the final round of the "Exegesis- Well Log Interpretation Round." The identification of formations, essential circumstances, and petrophysical qualities are all central components of logging. Competitors were able to display their analytical and problem-solving prowess in this setting.

Next, we held a guest lecture by Mr. KC Hari on the topic "Scope for a Realistic Hydrocarbon Vision." The session provided students with a deep insight into issues such as energy security, the use of alternative fuels, the interchangeability of technology, and how all these are vital to ensure that the mix of energy sources used in the economy is optimal and sustainable.

The Guest Lecture was followed by another intriguing event, the final round of "Bid your Block: The Block Bidding Competition". In the challenging question on block bidding and city gas distribution, the participants showcased their excellent decision-making skills and deep technical knowledge.

The next event was "Showcase-Paper and Poster Presentation", a technical paper and poster presentation event where participants manifested their research and technical skills and directly connected with industry professionals. The participants submitted the abstract for a technical event before the fest.

The day culminated in the "Examen- Case Study Solving Competition", an event where contestants competed to create the best solution to a practical problem related to the petroleum industry and were evaluated based on creativity, approach to the problem, and evidence of thoroughness of their solution.

Gala Night is the perfect way to cap off a day that was packed with learning and intense competition because what could be better? A night filled with merriment, music, and dance, followed by fine dining. Everyone who took part and served on the organizing committee had a great time during the event; they danced, told tales, and enjoyed the tasty cuisine

PDEU SPE FEST DAY 3

On the final day of the biggest oil and gas petrovaganza PSF`22, the day commenced with an energizing event "Feud-A-Nation: Dispute Solving Competition," which provided a forum for participants to express their views and spar using the weapons of eloquence and logic on the topic "Imposition of the price cap on Russian crude by European Union: It's impact on the global economy."

Followed by "Chemfluence: The Chemical Challenge," which brought together the fun of quizzes and the enjoyment of case studies based on the chemistry realm. Attendees at this event were given exposure to the chemistry underpinning the oil and gas industry, information that should have aided in the development of their conceptual understanding of the field.

Next, we held the "Chemforge: Cooling Tower Model" making competition, where participants came up with innovative designs for miniature versions of cooling towers using natural draught. By participating in this event, they were able to expand their understanding of cooling towers.

The spectacular event was subsequently followed by another intriguing event, "Bid your Block: The Block Bidding Competition." In the challenging question on block bidding and city gas distribution, the participants showcased their excellent decision-making skills and deep technical knowledge. The event enhanced partakers' Exemplary skills and quench their thirst for knowledge in bidding.

The next event was, "Geolog: The Geology challenge", a quiz that tested the geomorphology skills of partakers with the series dissected with amusing questions that aimed at enhancing their caliber. Geology carters the crucial knowledge in helping participants to understand complex concepts while stimulating interest in learning about the new subject matter.

Summoning up with the last event "Spectrocode: The Coding Competition" an intensive programming contest that analyzed the partakers' problem-solving skills along with their algorithmic prowess.

The 3-day saw its conclusion with a closing ceremony, graced by Dr. Anirbid Sircar, Dr. Uttam Kumar Bhui, Dr. Bhawanisingh G. Desai, and many prominent faculties of PDEU. Opportunities at SPE PDEU Fest came from every edge, and the participation of dignitaries who imparted their knowledge and advice was a priceless bonus. At the close of the ceremony, Mr. Archit Jain, President of the SPE PDEU Student Chapter, gave a vote of thanks.

The Fest allowed the students to exhibit their talents in the plethora of events that are lined up, ranging from technical to non-technical events thus broadening their horizons towards the Oil and Gas industry.

14th ANNUAL CEREMONY

SPE PDEU Student Chapter organized its 14th Annual Ceremony in the presence of Shri Sujit Mitra, General Manager (Reservoir), ONGC, Mr. Shree Jayesh Patil, Operation Head, JTI and Mr. Hrishikesh Karnik, Assistant Executive Engineer Drilling, ONGC.

The Student Chapter was handed to the New Office Bearers of 2023-24 who will carry the legacy of the student chapter to greater heights.

Entire committee celebrating the closing ceremony of PSF2022

FUNDAMENTALS OF RESERVOIR SIMULATION

SPE PDEU Student Chapter organized a guest lecture on "Fundamentals of Reservoir Simulation". The enlightening lecture was delivered by "Mr. Utkarsh Lall", who is currently serving as Senior Production Engineer at Sun Petrochemical Pvt. Ltd.

The lecture started by a brief introduction on Reservoir simulation and its principles given by the speaker. The fundamental contrasts between reservoir modelling and simulation were subsequently addressed during the lecture. Speaker also emphasized certain crucial CMG facts that would aid students in their future simulation education. The event concluded with an interactive Q&A session followed by a vote of gratitude for the speaker.

HYDROGEN ECONOMY

SPE PDEU Student Chapter has organized a guest lecture on "Hydrogen Economy". The enlightening lecture was delivered by "Mr. Zachary Evans" who is currently serving as sales Director at Dark Vision and former SPE Regional Director for North America, at PDEU.

The discourse sparked engaging discussions on fostering collaboration between academia, industry, and policymakers to expedite hydrogen adoption. It was an enlightening session that underscored hydrogen's pivotal role in our sustainable energy future.

Overall, it was highly informative and interactive session and all the participants grabbed the knowledge at their best.

SO WHAT?

Date: 27th October 2023

The elucidated discussion was delivered by "Mr. Shahid A. Haq" who is currently serving as Reservoir Domain Head and Reservoir Domain Adviser at Schlumberger Well Construction.

Throughout the discussion, our speakers delved into crucial aspects of reservoir characterization, shedding light on the "so what" behind petrophysical data. From porosity and permeability to saturation and beyond, the insights shared have undoubtedly deepened our understanding of reservoir dynamics.

It's evident that the collective knowledge and experience within our community contribute significantly to unraveling the intricacies of petrophysics.

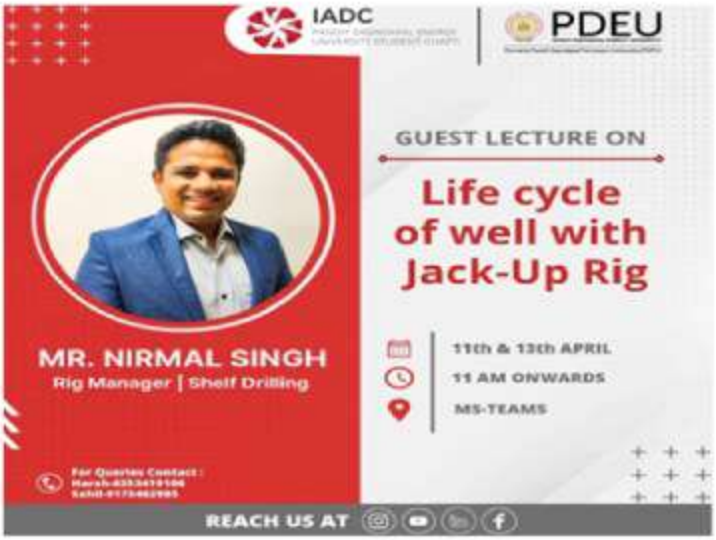
IADC Events

Edited by: Yash Kumar & Pratham Kumar

WEBINAR ON UNITIZED WELLHEAD

In this webinar on Unitized Wellhead featuring Mr. Siddheshawar Hawanale, a Technical Leader at Worldwide Oilfield Machine (WOM), participants gained valuable insights into the significance of unitized wellheads in drilling operations. Mr. Hawanale emphasized the various benefits that unitized wellheads offer over conventional alternatives, shedding light on their enhanced efficiency and advantages. The webinar delved into the intricacies of the design and installation processes for unitized wellheads, providing a comprehensive overview for attendees. By exploring the critical aspects of this technology, the session aimed to equip professionals and enthusiasts in the field with a deeper understanding of the role and advantages of unitized wellheads in the realm of drilling operations.

WEBINAR ON UNITIZED WELLHEAD



IADC PDEU Student Chapter was delighted to conduct a guest lecture on the topic, "Life cycle of well with Jack-Up Rig". The enlightening guest lecture was delivered by Mr. Nirmal Singh, who is currently serving as Rig manager at shelf drilling.

The speaker discussed about the life cycle of well starting from spudding till completion in the offshore oil and gas sector. This delightful session was aimed to broaden student's knowledge in offshore drilling.

ADVANCE CEMENTING TECHNOLOGY AND CAREER PROSPECTS

We were exhilarated to conduct a guest lecture on "Advance Cementing Technology and Career Prospects."

It was conducted by Mr. Nishant Kumar Singh(Field Operational Professional II, Halliburton). Mr. Singh is a well-known expert in the field of cementing technology and has a wealth of experience in the oil and gas industry.

The webinar focused on the latest advancements in cementing technology, including its applications and benefits. Additionally, he provided valuable insights into the career prospects in this field, helping us to understand the required skillset and knowledge to mould yourself into the industry professional.

INTRODUCTORY SESSION

The session was aimed at welcoming the new batch of students and introducing them to the academic curriculum, faculty, and facilities. During the introductory session for Batch 2023-2027, we warmly welcomed new students to the academic community and familiarized them with the various facilities available. The session included a comprehensive introduction to the academic policies and procedures, ensuring that students were well-informed about the guidelines they would need to follow throughout their academic journey. Additionally, we provided a detailed overview of the course structure, shedding light on the curriculum's key components and outlining the expectations for the upcoming years. This session aimed to set a solid foundation for the students, ensuring they felt equipped and informed as they embarked on their educational endeavors.

VALEDICTORY CEREMONY

GUEST LECTURE ON "RESERVOIR MONITORING THROUGH RMT TOOL" BY MR. PRAVESH GUPTA

The host for the event Miss. Tithee Bhavsar welcomed all the dignitaries.

The session was conducted by MR. Pravesh Gupta who carries an experience of more than 12 years in the oil and gas industry. Mr. pravesh Gupta is currently serving as country reliability manager at HLS ASIA LTD. The chief guest was felicitated by Mr. UttamKumar Bhui (Head of the Department Petroleum Engineering) followed by his words of gratitude and welcome. Welcome Speech by Dr. R.K.Vij (Dean Placement) commenced the event, and the host handed over the mic to Mr. Pravesh Gupta to begin the session. He began his session by making students aware of the risks and dangers of this operation and how to avoid such accidents. He began with the basics of the tool and covered all the technicalities of operation. During his session, he made students aware of 'SATG' measurements which is a relatively new measurement apparatus used in industry.He concluded his session with an interactive Q&A session and solved the doubts of students.

About The Valedictory ceremony:

On April 27th IADC PDEU SC successfully celebrated its 3rd valedictory ceremony and the ceremony was witnessed by more than 100 attendees including students, industry experts, and faculty members. It was commenced with a Technical Session by Mr. Pravesh Gupta. Further, the valedictory ceremony is followed by a welcome address by Mr. Bhavanisingh Desai (Dean) and after his inspiring words. The core committee for the year 2022-2023 was awarded a certificate and a letter of recommendation for their immense effort throughout the year to help the chapter reach new heights.

After appreciating the work of the core committee, the new core committee for the year 2023-2024 was announced. Mr. Ayush Katyare (chairman IADC PDEU SC, 2022-2023) shared a vote of thanks and he appreciated the support from the institution and faculty mentor Dr. Hari. He expressed his heartfelt gratitude to all the stakeholders of IADC PDEU student chapter starting from Mr. Arun Karle, Mr. Mike Dubose, and IADC fraternity of south-central asia and around the globe.

The office bearers for year 2022-2023 officially signed off and they announced the office bearers for year 2023-2024 in which they announced Mr. Harsh Patni as chairman and Ms. Tithee Bhavsar as Vice Chairman followed by Mr. Anand Pal as secretary, Mr. Sahil Panwala as Treasurer, Mr. Raiwant Modh and Mr. Vishal Bhoi as chapter coordinator. At last, the ceremony was followed by a cake-cutting and a group photo.

The IADC PDEU family Thanks outgoing office bearers for their contribution in the growth of the chapter and also congratulates the new office bearers.

WEBINAR ON S.T.E.P (SOCIETY, TRANSITION IN ENERGY AND PETROLEUM)

It was held on 1st July 2023 by Mr. Rajib Roy who is Superintending Engineer at IOGPT, ONGC Panvel. Firstly, the webinar starts with outlines of the energy transition and which gives there will be reliable chances for future in need of the newly environmentally friendly energy sources and to reduce the greenhouse gases.

The Management would be first required for any settlement of the energy production. It consists of the following requirements are:

- Brown Fields to clean reserves
- Enhanced geothermal recovery
- High Pressure Air Injection
- IN-SITU
- Integrated Systems
- Tools Required
- Well Design

Energy transition is a significant structural change in an energy system regarding supply and consumption. Currently, a transition to sustainable energy (mostly renewable energy) is underway to limit climate change. It is also called renewable energy transition. Speaker also focused on some of the key drivers of energy transition:

- Climate change: The need to reduce greenhouse gas emissions to mitigate climate change is one of the main drivers of energy transition.
- Rising cost of fossil fuels: The cost of fossil fuels is rising, making renewable energy more competitive.
- Advances in renewable energy technology: Renewable energy technologies have become more efficient and affordable in recent years, making them a more attractive option for energy production.
- Government policies: Governments around the world are increasingly putting in place policies to support the development of renewable energy and the transition to a low- carbon economy. The energy transition is a complex and challenging process, but it is essential to address the climate crisis and secure a sustainable future for our planet.
- A brownfield is a property that may be contaminated by hazardous substances, making it difficult to expand, redevelop, or reuse.
- A petroleum brownfield is a type of brownfield that is contaminated by petroleum products.
- High-pressure air injection (HPAI) is a process that uses compressed air to drive oil to the surface.

WEBINAR ON CAMPUS TO CORPORATE: EVOLUTION OF MINDSETS

This session was taken by Mr. Reddimi Sai Sampath Reddy Who is presently Flow Assurance Engineer at Wood. He begins with discussion on transition from college to the corporate world can be a daunting one. Not only people are facing new challenges and responsibilities, but they are also expected to adopt a different mindset. In college, they were encouraged to be creative and take risks. In the corporate world, however, they are expected to be more structured and focused on results. Further, he focused on the challenging areas in corporate Sector. A few of the points he discussed are as follows:

- Voicing out your opinion
- Adjusting to the new environment
- Time Management
- Work-life balance
- Lack of industrial knowledge
- Working as a team
- Physical & Mental Strength

He, then also provided a few Interview Tips to the students:

- Embrace your fear
- Introduce yourself in a given time period.
- Explain the value you have created during projects among your colleagues.
- Highlight your strengths
- Make them aware that you are working on your weaknesses
- Gracefully accept if you don't know certain things.
- Sound Confident
- Be careful about the words you use while answering
- Understand your Interviewer's or Company's requirement
- Try to conduct small research about your Interviewer
- Highlight if your values align with that of the company
- Ask the Interviewer at least one question.

By concluding the session, we thank our Speaker, Mr. Reddimi Sai Sampath for their insightful knowledge on transition to Evolution on Mindsets.

HIRE ME: A PRACTICAL GUIDE TO ACE THE HIRING PROCESS

The key takeaways of session are:

- CV: Highlight your skills, experience, and achievements; match them to the job requirements; avoid errors
- Group discussion: Express your views, listen to others, build on ideas, handle disagreements; show your leadership, teamwork, and communication skills
- Content: Follow a simple structure, use relevant examples, add some creativity; use visual aids, body language, and voice modulation
- Interview: Research the company and the role, anticipate questions, practice answers; show your personality, confidence, and enthusiasm.

We are immensely grateful to Mr. Parag H. Bhoraniya for a very insightful workshop on Hire Me: A Practical Guide to Ace the Hiring Process.

SUBSEA PIPELINE DESIGN

On 24th January 2024, IADC PDEU SC conducted an informative webinar on " Subsea Pipeline Design". The session was delivered by Mrs. Pallavi Tyagi, founder of 26 Technology Services and Head of marketing and development at Idg10 Engineering Solutions. Mrs. Pallavi Tyagi is also recognized as one of LinkedIn's top voices.

The webinar commenced with a brief introduction about the speaker and the flow of the event. The speaker commenced her session with an interactive video of subsea pipeline systems and an introduction to some components of subsea systems. She introduced students to different kinds of piping materials, different coatings, and fabrication methods. After that, the speaker spent some time describing the overall value chain of subsea pipeline systems beginning from the fabrication of the pipeline to the laying of the pipeline.
At the end of the session, she introduced students to SPDT which is a centralized database for subsea pipeline designs, she also explained to students how they can benefit from this software for developing a tech-savvy career in the oil and gas industry. She resolved the doubts raised by students and the session concluded with a vote of thanks from the host.

TESTIMONIALS

Written by: Ananya Verma
Edited by: Yuvraj Kaswan

OKHLAHOMA Student Exchange

Embarking on the semester exchange program at the University of Oklahoma was a remarkable adventure that brought a myriad of enriching experiences. The challenges that occurred while adapting to a different educational and cultural system became stepping stones for personal growth. The diverse coursework, engagement with professors, and the vibrant culture of the campus provided me with opportunities to learn and connect with students from various backgrounds.

University of Oklahoma not only expanded my academic horizons but also helped me in developing resilience and adaptability. It was a holistic journey that left an indelible mark on my life.

~ Rajvi Suthar (21BPE066)

GOTECH Conference

The Gas and Oil Technology Conference (GOTECH), organised by Dragon Oil and the Society of Petroleum Engineers (SPE) was conducted during March 13-15, 2023, wherein I got an opportunity to present my research paper, titled "Novel techniques to prevent wax deposition while hydraulic fracturing of shallow waxy oil reservoirs" (SPE 214193), which was later published on Scopus. The conference provided me with an extensive exposure to not only industry experts, but also to students, and recognising their knowledge about new innovations and approaches in the industry.

~ Aashish Dadwani (21BPE036)

TECHNICAL ARTICLE

Edited by: Yuvraj Kaswan

"Revolutionizing Upstream Oil and Gas: Unleashing the Power of Data Integrity Technology"

By: Raiwant Pankajkumar Modh
(20BPE062)

The upstream oil and gas sector is undergoing a revolutionary transformation propelled by the integration of advanced technologies. Among these, data integrity technology emerges as a catalyst, reshaping operational landscapes and fostering unprecedented efficiencies. This article delves into the pivotal role of data integrity technology in upstream oil and gas, exploring its impact on traditional methodologies, elucidating its benefits and challenges, and envisioning the potential future developments in this dynamic landscape.

Introduction: In the digital transformation era, the upstream oil and gas industry embraces cutting-edge technologies to enhance efficiency and productivity. Central to this transformation is the advent of data integrity technology, a powerhouse solution addressing historical challenges in data security, reliability, and quality. Notable advancements in processing power, data storage, and networking capabilities have catalyzed the industry's shift toward embracing these technologies.

Overview of Data Integrity Technology: Data integrity technology is more than just a solution; it represents a paradigm shift in how the industry manages, validates, and safeguards its data. Data integrity ensures the precision, comprehensiveness, and consistency of data throughout its entire lifecycle. Key components like data validation, quality assurance, data governance, and data lifecycle management form the bedrock of this technology. The seamless integration of these components into upstream oil and gas operations is crucial, and advanced tools like data analytics platforms and real-time monitoring facilitate this integration.

Conventional Oil and Gas Methods: To understand the magnitude of the transformation, a reflection on conventional methods is imperative. Manual data entry, data silos, and historical data accuracy issues have plagued the industry for years. This section elucidates the limitations of these traditional approaches, emphasizing their inefficiencies compared to the capabilities offered by data integrity technology.

Application of Data Integrity Technology in Upstream Oil and Gas: The transformative impact of data integrity technology is vividly illustrated in its application within upstream oil and gas operations. The many advantages of embracing this technology include real-time data monitoring and validation, automated data collection and analysis, enhanced security, and proactive decision-making. It has become the linchpin for asset integrity management, offering automated data analysis, predictive maintenance, and real-time monitoring to optimize the industry's critical assets.

Differences between Data Integrity Technology and Conventional Methods: A critical analysis of the disparities between data integrity technology and conventional methods reveals a stark contrast. Data integrity technology outperforms traditional approaches from accuracy and reliability to operational efficiency and cost savings. It ensures precise decision-making through accurate and current information and streamlines operational processes, leading to significant cost reductions and improved safety.

Challenges and Limitations: No technological revolution is without its challenges. This section navigates the hurdles posed by data privacy and cybersecurity concerns, legacy system integration issues, data quality assurance, and the imperative need for a skilled workforce. Acknowledging these challenges is crucial in charting a path for successful implementation.

Future Directions and Potential Developments: The article explores the potential advancements and future directions that could further revolutionize the upstream oil and gas industry. Blockchain technology is a promising solution for enhanced data integrity through decentralized and transparent data storage. The continued evolution of artificial intelligence and machine learning applications holds the promise of more sophisticated data analysis and predictive modeling. Integrating the Internet of Things (IoT) could further enhance data collection capabilities, and cloud-based data management solutions provide flexibility and scalability.

Case Studies and Success Stories: Real-world success stories are compelling evidence of the transformative power of data integrity technology. Case studies from industry giants like ExxonMobil, Shell, and Chevron illustrate how integrating real-time data monitoring, advanced analytics, and predictive maintenance has led to improved operational effectiveness, cost savings, and enhanced safety. These success stories showcase the tangible benefits and competitive advantages of adopting data integrity technology.

Conclusion: In conclusion, the article encapsulates the seismic shift data integrity technology brings to the upstream oil and gas industry. It underscores the industry's imperative to embrace this technological revolution, leaving behind conventional methods that hindered efficiency and accuracy. The transformative journey is not without challenges, but the potential benefits of accuracy, efficiency, cost savings, and safety make it worth undertaking. As the industry forges into the digital era, the power of data integrity technology stands as a beacon, guiding the way toward operational excellence and unparalleled success.

NON-TECHNICAL ARTICLE

Edited by: Yuvraj Kaswan

"From Drill Bits to Wit: Pete and Derrick's Hilarious Oilfield Odyssey"

By: Sumair Mudliar
(21BPE048)

In the heart of Oil Town, there lived a petroleum prospector named Pete. Pete was famous for talking to his drilling equipment, claiming it had a personality. One day, his drill, affectionately named "Derrick," started talking back.

Derrick revealed a secret – it had dreams of becoming a stand-up comedian in the big city. Shocked but intrigued, Pete decided to support Derrick's dreams. They modified the drill with a speaker system and set off for the city's comedy clubs.

Derrick's first gig was a hit. The audience loved the unexpected humor of a talking drill. Soon, Derrick became a sensation, headlining shows with Pete as his sidekick. Their comedic duo, "Pete and the Pneumatic Punchline," brought laughter to every corner of the city.

However, success came with its challenges. Other comedians were jealous, especially the hydraulic press that felt overshadowed. The press devised a plan to sabotage Derrick's next performance by leaking oil all over the stage.

Unfazed, Pete and Derrick turned the mishap into a slick comedy routine. The audience roared with laughter as they slipped and slid around the oil-covered stage, turning adversity into hilarity.

Pete and Derrick's resilience and humor triumphed over the hydraulic press's sabotage, making them even more popular. In the end, the oil-soaked comedy act proved that laughter could conquer any sticky situation in the unpredictable world of petroleum and punchlines.

NON-TECHNICAL ARTICLE

Edited by: Yuvraj Kaswan

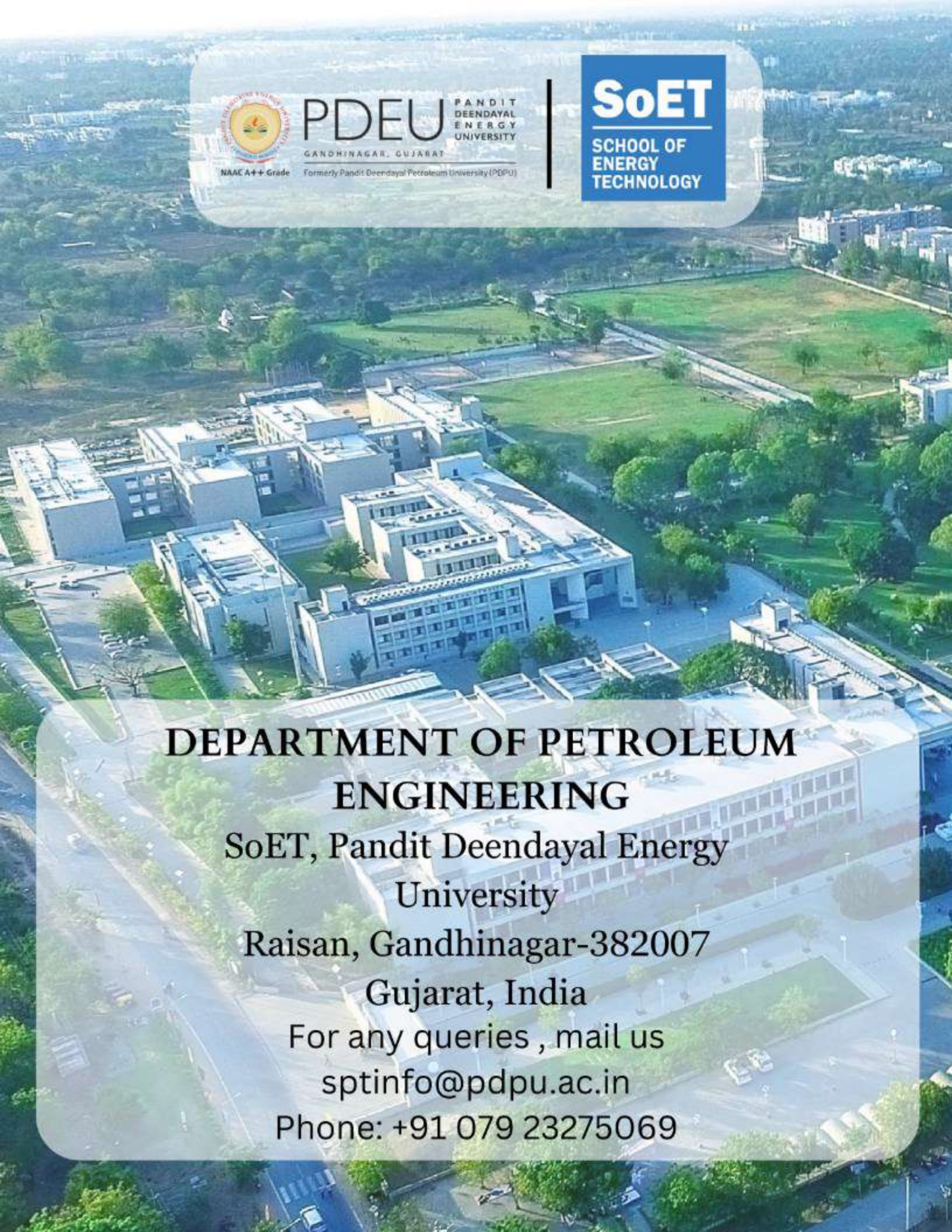
"Holographic Universe- A String Theory Axiom"

By: Aarzoo Jobanputra
(21BPE069)

Do we live in the one true reality or in one of the many simulations? This question has been contemplated by several brilliant minds in recent times. Physicists, philosophers and people of academia have all pondered over the true meaning of human existence. One might rhetorically view the world through a bird's eye and ask, 'how is all this real?'.

Stephen Hawking and Thomas Hertog theorized that all the information in the universe is stored on a flat, two-dimensional surface and the world around us is then projected from this information. This seems improbable when put in layman's terms but is supported by string theory, eternal inflation and Einstein's theory of general relativity.

What does that mean for us? Is there a type III civilization as given by Kardashev, that has designed humanity as a simulated hologram? Are we mere lab rats for some researchers of this advanced civilization? Or worse, a school project hologram of a bored advanced alien child?



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