

Knowledge Corridor, Raisan Village, Gandhinagar - 382426 Gujarat (State), INDIA Tel: +91 79 23275060 | Fax: +91 79 23275030 Website: www.pdpu.ac.in

# **Board of Studies Minutes of the Meeting**

Of

# **Department of Chemistry**

(B.Tech., B.Sc. and M.Sc. Programs)

(Date: 04th July, 2023 at 10:30 AM onwards)



Pandit Deendayal Energy University Knowledge Corridor, Raisan Village, Gandhinagar - 382007 Gujarat (State), INDIA Tel: +91 79 23275060 | Fax: +91 79 23275030 Website: www.pdpu.ac.in



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Minutes of Board of Studies Meeting of Chemistry Department for B.Sc. And M.Sc. programs held on 04th July, 2023 at 10:30 AM onward in E Block CDC Cell conference room

#### A. List of BoS committee and nominated members:

Sr. No.	Faculty Names	Designation	Remarks
1.	Prof. Anirbid Sircar	Director, SoET, Special Invitee	Absent
2.	Dr. Pragnesh Bhatt	Dean, SoET, Special Invitee	Absent
3.	Prof. Manoj Pandey	Professor & HoD, Department of Chemistry, SOET	Present
4.	Dr. Anirban Das	Assoc. Professor, Department Member-1	Absent
5.	Dr. Tapan Pal	Asst. Professor, Department Member-2	Absent
6.	Dr. Rama Gaur	Professor & HoD, Department Member-3	Present
7.	Dr. Sandip R. Patil	Assoc. Prof., Navrachna University, Vadodara as External academic members-1	Present
8.	Prof. V.K. Jain	Professor, Dept. of Chemistry, Gujarat University as External academic member-2	Present
9.	Dr. Sunil Mandal	Head of Discovery Chemistry & Analytics, PI Industries, Udaipur as External professional member-2	Online
10.	Prof. Kamalesh Prasad	Senior Scientist, CSIR- CSMCRI, Bhavnagar as External professional member-1	Online
11.	Devanshi Pandey	Sem 7 BSc as UG Student Member	Absent
12.	Khushali Ramoliya	Sem 3 MSc – Organic Chemistry as PG Student Member	Present
13.	Jeny Gosai	PhD Scholar, PDEU Alumni Member-1	Present
14.	Dr. Anu Manhas	Special Invitee	Present
15.	Dr. Kalisadhan Mukherjee	Special Invitee	Present
16.	Dr. Nandini Mukherjee	Special Invitee	Present
17.	Dr. Prakash Chandra	Special Invitee	Present
18.	Dr. Ranjan Pati	Special Invitee	Present
19.	Prof. Rajib Bandyopadhyay	Special Invitee	Present
20.	Dr. Syed Shahabuddin	Special Invitee	Present
21.	Dr. Tapan Pal	Special Invitee	Present

#### B. Agenda of Meeting:



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- I. Revision in the Vision, Mission, and About department of Chemistry
- II. Revision of B.Tech practicals
- III. Revision in B.Sc. course structure, Industrial Internship and research dissertation of B.Sc. Sem 8 students.
- IV. MSc Sem. 3 Analytical Chemistry Specialization Syllabus
- V. Minor Revision in Syllabus of existing Chemistry lab for M.Sc. Sem 2, if any

#### C. Minutes of BoS Meeting:

Agenda 1: Revision in the Vision, Mission, and About Department of Chemistry

#### **Discussion:**

Prof. Manoj Pandey introduced and presented the new vision and mission of the department in front of the BoS committee. The following suggestions were received from the BoS members

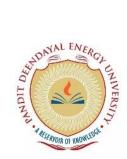
- Prof. V. K Jain rephrase the Vision statement as "To achieve the academic excellence".
- Dr. Sunil Mandal suggested the inclusion of the term technology in the vision statement as "knowledge of chemistry augmented with state-of-the-art advanced research, innovation, and technology"

Agenda 2: Revision of B.Tech. Practicals

#### **Discussion:**

Dr. Ranjan Pati presented the stream based practical for the B.Tech

- Prof. V. K. Jain suggested the revision of CO4 by either removing the term "gravimetric" or by the inclusion of gravimetric experiments such as the decomposition of calcium oxalate or calcium carbonate in a muffle furnace.
- Prof. Jain and Dr. Patil suggested the addition of ChemDraw and AI based lab experiments,
- Dr. Patil suggested revision of CO<sub>3</sub> by addition of conductometric and pH metric titrations.
- Practical 7 and 11 were the same, it was advised to remove one from the list.
- No revisions were made in the existing BSc, or MSc course syllabus.
- Addition of experiments like caffeine extraction and adsorption of charcoal on oxalic acid was advised by Dr. Patil.
- Prof. Pandey and Prof. Jain suggested the revision of the list of practicals to bring them in line with the syllabus of the theory course.



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 Dr. Das suggested a partial revision of the practical syllabus, other practicals will be revised in next BoS meeting.

Agenda 3: Revision in B.Sc. course structure, Industrial Internship, and research dissertation of B.Sc. Sem 8 students

**Discussion**: Dr. Das and DR. Pal presented the revision in the B.Sc. course syllabus. Due to the repetition of the analytical topics in the higher semester, it was proposed to remove the course from Sem 4 and introduce an Organic chemistry course. Minor revisions in the syllabus of Sem 1 & 2 were made. Unit 4 of the Sem 1 chemistry course was revised as an introduction to basic organic chemistry and Unit I of the Sem 2 chemistry course was revised as an introduction to reaction mechanism. The following suggestions were received from the BoS committee.

- Prof. Jain advised to map all the courses to check the missing topics and overlap for the preparation of the syllabus of the new organic chemistry course to be introduced in Sem 4.
- Prof. Jain advised elaborating the Unit I in Sem 2 chemistry course to justify 10 h teaching

Agenda 4: MSc Sem. 3 Analytical Chemistry Specialization Syllabus

**Discussion**:

Dr. Gaur presented the suggestion received in the last BoS and action taken for the approval of the Analytical Chemistry Stream specialization syllabus. The approved and revised syllabus was presented to the BOS committee. The BoS committee agreed to the revisions and gave their approval for the theory course. As advised in the last BoS meeting the total credits of the M.Sc. program was increased to 90.5 from 80.5 by increasing one credit for each of the stream elective theory courses and five credits for the research dissertation. The following suggestions were made for the analytical chemistry lab for Sem 3.

• Dr. Patil suggested the addition of experiments like the Isoelectric point of glycine, Karl Fischer titration, Estimation of Vanillin, analysis of petroleum mixture (BTX), and estimation of Na & K using flame photometry



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- Dr. Mandal and Prof. Jain suggested the addition of practicals based on GC and HPLC, and the termination of active ingredients using a tablet disintegrator.
- Prof. Jain suggested minor corrections in the proposed list like the addition of COD in experiment 2, and the removal of brand-specific terms (sprite and mountain dew).

#### Agenda 5: Minor Revision in Syllabus of existing Chemistry lab for M.Sc. Sem. 2, if any

**Discussion**: The revised syllabus of the analytical, organic, and inorganic chemistry for Sem 2 was presented to the BoS committee for approval.

• Dr. Mandal suggested the addition of multistage synthesis involving crystallization, distillation, and chromatographic separation as the last step for purification.

#### Agenda 6: Miscellaneous agendas

**Discussion**: The student alumni present in the meeting advised to include column chromatography experiments in early semesters (2&3), this will be helpful to the students during the final dissertation.

Note: Take signature of all the members present in BoS



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Name of BoS Member - Prof. Manoj Pandey	Name of BoS Member - Dr.Anirban Das	Name of BoS Member - Dr. Tapan Pal	Name of BoS Member - Dr. Rama Gaur
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