

#### Minutes of Meeting of the Board of Studies for M.Tech.-Chemical Technology-Plastic Technology held on November 17, 2023 Department of Plastic Technology, School of Chemical Technology, HBTU, Kanpur

The meeting of Board of Studies for Plastic Technology was held on November 17, 2023 at 3:00 PM for M. Tech.-Chemical Technology-Plastic Technology in Room no. 1-112 of HBTU Kanpur. Following members were present:

- 1. Dr. Pradeep Majhi, Associate Professor & Head; Department of Polymer and Process Engineering, IIT Roorkee, Roorkee - 247667 (Uttarakhand) (Expert members) jourdo
- 2. Dr. Syed Javed Ahmed Rizvi, Associate Professor; Department of Petroleum Studies Faculty of Engineering & Technology, Aligarh Muslim University Aligarh 202 002 (UP) (Expert members) journal online John
  3. Dr. D.S. Bag, Scientist G; Defence Materials and Stores Research and Development
- Establishment (DMSRDE), Kanpur- 208013 (Expert members) joured online
- 4. Dr. Pradeep Agarwal, Managing Director, Ark Golden India Pvt Ltd; D-31, Kamalanjali, Akota, Off. Old Padra Road; Vadodra - 399 020 (Gujarat) (Expert members)
- 5. Mr. Krishna Kanta, Vice President; Sperry Plast Limited, Greater Noida 201306 (UP) (Expert members) joned online July
- Dr. Indira Nigam (Prof. & Head, Plastic Tech. Deptt.)
   Dr. Deepak Srivastava (Member, B.O.S.)
- 8. Dr. Soma Banerjee (Member, B.O.S.)

The minutes of the BoS meeting of Plastic Tech Dept. are as follows: The following changes were made in the course structure of the M. Tech. Plastic Technology:

HBTU, Kanpur has New Education Policy (NEP) from session 2022-23 and as per the decisions of Course Structure Committee/ Committee of Implementation of NEP-2022 of HBTU, the course structure and syllabus have been developed to be implemented from session 2023-24.

#### Discussion and decision on the Structure of the M. Tech. Programme:

- 1. The total credits of the Degree M. Tech. Chemical Technology-Plastic Technology is 64 with all the four semester carrying 16 credits each.
- 2. There are 9 Program Core Course (PCC); 4 Program Elective Course (PEC) and 1 Open Elective Course (OEC) with Seminar and Projects in III and IV semester.

#### Discussion and decision on the Revisions/Improvement in the Syllabus of courses offered for M. Tech. Programme:

1. The syllabus of the courses offered by Chemical Engineering Department, were included as per suggestions communicated by HOD ChE as approved in the BoS of Chemical Engineering Department. Several suggestions have been made by external and internal

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experts. The entire syllabus is revised by about 20%.

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- As suggested by Dr. Pradeep Majhi, in NPL 502 Advanced Polymerization Engineering 'Manufacturing Technologies of Commodity Plastics, Engineering Plastics, Thermosets, Speciality Plastics' have been included in Module II-V.
- 3. As suggested by Mr. Krishna Kanta, in Unit I of NPL 505 Advanced Polymer Processing, a new section on 'Screw Design and Mixing' has been introduced in the Extrusion Technology Section. Again, in Module II of Injection molding Process, a new section on 'Specifications for injection molding machine' has been included as suggested by the expert.
- 4. As suggested by Dr. Syed Javed Ahmed Rizvi, in NPL 509 Advanced Polymer Composites the Module I has been marked as 'Introduction to Composites'. In Module IV a new section on Failure Analysis has been added as suggested. Again, in the Application section of Module V, the Application of Polymer Nanocomposites in Advanced areas has also been added. As suggested, a new reference 'Mechanics of composite materials by R.M. Jones' has also been added in the list of Books.
- 5. As suggested by Dr. Syed Javed Ahmed Rizvi, in NPL 512 Structure-Property Relationship in Polymers, a new section on 'Effect of structural features on mechanical, thermal, electrical properties of polymers' has been added.
- 6. As suggested by Dr. Syed Javed Ahmed Rizvi, in NPL 517 Polymer Rheology a new section on '*Mechanical response to Dynamic Load*' has been added in Module II. In Module IV, another new section on 'Measurements of Rheological properties by Rheometers' has been added.
- 7. As suggested by Dr. Syed Javed Ahmed Rizvi, the course titles for Dissertation/Project subject has been updated as Dissertation/Project I and Dissertation/Project II for III and IV Semester, respectively.

The syllabus has been revised after incorporating the valuable suggestions from the external expert.

Discussion and decision on the Modification/improvement in the New courses offered for <u>M.Tech. Programme:</u>

A new Open Elective Course *OPL 601: 'Advanced Polymer Materials*' has been introduced for the M. Tech. students of other departments in the III Semester.

Discussion and decision on the Modification/Improvement in the Programme Elective courses offered for M. Tech. Programme:

1. The total no. of Programs Electives has been increased. In Semester I, one PEC is offered from the Department of Chemical Engineering and one from PL department for Stream A and Steam B.

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2. In Semester II, three PEC NPL 508, NPL 510, and NPL 512 have been offered and the number of elective courses has been increased from two to three in this semester.

The meeting ended with vote of thanks to all the BOS expert members and invitees. The expert members also gave consent to chairmen of BOS to make minor amendments in syllabus, if necessary.

(Dr. Pradeep Majhi) (Dr. Syed Javed Ahmed Rizvi) (Dr. D.S. Bag) Expert Expert Expert (Dr. Pradeep Agarwal) (Mr. Krishna Kanta) Expert Expert s.m (Prof. Deepak Srivastava) (Dr. Soma Banerjee) Member Member (Prof. Indira Nigam)

Chairman

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The syllabus has been revised after incorporating the valuable suggestions from the external expert.

# Discussion and decision on the Modification/improvement in the New courses offered for <u>M.Tech. Programme:</u>



### <u>Discussion and decision on the Modification/Improvement in the Programme Elective courses</u> offered for M. Tech. Programme:

- 1. The total no. of Programs Electives has been increased. In Semester I, one PEC is offered from the Department of Chemical Engineering and one from PL department for Stream A and Steam B.
- 2. In Semester II, three PEC NPL 508, NPL 510, and NPL 512 have been offered and the number of elective courses has been increased from two to three in this semester.

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(Dr. Pradeep Majhi)

(Dr. Syed Javed Ahmed Rizvi)

Expert

(Dr. D.S. Bag)

Expert

Expert

(Dr. Pradeep Agarwal)

Expert

(Mr. Krishna Kanta)

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Expert (Dr. Pr		ert (Mr. Krishna Kanta	Expert	
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Expert	Expert		Expert		
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( <b>Prof. Deepak Srivasta</b> Member	iva)	( <b>Dr. Soma Ban</b> e Member	erjee)		
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e-tr (Mr. Krishna Kanta)

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Member

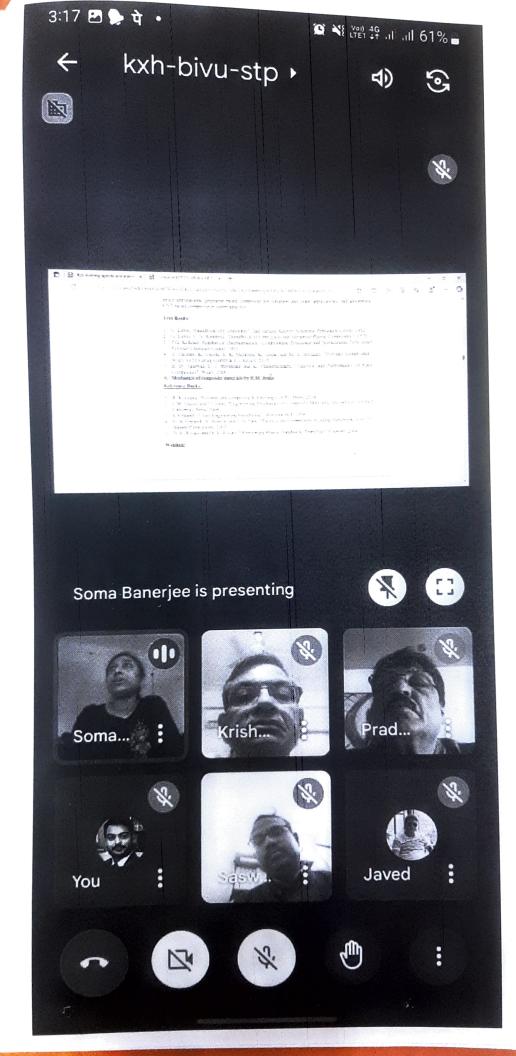
(Dr. Soma Banerjee)

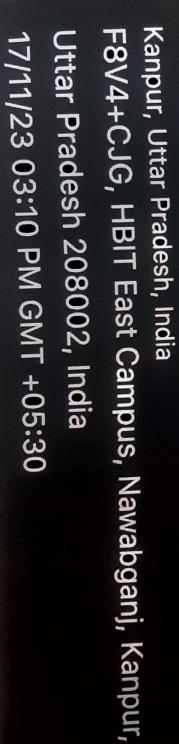
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