#### धात्विकि एवं पदार्थ अभियंत्रिकी विभाग

Department of Metallurgical & Materials Engineering



#### झारखण्ड **केन्द्रीय** विश्वविद्यालय CENTRAL UNIVERSITY OF JHARKHAND

(भारतीय संसद के अधिनियम 2009 द्वारा स्थापित) (Established by an Act of Parliament of India in 2009) Homepage: http://www.cuj.ac.in

#### MINUTES OF THE FIRST BOARD OF STUDIES (BoS) MEETING

A First Board of Studies (BoS) meeting of the Department of Metallurgical & Materials Engineering (DMME) was held on 07th December 2023 at 10.00 AM through blended mode, i.e. online (Google link: https://meet.google.com/fnw-wsvs-veq ) and offline in presence of the following members to discuss the academic issues of the department viz, implementation of NEP-2020, AICTE/UGC course pattern and formulate the Integrated (UG-PG) and Ph.D. program course structure & syllabus, and Ph.D. research supervision, etc.

1.	Prof. Gajendra Prasad Singh	Head& Chairperson (Ex-Officio), Department of Metallurgical & Materials Engineering, Central University of Jharkhand, Ranchi, Jharkhand
2.	Prof. Ajai Singh	Professor, Dept. of Civil Engineering & Dean School of Engineering & Technology
3.	Dr. Amar Nath Bhagat,	Head, Surface Engineering Research, R & D Tata Steel Jamshedpur, Jharkhand
4.	Prof. Anindya Basu	Professor and Head, Dept. of Metallurgical and Materials Engineering, National Institute of Technology, Rourkela, Orissa
5.	Prof. Debdas Roy	Professor, Materials and Metallurgical Engineering Department, National Institute of Advanced Manufacturing Technology, Hatia, Ranchi, Jharkhand
6.	Dr. Amritendu Roy	Associate Professor, School of Minerals, Metallurgical and Materials Engineering, Indian Institute of Technology, Bhubaneswar, Orissa
7.	Dr. S. Srikanth	GM & HoG (Mechanical Metallurgy & Corrosion Group), RDCIS, SAIL, Ranchi (available through google meet).
8.	Prof. Ratan Kumar Dey	Professor, Dept. of Chemistry, Central University of Jharkhand, Ranchi, Jharkhand
9.	Prof. Ashish Sachan	Professor & Head, Department of Life Sciences, Central University of Jharkhand, Ranchi, Jharkhand
10.	Prof. Subhash Chandra Yadav	Professor& Head, Department of Computer Science & Engineering, Central University of Jharkhand, Ranchi, Jharkhand
11.	Dr. Devdas Lata	Professor, Department of Energy Engineering, Central University of Jharkhand, Ranchi, Jharkhand
12.	Dr. Arnab Shankar Bhattacharyya	Assistant Professor (Stage-II), Department of Metallurgical & Materials Engineering, Central University of Jharkhand, Ranchi, Jharkhand
3.	Dr. Lawrence Kumar	Assistant Professor (Stage-II), Department of Metallurgical & Materials Engineering, Central University of Jharkhand, Ranchi, Jharkhand

In the beginning, Prof. Gajendra Prasad Singh, Head & Chairperson (Ex-Officio), Department of Metallurgical & Materials Engineering, expressed his deep sense of happiness and gratitude for the presence of all members in the meeting. Prof. Gajendra Prasad Singh, Head, DMME has given the introduction of all members of the BoS. Prof. Gajendra Prasad Singh expressed his immense pleasure and gratefulness. He welcomes all external members who have attended the meeting despite various busy schedules. Prof. Gajendra Prasad Singh also individually welcomes all other members from various Departments of CUJ, including the Department of Metallurgical & Materials Engineering, who attended the meeting and hence made the event academically successful and productive.

The BOS members discussed in detail the agenda items and looking into the requirements of the Department, the committee unanimously recommended and resolved each agenda item that:

BoS-DMME: 2023/1/01	To confirm the minutes of the 4th BoS meeting of the Department of Nanoscience & Technology held on 13th September 2021.	
Resolution:	The minutes of the 4thBoS meeting of the Department of Nanoscience & Technology held on 13th September 2021 were confirmed (Annexure-I).	
BoS-DMME: 2023/1/02	The action taken reports of the 4th BoS meeting of the Department of Nanoscience & Technology held on 13th September 2021.	
Resolution:	The action taken reports of the 4th BoS meeting of the Department of Nanoscience & Technology held on 13th September 2021 were presented and recorded (Annexure-II).	
BoS-DMME: 2023/1/03	For information: Renaming of Department Name as Department of Metallurgical and Materials Engineering (formerly Department of Nanoscience and Technology) as per the recommendation of the Expert Committee Meeting held on 24/03/2022 and Academic Council Meeting held on 30/08/2022 vide CUJ Notification No. Ref. No. CUJ/773 dated 20th September 2022	
Resolution:	The renaming of the department name, i.e., "Department of Nanoscience and Technology" as the "Department of Metallurgical and Materials Engineering" was appraised to the committee members and recorded (Annexure-III).	
BoS-DMME: 2023/1/04	For consideration and approval of the eligibility criteria, Intake, and program duration of the Integrated B. Tech M. Tech. in Metallurgical and Materials Engineering and specialization in Nanotechnology for B. Tech. (Hons) Degree for admission.	
Resolution:	After due deliberation, the committee agreed on as following  (i). Eligibility: Passed 10+ 2 or equivalent examination with Physics, Mathematics, and Chemistry subjects with a minimum 45% marks or equivalent grade for General Category and 40 % or equivalent	

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grade for SC/ST/OBC (non-creamy layer)/ PWD. (ii). Intake for 2024-25: 60 (iii). Course duration: 05 years (integrated) Lateral entry in integrated program may be allowed BoS-DMME: For consideration and approval of the course structure and syllabus of the 2023/1/05 Integrated B.Tech.-M. Tech. in Metallurgical and Materials Engineering and specialization in Nanotechnology for B. Tech. (Hons) Degree. Resolution: The structure and syllabus for Five (05) Years Integrated B.Tech. - M. Tech. in Metallurgical and Materials Engineering and specialization in Nanotechnology for B. Tech. (Hons) Degree proposed by the department (Annexure-IV) is placed before BoS members for discussion, suggestions recommendations, and approval for effective from batch 2022-23. After due deliberation, the course structure and syllabus for Five (05) Years Integrated B. Tech.-M. Tech. in Metallurgical and Materials Engineering and specialization in Nanotechnology for B. Tech. (Hons) Degree was approved with effective from batch 2022-23 with the following suggestions: 1. Iron and steel making should be brought in Semester -4. 2. Physical Metallurgy and Heat treatment should be combined and may be renamed and offered in Sem-4. Physics of materials should be in Sem-6. 4. Foundry technology should be in sem-5 5. Principal of extractive metallurgy and non-ferrous metallurgy should be merged and named as Principal of extractive metallurgy and keep in Sem-V. 6. Alloys and steel, and Fuel Furnace and Refractories should be in Sem-6. Powder Metallurgy should be in Sem-7. 8. One more PCC paper like Metal Joining should be in Sem-7. 9. Semiconductor Technology should be elective in Semester- 7 10. Recycling and substantiable, Electro microscopy, Texture analysis paper should be elective in SEM-8 11. Quantum mechanics for nanostructure should be replaced by Advance functional materials under specialization in Nanotechnology. 12. Surface Engineering - Syllabus to be modified (Dip coating, powder spray, Hot dip, e-beam) 13. Manufacturing Technology syllabus to be revised 14. Overall all papers syllabus may relook to remove the duplicity in course contents. BOS-DMME: For consideration and approval for the implementation of the multiple entry and exit policy and the degree nomenclature at various exit levels for 2023/1/06 the Integrated B. Tech. - M. Tech. in Metallurgical and Materials

	Engineering and specialization in Nanotechnology for B. Tech. (Hons) Degree as per NEP -2020.
Resolution:	The proposal for the implementation of a multiple entry-exit policy and the degree nomenclature at various exit levels as per NEP 2020 in five (05) Years Integrated B. Tech M. Tech. in Metallurgical and Materials Engineering and specialization in Nanotechnology for B. Tech. (Hons) Degree was discussed in detail looking into the possibility of the employability of the students after taking an exit at any stage. The committee members recommended the following nomenclature with minor revisions in the course name at various exit levels (Details in the Annexure-IVA)  (i). "Undergraduate Certificate in Heat Treater or Foundry Technology" after successfully completion of two courses of total 6 credits (Each paper 3 credits) from foundry technology, and Heat treatment of materials or internship in industry of 8-10 weeks in case of opting exit after 1 year  (ii). "Diploma in Metallurgical engineering" will be awarded after successfully completion of skill oriented or lab oriented courses of total 6 credits (Each paper 3 credits) or internship in industry of 8-10 weeks in case of opting exit after 2 years.  (iii). "Bachelor's Degree in Vocation (B. Voc.) in Metallurgical engineering" degree will be awarded after successfully completion of two courses of total 6 credits (Each paper 3 credits) from Microscopy & Spectroscopy, Metal forming, Welding Technology, Metal working, Materials testing or internship in industry of 8-10 weeks in case of opting exit after 3 years.  (iv). "B.Tech." degree will be awarded in the concerned discipline in case of opting exit after 4 years if the student takes additional specialization courses of 18-20 credits as per AICTE.
BoS-DMME: 2023/1/07	For consideration and approval of the minimum 12 credits course work for the Ph. D. Program in Metallurgical and Materials Engineering as per UGC Ph.D. regulation 2022.  After due deliberation, the committee members approved the proposal to
Resolution:	After due deliberation, the committee members approved the proposal to undertake the minimum 12 credits course work by each scholar of the Ph. D. Program in Metallurgical and Materials Engineering is approved. Further, the committee suggested that the course-work paper recommended by the DRC/RAC may be placed for rectification and post-facto approval in the next BoS as it is concerned with a research topic.
BoS-DMME: 2023/1/08	For information: List of admitted students for the Integrated B. TechM. Tech. in Metallurgical and Materials Engineering for the academic years

	2022-23 & 2023-24 and their mentor-mentee.
Resolution:	The committee was apprised about the (i) list of admitted students for the Integrated B. Tech M. Tech. in Metallurgical and Materials Engineering for academic years 2022-23 & 2023-24 and (ii) their mentor-mentee. It was noted as proposed (Annexure-V).
BoS-DMME: 2023/1/09	For information: List of admitted students for the Ph. D. Programme in the academic year 2021-22 and 2022-23.
Resolution:	The committee was apprised about the (i) list of admitted students for the Ph. D. Programme in the academic year 2021-22 and 2022-23. It was noted as proposed.
BoS-DMME: 2023/1/10	For information: Allotment of Supervisor to Ph.D. research scholars admitted in the academic year 2020-21, 2021-22, and 2022-23.
Resolution:	The committee was apprised about the allotment of Supervisors to Ph.D. research scholars admitted in the academic year 2020-21, 2021-22, and 2022-23. It was noted as proposed (Annexure-VI).
BoS-DMME: 2023/1/11	For information: Thesis submission of Ph.D. research scholars and Ph.D. thesis open <i>viva voce</i> conducted.
Resolution:	The committee was apprised of the name of the Ph.D. scholar(s) whose Ph.D. thesis was submitted and the Ph.D. degree was conferred. It was noted as proposed (Annexure-VII).
BoS-DMME: 2023/1/12	For consideration and recommendation of annual research contingency grant for faculties to undertake the research.
Resolution:	After due deliberation, the committee recommended the annual contingency grant of Rs. 5 lakhs may be provided to the department faculty for undertaking the B. Tech./Integrated M. Tech./Ph.D. research work in the field of materials research.
BoS-DMME: 2023/1/13	For consideration and recommendation of funds for the Procurement of Laboratory Equipment for Integrated B.TechM. Tech. Programme/courses.
Resolution:	After due deliberation, the committee recommended the grant of Rs. 5.0 crore may be considered for the procurement of the Laboratory Equipments for Integrated B.TechM.Tech. Program/courses.
BoS-DMME: 2023/1/14	For consideration and recommendation of the faculty requirement for the Integrated B.TechM.Tech. to maintain the teaching/research/extracurricular workload and student-teacher ratio as per AICTE/UGC rules.
Resolution:	After due deliberation, the proposal of the requirement of a minimum of thirteen (13) faculties for the smooth running of the Integrated B.Tech M. Tech. program in Metallurgical & Materials Engineering was recommended

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by the committee for consideration to the University (Annexure-VIII).
For consideration and recommendation of discontinuation of M. Tech. in Nanotechnology in view of existing faculty strength and infrastructures.
After due deliberation, the committee accepted the proposal of the discontinuation (for the time being) of the M. Tech. in Nanotechnology (Annexure-IX) from the academic year 2024-25 considering the present faculty strength. Further, it is also recommended that M. Tech. programme may be re-started if more faculty are recruited in the Department.
Any other matter with the permission of the chair.
<ol> <li>The Department proposal for the recommendation to appoint renowned persons from the industry and other professional experts under a new category of positions called "Professor of Practice" as per UGC norms and guidelines, and placed before the house for consideration and recommendation.</li> <li>Marksheet and Certificate Format: B. Tech./B. Tech. (Hons)/Integrated M. Tech.</li> </ol>
<ol> <li>After due deliberation</li> <li>the committee accepted the proposal and recommended appointing renowned persons from the industry and other professional experts as "Professor of Practice" as per UGC norms and guidelines in the Department.</li> <li>The proposed Marksheet and Degree Certificate Format for B. Tech/B. Tech. (Hons)/Integrated M. Tech. degree may be accepted</li> </ol>

Meeting ended with the Vote of thanks to the Chair.

Prof. Aja Shigt (Member)

(Member)

Dr. Amar Nath Bhagat, (Member)

Prof. Anindya Basu (Member)

Prof. Debdas Roy

Dr. Amritendu Roy

(Member) (Memb

Dr. S. Srikanth (Member)

Prof. Ratan Kurhar Dey

(Member)

Dr. Devdas Lata

(Member)

Prof. Ashish Sachan (Member)

Dr. Arnab Shankar Bhattacharyya Dr. Lawrence Kumar

(Member)

Prof. Subhash Chandra Yadav (Member)

(Member)

Prof. Gajendia Prasad Singh (Chairperson, Ex-officio)

