

Activity Calendar of Mechanical Engineering Department 2024-25

(By Dr. Yashvir Singh, Prof. S.K.S. Yadav and Dr. Nishant Kumar Singh as Conveners)

S.No.	Activity	Resource Person(s)	Participants	Faculty member/Persons Involved	Date and Duration	Status	Activity Report
1.	International Conference on Advances in Materials, Manufacturing with Artificial Intelligence Applications	<ul style="list-style-type: none">• Prof. P.M. Pandey, IIT Delhi• Prof. J. RamKumar, IIT Kanpur• Dr. Varun Sharma, IIT Roorkee• Prof. Erween Abd Rahim, UTHM, Malaysia• Prof. M.M. Noor, UMP, Malaysia	Above 120 Participants participate and 47 articles have been received for Publication in AIP conference proceedings	Undergraduate/post graduate Students/ Faculty members, research scholars, and practicing employees in allied areas	4 th to 5 th April 2025	Completed	https://www.youtube.com/watch?v=Nm13Xu95cok

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100+
YEARS
1921 - 2021



The International Conference on Advances in Materials, Manufacturing and Artificial Intelligence Applications (ICAMMAIA-2025) was held on 4–5 April 2025 as a hybrid event organised by the Department of Mechanical Engineering at Harcourt Butler Technical University (HBTU), Kanpur. The conference brought together researchers, faculty, industry professionals and students to present and discuss recent advances in materials science, manufacturing technologies and the application of AI and data-driven methods to manufacturing and materials problems. Key outcomes included knowledge exchange across experimental, computational and AI approaches, networking opportunities, and a set of presented papers with potential outlets for publication.

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TECHNICAL PROGRAM SCHEDULE

**International Conference on Advances in Materials, Manufacturing, and Artificial Intelligence Applications
(ICAMMAIA 2025)
4th – 5th April 2025**

Conference Registration: 9:00 AM to 10:00 AM, Venue: Radhakrishnan Auditorium

Day 1, 4th April 2025, Friday

S. No.	Event Name	Timings	Details	Venue
1	Inauguration	10:30 - 10:35	Saraswati Vandana and Lighting of Lamp by Keynote Speakers and Hon'ble Vice Chancellor	Mode: Offline, Radhakrishnan Auditorium
		10:35 - 10:40	Welcome Address and CE&IQA Introduction by Chairman Prof. Vandana Dixit	
		10:40 - 10:45	Department Introduction by Chairman Prof. Anand Kumar	
		10:45 – 10:50	Brief Note about the Conference by Convener Prof. S.K.S. Yadav	
		10:50 - 10:55	Conference Address by Chief Guest	
		10:55 - 11:00	Conference Address by Hon'ble Vice Chancellor Prof. Samsher	
		11:00 - 11:05	Vote of Thanks by Organizing Secretary Dr. Nishant Kumar Singh	
	Keynote Lecture	11:05 – 11:45	Prof. P.M. Pandey, IIT Delhi	Mode: Offline, Radhakrishnan Auditorium
2	High Tea	11:45 – 12:00	Radhakrishnan Auditorium	
3	Keynote Lectures	12:00 – 12:40	Prof. J. Ram Kumar, IIT Kanpur	Mode: Offline, Radhakrishnan Auditorium
		12:40 - 13:20	Prof. Vinod Yadava, MNNIT Allahabad, Prayagraj	Mode: Offline, Radhakrishnan Auditorium

		13:20 – 14:00	Dr. Varun Sharma, IIT, Roorkee	Mode: Offline, Radhakrishnan Auditorium
4	Lunch	14:00 – 15:00	Mechanical Engineering Department	
5	Keynote Lectures	15:00 – 15:40	Prof. Muhamad Bin Mat Noor, Universiti Malaysia Pahang, Malaysia	Mode: Online, Radhakrishnan Auditorium Google Meet Link: https://meet.google.com/wqk-ehss-yfb
		15:40 - 16:20	Prof. Erween Bin Abd Rahim, Universiti Tun Hussein Onn Malaysia, Malaysia	Mode: Online, Radhakrishnan Auditorium Google Meet Link: https://meet.google.com/wqk-ehss-yfb

Day 1, 4th April 2025, Friday

TECHNICAL PROGRAM SCHEDULE				
International Conference on Advances in Materials, Manufacturing, and Artificial Intelligence Applications (ICAMMAIA 2025) 4th – 5th April 2025				
Day 1, 4 April 2025, Friday				
S. No.	Event Name	Timings	Details	Venue
1	Oral Presentation (Offline and Online)	16:20 - 19:10	SESSION 1: (Chair by Dr. Pushpendra Kumar, GEU, Dehradun, and Co-chair by Prof. S.K. Singhal, HBTU, Kanpur, and Dr. Gaurav Saini, HBTU, Kanpur)	Mode: Offline and Online, Radhakrishnan Auditorium Google Meet Link: https://meet.google.com/wqk-ehss-yfb
	Submission ID		ICAMMAIA_2025_037, ICAMMAIA_2025_045, ICAMMAIA_2025_046, ICAMMAIA_2025_047, ICAMMAIA_2025_060, ICAMMAIA_2025_066, ICAMMAIA_2025_067, ICAMMAIA_2025_069, ICAMMAIA_2025_074, ICAMMAIA_2025_076, ICAMMAIA_2025_078, ICAMMAIA_2025_079, ICAMMAIA_2025_080, ICAMMAIA_2025_081, ICAMMAIA_2025_072, ICAMMAIA_2025_073, ICAMMAIA_2025_75, ICAMMAIA_059	

Day 2, 5th April 2025, Saturday

TECHNICAL PROGRAM SCHEDULE				
International Conference on Advances in Materials, Manufacturing, and Artificial Intelligence Applications (ICAMMAIA 2025) 4th – 5th April 2025				
Day 2, 5th April 2025, Saturday				
S. No.	Event Name	Timings	Details	Venue
1	High Tea	10:30 – 11:00	Mechanical Engineering Department	
2	Oral Presentation (Offline and Online)	11:00 - 13:30	SESSION 2: (Chair by Dr. Brijesh Prasad, GEU, Dehradun, and Co-chair by Dr. Rishi Kant, HBTU, Kanpur, and Mr. Praveen Kumar Rai, HBTU, Kanpur)	Mode: Offline and Online, Committee Room, Mechanical Engineering Department Google Meet Link: https://meet.google.com/rxc-yfxa-tmq
	Submission ID		ICAMMAIA_2025_006, ICAMMAIA_2025_007, ICAMMAIA_2025_010, ICAMMAIA_2025_011, ICAMMAIA_2025_012, ICAMMAIA_2025_013, ICAMMAIA_2025_014, ICAMMAIA_2025_015, ICAMMAIA_2025_017, ICAMMAIA_2025_024, ICAMMAIA_2025_026, ICAMMAIA_2025_029, ICAMMAIA_2025_030, ICAMMAIA_2025_031, ICAMMAIA_2025_032, ICAMMAIA_2025_001, ICAMMAIA_2025_002, ICAMMAIA_2025_004	
3	Lunch	13:30 - 14:30	Mechanical Engineering Department	

4	Oral Presentation (Offline and Online)	14:30 – 17:00	SESSION 3: (Chair by Dr. Abhishek Sharma, Loknayak Jai Prakash Institute of Technology, Chapra, and Co-Chair by Ms. Nisha Singh, HBTU, Kanpur and Keshav Gupta, HBTU, Kanpur)	Mode: Offline and Online, Committee Room, Mechanical Engineering Department Google Meet Link: https://meet.google.com/ops-pymp-dzi
	Submission ID		ICAMMAIA_2025_049, ICAMMAIA_2025_050, ICAMMAIA_2025_053, ICAMMAIA_2025_033, ICAMMAIA_2025_035, ICAMMAIA_2025_039, ICAMMAIA_2025_041, ICAMMAIA_2025_042, ICAMMAIA_2025_043, ICAMMAIA_2025_048, ICAMMAIA_2025_052, ICAMMAIA_2025_054, ICAMMAIA_2025_055, ICAMMAIA_2025_061, ICAMMAIA_2025_062, ICAMMAIA_2025_064, ICAMMAIA_2025_070, ICAMMAIA_016	
4	Valedictory Function	17:00 – 17:10	Conference Summary and Vote of Thanks by Organizing Secretary Dr. Yashvir Singh	Mode: Offline and Online, Committee Room, Mechanical Engineering Department Google Meet Link: https://meet.google.com/ops-pymp-dzi



**International Conference on Advances in Materials, Manufacturing and Artificial Intelligence Applications
(ICAMMAIA-2025)**

Hybrid Mode

4 - 5 April, 2025

**Organized by
Department of Mechanical Engineering**

HARCOURT BUTLER TECHNICAL UNIVERSITY

KANPUR, UTTAR PRADESH, INDIA

<https://www.icammaia2025.info/>

ABOUT US

Harcourt Butler Technical University (Formerly Harcourt Butler Technological Institute, Kanpur) has always been a paragon and a source of inspiration in the field of science and technology since the year 1921. Now, as per Act No. 11 of 2016 by the government of Uttar Pradesh it is upgraded to University, i.e, Harcourt Butler Technical University, Kanpur (HBTU, Kanpur). The University was established to make it a leading Residential University w.e.f 01.09.2016 to become a “Centre of Excellence” with a focus on Research and Development and Incubation in the field of Engineering, Technology, Basic & Applied Sciences, Humanities, Social Science & Management and other professional courses. HBTU, Kanpur aims to promote studies, research & innovation in engineering areas of higher education, to enhance skill development through continuing education programmes, and to achieve excellence in higher technical education.

ABOUT DEPARTMENT

Department of Mechanical Engineering was established in 1964. It is currently offering an Undergraduate programme of B.Tech. in Mechanical Engineering with an intake of 80 students. Apart from this it also runs a regular Post graduate of M.Tech. in Computer Aided Design with an intake of 18 students. Also, it offers Regular and Part-time Ph.D. with 10 seats of intake. Most of the faculty members are well qualified and have completed their Ph.D. from reputed Institutions. The Department has well-equipped laboratory and research facilities to cater to the needs of UG and PG programmes. The department also extends Testing and Consultancy work for local Industries.

CONFERENCE AIM AND OBJECTIVE

Material science research and advancements in manufacturing technology are key markers of the contemporary high-tech revolution. Technological developments in the fields of materials science and manufacturing aim to validate these notions and conceptions. The conference is titled "International Conference on Advances in Materials Manufacturing and Artificial Intelligence Applications" in light of the aforementioned facts. These ideas and concepts will be confirmed by technological progress in materials and production domains. The primary aim is to enhance the quality of life for the general public by advancing theory and practice across various scientific disciplines and research sectors. Organizing a conference by the Department of Mechanical Engineering in Association with the Internal Quality Assurance Cell at Harcourt Butler Technical University, Kanpur, Uttar Pradesh, India will lead to the following benefits to society.

Provides a platform for

- Industrial professionals
- Academics
- Research Scholars *Opportunities for participants to*
- Interact
- Share experiences
- Discuss the latest developments and their applications
- Serves as a premier international forum for the exchange of knowledge and addressing recent challenges in the field of Mechanical Engineering and associated disciplines



CONFERENCE THEMES

Track 1: Advances in Material Science

- Material synthesis and characterization
- Sustainable materials
- Smart materials
- Structural materials
- Biocompatible materials
- Polymers and biopolymers
- Composite materials, metallic, and their alloys
- Surface Engineering and Coatings
- Nanomaterials and its applications
- Advanced energy materials

Track 2: Green Manufacturing Technologies

- Progress and prospects of green manufacturing
- Social and economic rules for green manufacturing
- Fabrication routes for green manufacturing
- Eco materials and life cycle assessment
- Product design for sustainability
- Sustainable power generation
- Green Manufacturing through Clean Energy Supply
- Enabling Technologies for Assuring Green Manufacturing
- Green manufacturing approach during machining
- Meso/micro manufacturing equipment and processes in green manufacturing
- Modeling, analysis, and simulation of green manufacturing processes
- Nanofabrication and applications in green manufacturing

Track 3: Sustainable Energy Technologies

- Carbon capturing and utilization
- Waste-derived energy, energy storage, and flexible production energy effectiveness.
- Effects of smart technologies on the environment
- Energy shift
- Removal of greenhouse gases
- The petroleum and processing sector
- Energy applications using smart technologies

Track 4: Application of Artificial Intelligence

- AI Algorithms and Applications related to manufacturing
- Bioinformatics
- CAD Design and Testing related to materials and manufacturing
- Machine Learning Tools
- Fuzzy Logic, Computational Theories of Learning
- Hybrid Intelligent Systems
- Multimedia and Cognitive Informatics
- Neural Networks
- Parallel Processing and Pattern Recognition
- Pervasive Computing and Ambient Intelligence
- Soft Computing Theory and Applications related to manufacturing
- Web Intelligence Applications and Search

PAPER SUBMISSION LINK

All the manuscripts for consideration in the conference are invited through the following link. The page limit for the articles is 10 pages according to the template provided.

[Paper Submission](#)

Manuscript Template and Copyright: The Manuscript Template and Copyright Release Form are available through the following link.

[Manuscript Template](#)

[Copyright Release Form](#)

PUBLICATION

All manuscripts submitted on the submission portal will undergo peer-review process and after acceptance will be published by AIP Conference Proceedings journal (SCOPUS, Web of Science indexed). There are no extra charges for publication in AIP conference proceedings journal.

REGISTRATION DETAILS

Registration is mandatory for all the delegates as per the nature of the participant's category. Once you submit the manuscript, we will issue the paper ID, then you can pay the registration fee after its acceptance. Registration fee includes participation in the conference, lunch, and registration kit. The registration fee is non-refundable.

The following is the link for Manuscript registration after making payment.

[Manuscript Registration](#)

BANK DETAILS FOR PAYMENT

Beneficiary Name: ICAMMAIA-2025 Bank Name: Central Bank of India Branch ID: 283288

Bank Address: HBTI, Kanpur, Uttar Pradesh, India

Account Number: 5665636238

NEFT/RTGS/IFSC CODE: CBIN0283288

MICR Code: 208016036

SWIFT CODE: CBININBBCXL

IMPORTANT DATES

Last Deadline for the Paper Submission: 5th March 2025

Early Registration Starts: 16th August 2024

Early Registration Ends: 10th March 2025

Conference Date: 4th - 5th April 2025

REGISTRATION FEES

FOR INDIAN DELEGATES		
Nature of participants	Early	Late
Academicians/Research Scholars	INR 6500	INR 7000
Industry/Research Organization	INR 7000	INR 7500
Listeners/Accompany	INR 1000	INR 1500
FOR FOREIGN DELEGATES		
Nature of participants	Early	Late
Academicians/Research Scholars	USD 200	USD 250
Industry/Research Organization	USD 250	USD 300
Listeners/Accompany	USD 50	USD 100

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- Prof. Sanjeev Kumar Singh Yadav, Professor, Department of Mechanical Engineering, HBTU, Kanpur, Uttar Pradesh, India
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KEYNOTE SPEAKERS



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