



Symposium on Artificial Intelligence and CAD/CAM/CAE in Engineering/Medicine/Dentistry [AIEMD-2025]

July 12-13, 2025

Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Kancheepuram

About the Institute

Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kancheepuram is a public institution established in 2007 by the Ministry of Education, Government of India to pursue design and manufacturing-oriented engineering education and research. IIITDM Kancheepuram offers Undergraduate, Postgraduate and PhD programme in the areas of Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Smart Manufacturing and Interdisciplinary Design and Innovation.



About the AIEMD 2025

Artificial intelligence (AI) plays a transformative role in medical imaging-based diagnosis, treatment planning, and implants procedures by effectively analyzing patient medical data. For example, the integration of AI with 3D printing technologies facilitates the creation of patient-specific prostheses, significantly improving functional outcomes. This symposium highlights advancements in AI, CAD/CAM/CAE technologies, and their applications in diagnosis, surgical treatments, and the design, fabrication and placement of implants.



Duration of Symposium

12th- 13st July 2025 (2 Days) on campus. Hostel accommodation will be provided based on the availability and first come first serve basis.



Participants

Scientists, Academicians, Research Scholars, Physicians, Students from Engineering, Medical, Dental, and Clinical background, Industry Delegates, and Entrepreneurs.

Thrust Areas

Engineering

- AI in Medical Data
- AI in Disease Diagnosis
- AI in CT and MRI
- CAD/CAM/CAE in Medicine and Dentistry
- Haptic and Robot in Surgical Planning
- 3D/4D printing in Medicine and Dentistry
- Biomaterials
- Predictive Model and Analysis
- Patient Specific Surgical Simulation

Medicine

- Advances in Orthopaedic Surgery
- Advances in Spine Surgery
- Laser/Robot-Assisted Surgery
- 3D Printing in Surgery
- Advances in Cardiothoracic Surgery
- Advances in Neurosurgery
- Implant Placement Procedure
- Forensic Medicine
- Haptic and Robot in Medicine

Dentistry

- Oral and Maxillofacial Surgery
- Advances in Orthodontics
- Advances in Prosthodontics
- Advances in Periodontics
- Dental Bone Grafting and Implant
- 3D Printing in Dentistry
- Laser/Robot in Dentistry
- Forensic Dentistry
- Haptic and Robot in Dentistry

***The areas mentioned above are indicative and papers from other areas are also requested for submission**

Abstract Submission and Registration

Authors have to submit a one-page abstract of their original, unpublished work using the QR code given.



QR Code for Abstract Submission

Payment Details:

Students: **5000 INR**
Faculty, Scientists and all others: **7565 INR**



QR Code for Registration

Important Dates

Last date for abstract submission	28 th February, 2025
Notification of the acceptance	10 th March, 2025
Last date for 5-page paper submission	15 th April, 2025
Last date for revised paper submission	30 th May, 2025
Last date for registration	20 th June, 2025

Publication

It is planned to publish the peer-reviewed and selected papers of the symposium as proceedings with Springer. 5 Page full paper are requested to consider for publication subject to approval from the publisher.

Organized by the Department of Mechanical Engineering, IIITDM Kancheepuram, Chennai – 600127, Tamilnadu, INDIA. www.iiitdm.ac.in

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Patron



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Director and Professor of ECE
IIITDM Kancheepuram



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Dr. P. Pandithevan
Associate Professor
Department of Mechanical Engineering
IIITDM Kancheepuram

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Orthopaedic Surgery, Dept. of
Neurosurgery, Medical College of
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Distinguished Professor, Joint Department
of Biomedical Engineering, University of
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BHF Advanced Fellow In Cardiovascular
Nanomedicine, Radcliffe Department of
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Prof. Renu John
Department of Biomedical Engineering,
IIT Hyderabad, INDIA.



Prof. S. Narayanan
Retired Professor, Department of
Mechanical Engineering,
IIT Madras, INDIA.



Prof. US. Dixit
Department of Mechanical Engineering,
IIT Guwahati, INDIA.

Keynote Speakers



Prof. Narayan Yoganandan
Professor of Neurosurgery and
Orthopaedic Surgery, Dept. of
Neurosurgery, Medical College of
Wisconsin, USA.



Prof. Roger J. Narayan
Distinguished Professor, Joint Department
of Biomedical Engineering, University of
North Carolina and North Carolina State
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Prof. Tanveer Tabish
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Prof. J. Ramkumar
Department of Mechanical Engineering,
IIT Kanpur, INDIA.



Prof. Renu John
Department of Biomedical Engineering,
IIT Hyderabad, INDIA.

Expert Talk



Dr. Varadhan S K M
Department of Applied Mechanics and
Biomedical Engineering, IIT Madras, INDIA.



Dr. Nagarajan Ganapathy
Department of Biomedical Engineering, IIT
Hyderabad, INDIA.



Prof. B. Krishnan
Department of Dentistry, JIPMER
Puducherry, INDIA.



Dr. Jio Athertya
Postdoctoral Scholar, UC San Diego Health
San Diego, California, USA.



Dr. V. Prasannavenkadesan
Postdoctoral Researcher, Trinity Biomedical
Sciences Institute, Ireland.



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