## **About BITS Pilani**

Birla Institute of Technology & Science (BITS) Pilani, is an all-India Institute for higher education. Founded with strong technical collaboration with MIT (USA) under the Ford Foundation Grant, BITS Pilani has evolved into India's leading institute of higher education, distinguished by its illustrious legacy, modern campuses, and exceptional placement records. The institute's commitment to excellence, adherence to merit, transparency, innovation, and enterprise has been the hallmark of its journey. BITS Pilani has got campuses in Dubai, Hyderabad, Goa and Mumbai in addition to Pilani.

The past six decades have been exceptional for BITS Pilani, marked by groundbreaking achievements in research, teaching and fostering entrepreneurship. Key achievements and milestones include: 1. Institute of Eminence, 2. BITS BioCyTiH Foundation, 3. Center for Research Excellence in Semiconductor Technologies (CREST), 4. BITS-Technology Enabling Centres (TEC), 5. Center for Research Excellence in National Security (CRENS), 6. BITS GATI (Gender Advancement for Transforming Institutions), 7. SATHI Project Award.

# **About Department of Mechanical Engineering**

The Department of Mechanical Engineering at BITS Pilani, Pilani Campus offers undergraduate, postgraduate, and Ph.D. programs. The department focuses on theoretical learning and hands-on experience. Established as early as 1946, the department is known for research in fields such as Design, Manufacturing, Thermo-fluids, and Industrial Systems Engineering. Our students explore specialized areas such as Robotics, Mechatronics, Energy Management, 3D Printing, and Battery Technology. The students are trained in software tools such as AutoCAD, CATIA, COMSOL Multi-physics, MATLAB, and Fusion 360. Faculty members are deeply involved in cutting-edge research, addressing both fundamental and applied problems, with strong links to industry, academia and research. With a focus on critical thinking, innovation, and problem solving, we contribute to technological advancements while addressing the real-world challenges.

# **About PLMSS Trust**

PLMSS Trust was registered in December 2014 at Bengaluru by the Heads of DRDO, ADA, NAL & IISc in order to take up research, aid, promote, guide, manage, coordinate, execute and disseminate activities in the area of CAD, CAM, CAE, PLM, ERP and other related topics in Aerospace, Automobile, High-Tech and concerned industries. One of the prime activities is to facilitate and initiate the organization of the International Conference PLMSS. The Trust has also been organizing special lectures and workshops on its foundation day. Please visit PLMSS for more details.

## About the Conference

BITS Pilani, an institute of eminence, is delighted to announce the 10<sup>th</sup> International Conference on Product Lifecycle Modeling, Simulation, and Synthesis (PLMSS 2025). The PLMSS conference series has established itself as a premier platform for researchers, industry practitioners, and academicians to exchange ideas, discuss emerging trends, and collaborate on advancing the frontiers of product lifecycle management. The 10th edition of this conference marks a significant milestone, bringing together thought leaders and innovators from around the globe to explore transformative solutions for the challenges of tomorrow. In an era marked by rapid technological advancements, including Industry 4.0, digital twin technologies, and Al-driven design paradigms, the lifecycle of a product from ideation and design to manufacturing, operation, and disposal has become increasingly complex. PLMSS 2025 will serve as a confluence of disciplines, offering a forum for groundbreaking research, cutting-edge applications, and future-oriented strategies in modeling, simulation, and synthesis of product lifecycles. As an academic institution renowned for its commitment to excellence in engineering, technology, and innovation, BITS Pilani serves as the perfect backdrop for this landmark event. We look forward to welcoming you to the vibrant campus of BITS Pilani, where tradition meets innovation.

## Important Dates

Call for Abstracts

Last date for Abstract submission

Acceptance of Abstracts

Substracts

Acceptance of Abstracts

Camera-ready Abstract/Paper

Commencement of Registration

Conference Dates

Full paper submission

15<sup>th</sup> April 2025

15<sup>th</sup> August 2025

15<sup>th</sup> August 2025

27<sup>th</sup>—29<sup>th</sup> November 2025

Full paper submission

25<sup>th</sup> January 2026

# **Registration Details for Conference**

Please access the conference website (https://www.bits-pilani.ac.in/plmss2025/) for registration. Fee details for early registration (till November 01, 2025) are as follows:

- Industry / R&D Organization: INR 10,000 per delegate
- Group registration from industry (5 participants): INR 8,000 per delegate
- Academician: INR 8,000 per delegate
- Student: INR 5,000 per student
- Accompanying person/non-presenting participant: INR 4000 per person
- Foreign participant: 150 USD per delegate (Group discount not applicable)

# **Pre-Conference Workshop**

In today's life, interdisciplinary nature of R&D is almost inevitable and brings more opportunities to cater societal and strategical needs of the nation. This is very much true particularly in the context of PLMSS Conference theme. The R&D in the area of electronics and allied science and technologies is privileged in this aspect, as it is required everywhere. In one-day Pre-Conference Workshop, there would be specialized talks on on-going research and technology-development in the areas of semiconductor, microwave and Al-enabled electronics from CSIR-CEERI, Pilani and BITS Pilani during the pre-lunch session. Demonstration of various products and technologies developed at CSIR-CEERI will be made in the post-lunch session. Apart from talks and live demonstration of products, the special benefits of participants are anticipated through one-to-one interaction leading to possible near-future interdisciplinary research collaboration.

# Registration Details for Pre-Conference Workshop

Fee details for the Pre-Conference Workshop (26<sup>th</sup> Nov. 2025) are given as:

- Industry / R&D Organization: INR 5.000 per delegate
- Academician: INR 4,000 per delegate
- Student: INR 2,500 per student
- Group registration from students: INR 2,000 per delegate (5 participants)

# **Publication Opportunities**

The abstract booklet will be released in the inaugural session of the conference, containing all the registered papers/abstracts to be presented at the conference. Selected papers will be published as the conference proceedings in CRC Press (Taylor and Francis). Please visit the website for more details (*Link*).





# 10th INTERNATIONAL CONFERENCE

on

# PRODUCT LIFECYCLE MODELING, SIMULATION AND SYNTHESIS (PLMSS 2025)

27th-29th November 2025

&

# **Pre-Conference Workshop**

26th November 2025

Organized by

Department of Mechanical Engineering, BITS Pilani, Pilani Campus

&

**Work Integrated Learning Programmes** 

In collaboration with





UNDER THE AEGIS OF CYIENT

**VENUE: BITS Pilani, Pilani Campus** 

<sup>\*</sup>Please visit the conference webpage for abstract submission.

<sup>\*</sup>Extra INR 1000 will be charged from Indian participant and extra 50 USD will be charged from foreign participant after November 01, 2025.

<sup>\*\*</sup> Registration fee does not include accommodation charges.

<sup>\*</sup> Food and Hostel accommodation are included.

## Themes and Core Areas

"Digital Twin and Circular Economy for a Greener Future" is the theme of PLMSS 2025. The core areas targeted for PLMSS 2025 are but not limited to:

#### Product Definition:

Requirements Engineering, Logical and Functional Design, Conceptual Design, Detail Design CAD/Geometrical Modeling, Model Based Definition

#### Product Modeling and Simulation:

Computer Aided Engineering, Multi-Disciplinary Analysis and Optimisation, System Design Model Based System Engineering, Digital Manufacturing, Simulation Tools

#### Product Visualisation:

Large CAD Data Visualisation, Digital Mock-Up, Virtual Prototyping, Distributed Visualisation, Virtual Reality, Augmented Reality, Mixed Reality

### Product Realisation:

Process Planning & Control, Advanced Manufacturing & Inspection Techniques, Automation, Rapid Prototyping, Jigless Manufacturing, Green Manufacturing, Additive Manufacturing, Industry 4.0. Advanced Materials and Applications, ERP

#### **Product Development Frameworks:**

Product Lifecycle Management, Information and Knowledge Modeling, Distributed Data Management, Secure Data Exchanges, Digital Thread, Digital Twin, Scalability, Interoperability with Enterprise Solutions, Supply Chain and Value Chain, Cloud-based PLM, Mobile PLM

#### Product Quality & Performance:

Quality Management, Performance Evaluation, Standards, Metrics and Regulations, FRACAS, Data Analytics and Dashboards

#### Product Support and Sustenance:

Product Maintenance Strategy, Development of Product Support & Maintenance Framework, Service Lifecycle Management, Integrated Vehicle Health Management, Condition Based Maintenance, CBM Plus & Intelligent Maintenance Systems, Technical Publications, Asset and Fleet Management, Integrated Logistic Support and Performance Based Logistics, Lifecycle Assessment and Sustainability, Remote Monitoring

#### Smart Technologies in Product development:

Artificial Intelligence, Blockchain, Environmental Social Governance

#### Circular Economy: Reuse

Design for Reuse, Reverse Logistics, Remanufacturing and Refurbishment, Reusable Consumer Goods, Reuse of Machinery, Tools, and Construction Materials

#### Waste Reduction:

Minimizing Waste through Efficient Design, Manufacturing and Packaging i.e. Source Reduction, Sustainable Materials, Reducing Waste through Process Optimization, Managing Organic Waste **Environmental Sustainability:** 

Resource Conservation, Renewable Energy, Climate Change Mitigation, Biodiversity Conservation, Sustainable Agriculture, Green Manufacturing, Eco-friendly Products

# Sponsorship Opportunities

Private, semi-government and government organizations involved with manufacturing, construction, consultancy, R&D and other areas related to Mechanical Engineering are

requested to sponsor, co-sponsor or support PLMSS 2025. Details of sponsorship are :

	Platinum	Diamond	Gold	Silver
Sponsorship amount (Excluding GST)	INR 8 Lakhs	INR 6 Lakhs	INR 4 Lakhs	INR 2 Lakhs
Brochure insertion	✓	✓	✓	✓
Complementary registration	8	6	4	2
Exhibition stall	✓	✓	-	-
Presentation slot	✓	✓	-	-
Banner at the venue	✓	✓	✓	✓
*Sponsors to pay applicable GST directly to the Government				

## Conference Committee

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## LOCATION:

Pilani can be reached either by road or by rail. The nearest railway stations are Chirawa on the western railway (16 km) and Loharu on the Northern railway (24 km). There are regular bus services between Delhi & Pilani and Jaipur & Pilani. The buses leave Delhi from inter-state Bus Terminal (ISBT) and Kashmiri gate. From Jaipur, buses leave from Rajasthan State Roadways bus stand, Sindhi camp.



The campus is very close to Pilani bus stand. If you are travelling by train from Delhi, you can also take a train from Sarai Rohilla Railway Station in New Delhi (DEE) to Loharu station (LHU). Loharu is 26 km away from Pilani. Buses and Jeeps are available from Loharu to Pilani. The BITS Pilani, Pilani Campus is very close to the Pilani Bus Stand.



Conference E-mail: plmss2025@pilani.bits-pilani.ac.in