#### **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 Mechanical Engineering Department at BITS Pilani is spread across its four campuses of Pilani, Dubai, Goa and Hyderabad. It offers undergraduate, postgraduate, and Ph.D. programs and focuses on theoretical learning and hands-on experience. Established as early as 1946, the department is known for research in fields like Design, Manufacturing, Thermo-fluids, Engineering Management, etc. Our students explore specialized areas such as Robotics, Mechatronics, Energy Management, 3D Printing, Battery Technology, etc. and are trained in software tools like AutoCAD, CATIA, COMSOL Multiphysics, MATLAB, Fusion 360, etc. 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 & IlSc 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. Visit PLMSS for more details.

#### **About the Conference**

BITS Pilani, an institute of eminence, is delighted to announce the 10th International Conference on Product Lifecycle Modeling, Simulation, and Synthesis (PLMSS 2025). 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. 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. We look forward to welcoming you to the vibrant campus of BITS Pilani, where tradition meets innovation.

#### Important Dates

Call for Abstracts 15<sup>th</sup> April 2025
Last date for Abstract submission 31<sup>st</sup> July 2025
Acceptance of Abstracts 15<sup>th</sup> August 2025
Camera-ready Abstract/Full paper submission 01<sup>st</sup> October 2025
Commencement of Registration 15<sup>th</sup> August 2025
Conference Dates 26<sup>th</sup>–28<sup>th</sup> November 2025

# **Registration Details for Conference**

Access the conference website (<a href="https://www.bits-pilani.ac.in/plmss2025/">https://www.bits-pilani.ac.in/plmss2025/</a>) for registration. Fee details for the conference (26th to 28th Nov. 2025) are given as:

- 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
- Foreign participant: 150 USD per delegate (Group discount not applicable)
- \*Early registration is allowed till 15th November, 2025.
- \*\* Registration fee does not include accommodation charges.

# **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 AI-enabled electronics from CSIR-CEERI 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 (25th 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)
- \* Food and Hostel accommodation are included.

# **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*).





Department of Mechanical Engineering &

**Work Integrated Learning Programmes** 

**Present** 

10th INTERNATIONAL CONFERENCE

on

PRODUCT LIFECYCLE MODELING, SIMULATION AND SYNTHESIS

(PLMSS 2025)

26th-28th November 2025



**Pre-Conference Workshop:** 

25th November 2025

In collaboration with:





**UNDER THE AEGIS OF CYIENT** 

**VENUE: BITS Pilani (Pilani Campus)** 

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

#### 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, Asset and Fleet Management, Lifecycle Assessment and Sustainability, Remote Monitoring

Smart Technologies in Product development: Al. Blockchain. Environmental Social Governance Circular Economy: 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 & 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, Eco-friendly Products

Systems Engineering: Requirements Definition, System Architecture Modelling, Model Based Design, Detailed Design & Simulations, Multi-disciplinary Analysis & Optimization, Model Based Testing, Virtual Verification & Validation,

Sensors and Sensing Technologies: Sensor Design, Simulation, Sensing materials and fabrication. Testing and Validation, Emerging Sensor Technologies and Industrial Applications.

Sustainable Materials & Manufacturing: Sustainable Material Synthesis, Characterisation and Testing, Upscaling of Waste into value added product, Sustainable Manufacturing for Product Design

# 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

equested to sponsor, co sponsor or support i Liviss 2025. Details or 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.

# **BITS PILANI**



Contact: plmss2025@pilani.bits-pilani.ac.in