



9th International Conference on Product Lifecycle Modeling, Simulation and Synthesis



Theme: **Product Lifecycle Management in Smart, Connected and Sustainable Ecosystem**

In partnership with



under the aegis of



<https://plmss.org.in/plmss-2023>

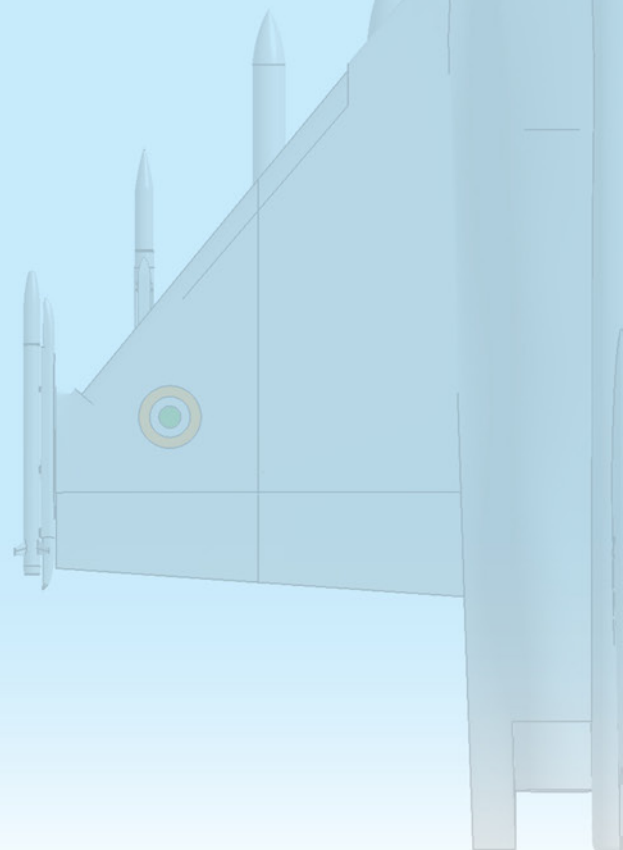


PREAMBLE

The role of digitalisation is no more a choice but mandatory in product design, development and support. It facilitates validation of product design, realisation process & maintenance strategies in virtual environment much ahead of metal cutting. Digitalization has become essential for managing the ever-increasing product complexity, diversity, built-in quality and achieving 'first time right' in new product development. In digital product development ecosystem, Modeling, Simulation and Synthesis are dovetailed into a collaborative PLM framework for seamless connectivity and single source of truth for all stakeholders.

The International Product Lifecycle Modeling, Simulation and Synthesis (PLMSS) Conference series aims to provide a live platform for fruitful deliberations and sharing of knowledge/experiences in new technologies/processes pertaining to this domain as well as challenges and solutions among diverse players from Aerospace & Defence – R&D, Production, Private Industry and Academic Institutions.

The current edition of PLMSS conference, 9th in the series is being conducted at Bengaluru by Aeronautical Development Agency (ADA) Bengaluru, in association with SAEINDIA Aerospace forum under the aegis of PLMSS Trust. Previous eight editions of the conference were successfully hosted by ADA & IISc Bengaluru (2006), NAL Bengaluru (2008), PSG Tech Coimbatore (2011), VIT Vellore (2013), ASL/DRDO & BITS Hyderabad (2015), DIAT Pune (2017), CABS/DRDO & IISc Bengaluru (2019) and VSSC/ISRO & IIST Trivandrum (2021).





ABOUT ADA

ADA, an autonomous organisation under the Department of Defence Research & Development, Ministry of Defence, Government of India, is entrusted with the design & development of Combat Aircraft for Air Force and Navy. As a nodal organisation, ADA has synergised and developed strategic capabilities with identified partners towards realisation of various advanced technologies and final products for the Indian Air Force. Tejas, the Light Combat Aircraft for the Indian Air Force, is a triumphant venture culminating into induction for operations. Three other variants of the LCA viz., Air Force Trainer, Navy Trainer and Navy Fighter are under flight tests.

LCA Mk2, a medium weight combat aircraft with higher thrust engine, improved mission and point

performance is in the advance stage of design. ADA has also taken up the design of Advanced Medium Combat Aircraft - a Fifth Generation, Medium Weight, Multirole, Twin Engine Stealth Fighter Aircraft for Indian Air Force and Twin Engine Deck Based Fighter - a carrier based multirole fighter to meet long term requirement of Indian Navy.

ADA since its inception has been one of the pioneers in adoption of state-of-the-art enabling technologies. ADA, as part of digital transformation has deployed a diversified suite of CAx and PLM solutions successfully for its aircraft programmes and reaped rich benefits.

<https://www.ada.gov.in>





ABOUT SAEINDIA AEROSPACE FORUM

SAEINDIA is India’s leading resource for mobility technology. As an individual member driven society of mobility practitioners, the ownership of SAEINDIA lies with its members, who are individuals from the mobility community, which includes Engineers and Executives from Industry, Government Officials, Academics and Students.

SAEINDIA, a strategic alliance partner of SAE International, is registered in India as an Indian non-profit engineering and scientific society, dedicated to the advancement of the mobility industry in India.

The Aerospace Forum is a team of dedicated individuals representing a broad spectrum of knowledge and skills in the aerospace industry who defines the strategy and direction of the forum. Overall objective of the group is “To develop a strong community of interest, leading to a healthy aerospace ecosystem in India”. Numerous events and activities were organised by the Aerospace Forum over a decade, some independently and a few in collaboration with the like-minded groups. SAEINDIA

team has been collaborating with SAE International for the development of aerospace standards. The Indian team is actively involved in G-31: Electronic Transactions for Aerospace Technical Committee, G-34: Artificial Intelligence in Aviation Committee and HM-1: Integrated Vehicle Management Committee.

<https://saeindia.org>



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 organisation of the International Conference PLMSS. The Trust has also been organising special lectures and workshops on its foundation day.

<https://plmss.org.in>



ABOUT BENGALURU



Bengaluru, the capital of Karnataka, is a vibrant city located in the southern part of India. Known as the Silicon Valley of India, Bengaluru is the hub of India's technology industry and is home to many multinational corporations and startups. The city's rich history and culture can be seen in its many ancient temples, museums, and art galleries. The Bengaluru Palace, Vidhana Soudha, and Lalbagh Botanical Gardens are some of the popular tourist attractions. Bengaluru is also a centre for education and research, with prestigious institutions like the Indian Institute of Science, Indian Institute of Management, and National Law School of India University.

Bengaluru's pleasant climate, friendly people, and diverse cuisine make it a great destination for travellers. Overall, Bengaluru is a cosmopolitan city that offers a perfect blend of modernity and tradition, making it an ideal destination for a conference that seeks to explore the best of Indian culture, technology, and innovation.

VENUE

Conference will be held at HAL Management Academy, Marathahalli, Bengaluru.
Location: [XM7V+V7 Bengaluru, Karnataka](#)



THEME AND CORE AREAS

“Product Lifecycle Management in Smart, Connected and Sustainable Ecosystem” is the theme of PLMSS 2023. This edition of PLMSS aims to discuss various product lifecycle activities in light of advanced digitalisation technologies and their applications in new product development. The conference intends to provide a vibrant platform for discussing new approaches, innovative methods, challenges and issues in the field of Product Design, Development, Operations and Sustenance.

Core Areas targeted for PLMSS 2023 as applied to Aerospace, Automotive, Heavy Engineering, Manufacturing, and associated domains are

- 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, Smart Structure Modeling and Analysis, 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, Enterprise Resource Planning
- Product Development Frameworks: Product Lifecycle Management, Application Lifecycle Management, Simulation Lifecycle Management,

Information and Knowledge Modeling, Distributed Data Management, Secure Data Exchanges, Digitalisation, Digital Thread, Digital Twin, Scalability, Enterprise Systems Integration/Interface, Interoperability with Enterprise Solutions, Supply Chain and Value Chain, Challenges in Implementation, 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, Connected Product & Model Based RAMS, Maintenance, Repair and Overhaul
- New Technologies in Product development: Artificial Intelligence, Blockchain, Environmental Social Governance

CALL FOR PAPERS

Papers outlining original research or an interesting application in any of the above topics or related areas are invited from prospective authors/participants. Extended abstracts submitted for the conference will be reviewed quickly to confirm relevance to the conference themes. Only full papers submitted for the conference will be reviewed for its possible publication/presentation. All papers should be submitted electronically. Full Papers should be



limited to 10 pages in A4 size, including figures and references and should contain unpublished original results. All papers will be reviewed by peer reviewers from within and outside the country. Verbal and poster presentations will be decided based on the recommendations of reviewers. E Proceedings of the conference containing the full-length papers and book containing the abstract of all selected papers will be made available to the registered participants. Also, efforts are being made to publish some of the full-length papers in selected National and International Peer Reviewed Journals. Awards are planned for the best paper and poster and shall be awarded during the conference. Formats/Templates for preparation of full paper and abstract can be obtained from the conference website <https://plmss.org.in/plmss-2023/call-for-papers/>. Authors are required to register in the prescribed format online.

IMPORTANT DATES

Submission of Extended Abstract	31 Jul 2023
Acceptance of Abstract	11 Aug 2023
Submission of Full papers	11 Sep 2023
Reviewer Comments	10 Oct 2023
Submission of Camera-ready paper	31 Oct 2023
Commencement of Registration	01 Nov 2023
Conference Dates	6-8 Dec 2023

(Please note that submission of paper has to be made through PLMSS website only).

PRE-CONFERENCE WORKSHOP

A pre-conference workshop is planned on 5th December 2023. The topic of the pre-conference workshop is Digital Thread Solutions for Aerospace Industry. Details of workshop is announced on the conference website.

REGISTRATION DETAILS

Access conference website <https://plmss.org.in/plmss-2023/> for registrations. Fee details are given

- Private /Academic/R&D Organization:
Rs. 10,000 per delegate
- Group registration (≥ 5 participants):
Rs. 8,000 per delegate
- Student: Rs. 5,000 per student
- Foreign participant: 150 USD per delegate
(Group discount not applicable)

Registration fee can be paid through DD/Multicity cheque/Bank transfer / Online.

Registration fee includes conference kit, tea / coffee, snacks, lunch on all the days.

For Bank transfer, please mention Registration Number / Name in remarks column. Bank details are given below:

Account Name	PLMSS
Account No.	41357119119
IFSC Code	SBIN0061768
Bank Name	State Bank of India
Branch	ARDC Campus
SWIFT Code	

Cheque and DD should be drawn in favour of PLMSS Trust payable at Bengaluru.



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Members confirmation for the committees under progress





SPONSORSHIPS

Platinum, Diamond, Gold and Silver Sponsorships are planned. Final Details are being worked out and will be published on the website.

	Platinum	Diamond	Gold	Silver
Sponsorship amount (excluding GST *)	Rs. 8 Lakhs	Rs. 6 Lakhs	Rs. 4 Lakhs	Rs. 2 Lakhs
Brochure insertion for delegates	✓	✓	✓	✓
Complimentary registrations	8	6	4	2
Exhibition stall	✓	✓	-	-
Presentation slot	✓	✓	-	-
Banner at the venue	✓	✓	✓	✓

* Sponsors to pay applicable GST directly to the Government

EXHIBITION STALLS

It is planned to put up few stalls. Details are being worked out and will be published on the website. Priority will be given to sponsors.

CONTACT DETAILS

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Aeronautical Development Agency
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