



# PLMSS 2021



8<sup>th</sup>

International Conference on  
Product Lifecycle Modeling,  
Simulation & Synthesis (PLMSS)

17-18 December 2021

**Pre-Conference Workshop**

16 December 2021



PRODUCT LIFECYCLE –  
SPACE SYSTEM PERSPECTIVE





## Preamble

Product Lifecycle Management (PLM) is the process of managing entire lifecycle of a product from its inception through its linkage to system engineering philosophy and forms a platform for design, development, manufacturing, operations etc throughout the life of the product. PLM increases productivity and eliminates wastes and thereby acts as a pillar for innovation driven industries. Product Lifecycle Modeling Simulation and Synthesis Conference (PLMSS-2021) will be a platform to exchange ideas and information about the latest PLM practices to achieve product excellence and improve yield. The intention of the conference is to unify R & D institutes, academia and industry to discuss over novel methods, challenges and possibilities in PLM in the space system perspective. The seven previous PLMSS conferences were successfully hosted by ADA - Bangalore with IISc in Dec 2006, NAL CSIR-Bangalore in November 2008, PSG College of Technology Coimbatore in December 2011, VIT University Vellore in January 2014, ASL DRDO - Hyderabad with BITS Hyderabad in December 2015, DIAT - Pune with Tech Mahindra in December 2017 and CABS DRDO - Bangalore with CPDM IISc - Bangalore in December 2019.

## About the conference

Vikram Sarabhai Space Centre (VSSC) and Indian Institute of Space Science and Technology (IIST) is jointly hosting the 8<sup>th</sup> International Conference on Product Lifecycle Modelling, Simulation and Synthesis (PLMSS - 2021) in collaboration with PLMSS Trust during 17-18 December 2021 along with pre-conference workshop on "Digital Aerospace Manufacturing" on 16 December 2021. The theme of PLMSS 2021 is "Product Lifecycle-Space System Perspective". The conference and pre-conference workshop will be conducted in online mode.



## About VSSC

**V**ikram Sarabhai Space Centre (VSSC) is the lead Centre of Indian Space Research Organisation (ISRO) under the Department of Space (DOS), Government of India. The Centre is named in the fond memory of Dr Vikram A Sarabhai, the great visionary leader and the father of Indian Space Programme. VSSC pioneers in rocket research and launch vehicle projects of ISRO. The Centre also pursues research and development activities in associated areas like propellants, solid propulsion technology, aerodynamics, aero structural and aero thermal fields, avionics, polymers and composites, guidance, control & simulation, computer and information, mechanical engineering, aerospace mechanisms, vehicle integration and testing, space ordnance, chemicals and materials. Systems reliability and quality assurance of all aspects of engineering and operations are assessed and evaluated to the levels of conformance to specification.



## About IIST

**I**ndian Institute of Space Science and Technology (IIST) functions as an autonomous body under the Department of Space, Government of India. The institute is the first of its kind in the country to offer high quality education with special focus to space sciences, space technology and space applications. IIST offers various undergraduate and post graduate programmes in areas relevant to space science and technology. The institute also recognizes the importance of research in developing future technologies and applications of space research. IIST encourages close collaboration with DOS/ISRO centres through joint research projects. With Dr. A P J Abdul Kalam as the first chancellor, the institute has an enviable reputation among the educational institutions in the country.

## About PLMSS Trust

PLMSS TRUST was registered on 03 December 2014 as a nonprofit organisation. The trust is headed by eminent persons from the organisations of DRDO, ADA, NAL, IISc and other industries. It was formed in order to take up research, aid, promote, guide, manage, coordinate, execute and disseminate activities in the following areas:

1. Computer Aided Design (CAD)
2. Computer Aided Manufacturing(CAM)
3. Computer Aided Engineering (CAE)
4. Product Lifecycle Management (PLM)
5. Enterprise Resource Planning (ERP) and other related topics.

## Call for papers for PLMSS 2021

Papers describing original research or an innovative application in any of the following topics or related areas are invited from prospective authors/participants.

- Space systems design, modelling and simulations
- Systems Engineering in Aerospace and PLM tools.
- Product Lifecycle of human rated space systems
- Environmental risk assessment of space systems
- Modelling and simulation of metallurgical processes and manufacturing techniques
- Additive manufacturing and manufacturing under microgravity in Space
- Advanced Product development frame work - Knowledge based engineering and Knowledge modelling
- Concurrent engineering and collaborative workspaces
- Artificial intelligence and Machine learning techniques in manufacturing, inspection, characterization.
- Virtual factory: Virtual platforms for design, manufacturing and evaluation
- Emerging trends in PLMSS- Kanban methodology, Agile development, Mobile PLM, Eco PLM design, Digitization of PLM
- Industry 4.0 and IoT in manufacturing - Relevance in present scenario
- Quality and System Reliability
- Advances in Metrology and automation in inspections
- Sustainability risk management

Topics are indicative and any research in Product Life cycle of aerospace systems will be encouraged for submission. Some of the peer reviewed selected papers stand a chance to be published in international journals of repute.



Extended abstracts shall be submitted with minimum 2 pages in A4 size. Full Papers shall be limited to 8 pages in A4 size, including figures and references and shall contain unpublished original results. All papers shall be submitted electronically in IEEE format. All papers will be reviewed by peer reviewers. Oral and poster presentations will be decided considering the recommendations of reviewers and the technical committee.

## Pre-Conference Workshop

A pre-conference workshop will be organized on 16 December 2021 through online mode. The theme of the pre-conference workshop is "Digital Aerospace Manufacturing". Experts will share their experiences on Digital Manufacturing in Aerospace with the participants.

## Important dates

- Last date for submission of extended abstracts : 20 Sept 2021
- Acceptance communication for extended abstract : 30 Sept 2021
- Last date for submission of full paper : 20 Oct 2021
- Communication of reviewer's comments : 05 Nov 2021
- Last date for Camera ready paper submission : 20 Nov 2021
- Last date for submission of recorded presentation : 30 Nov 2021

Please note that submission of extended abstracts, paper and presentation videos has to be made only through online and details of the format are provided on the website <https://plmss.org.in/plmss-2021>

## Registration Details of PLMSS 2021

Registration for the conference and Work shop can be made through our website: <https://plmss.org.in/plmss-2021/> Fee details (excluding 18 %GST) are as follows:

### Delegate fee

#### Conference

Non Academic Institutions	: ₹ 1500/-
Academic Institutions & Student	: ₹ 800/-
Foreign Participant	: \$ 100
Foreign Student Registrant	: \$ 50

#### Workshop

Non Academic Institutions	: ₹ 1200/-
Academic Institutions & students	: ₹ 600/-

Registration fee can be made directly to the bank account and receipt copy uploaded in the website.



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## Sponsorship

PLMSS 2021 solicits sponsorship from associated industries and establishments. Types of sponsorship and benefits associated are below:

	Platinum ₹ 1, 00,000/- + 18 % GST	Diamond ₹ 50,000/- + 18 % GST	Gold ₹ 30,000/- + 18 % GST
Colour advertisement in Souvenir	Full page	Full page	Half page
Logo display in Souvenir	✓	✓	✓
Complementary Registrations	10	7	5
Exhibition stall	✓	✓	✓

## Souvenir

As a part of PLMSS 2021, a souvenir shall be released during the inaugural function. The souvenir will have collection of abstracts of technical papers, invited talks and advertisements. It is an ideal platform for all PLM industries to advertise their products

Front inside, back cover and back inside*	₹ 20,000/- + 18 % GST
Inner pages*	₹ 7,500/- + 18 % GST
Full Page (Colour)*	₹ 15,000/- + 18 % GST
Half Page (Colour)*	₹ 10,000/- + 18 % GST

**\*Complimentary registration - one delegate**

Payments can be made directly to the bank account.

## Bank details:

Account name	:	Organising committee PLMSS 2021 VSSC
Account number	:	40395038424
Bank name & Branch:	:	SBI, Thumba
IFSC code	:	SBIN0002279

