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- Saravanan S, PSG Tech, Coimbatore, India
- Udo Lindemann, TUM, Germany
- Umberto Cugini, Italy
- Valarmathi, Project Director, ISRO
- Vasudevan R, VIT, Vellore, India
- Venkateswara V Rao, CAS, Hyderabad, India
- · Vasantharaj C, KCT, Coimbatore, India

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- · A Chakrabarti, IISc Bangalore, India : Co-Chair

#### **CONFERENCE SECRETARY**

Reena Sharma, CABS, DRDO

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- Venkateswara Rao Koushik ADA, PLMSS Trustee Bengaluru, India

## **REGISTRATION DETAILS FOR PLMSS 2019**

Registration for the conference and Work shop can be made through our website: www.plmss.org.in/conf/plmss19. Fee details (excluding 18 %GST) are as follows:

#### CONFERENCE

- Non Academic Institutions: Rs. 10,000/- Per Person
- Academic Institutions: Rs. 8,000/- Per Person
- Group Registration (>5 participants): Rs. 8,000/- Per Person Student: Rs. 4,000/-
- Foreign Participant: \$450/- Foreign Student Registrant \$225

#### WORKSHOP

- Registration Fees: Rs. 5000/-
- Combined Conference and Workshop Registration : Rs. 14000/- Per Registrant

For offline registrations, the payment by cheque/DD can be made in favour of "PLMSS 2019 CABS" payable at Bengaluru.

#### **CONTACT DETAILS**

Dr. Reena Sharma **Conference Secretary** Email: plmss.blr.2019@gmail.com Phone: 080-25049021 Mobile: +91-9341903693 Address: Centre for Airborne Systems. Ministry of Defence (R&D), Belur, Yemalur Post, Wind Tunnel Road. Bangalore - 560037

#### **SPONSORSHIP**

	Platinum Rs. 5 Lakhs + 18% GST	Diamond Rs. 4 Lakhs + 18% GST	Gold Rs. 3 Lakhs + 18%GST
Color advt. in Souvenir	Full page	Full page	Half page
Logo display in Souvenir	$\checkmark$	$\checkmark$	—
Brochure insertion for delegates	$\checkmark$	$\checkmark$	$\checkmark$
Complimentary registrations	10 no's	7 no's	5 no's
Exhibition stall	$\checkmark$	$\checkmark$	$\checkmark$
Presentation	20 min	15 min	7 min
Banner at venue	$\checkmark$	$\checkmark$	$\checkmark$

#### **SPONSORSHIP**

As part of PLMSS 2019, 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 Color)	Rs. 1,00,000/- +18% GS
Half Page (Color)	Rs. 50,000/- +18 % GST
Inside Pages	Rs. 25,000/- + 18% GST
Full Page (Color)	Rs. 75,000/- + 18% GST
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# 7th

## **International Conference on Product Lifecycle Modelling, Simulation &** Synthesis (PLMSS)



## **PLMSS 2019** 18 - 20 December 2019

**Pre-Conference Workshop** 16 & 17 December, 2019

VENUE: Hotel Taj, MG Road, Bengaluru - 560001

#### PREAMBLE

Product Lifecycle Management (PLM) as a concept, though originating from Aerospace and Automotive industries, has become the mainstay of all innovation driven industries. PLM encompasses product development, management, collaboration, programs and project management, manufacturing streamlining and maintenance management and is the core of all engineering centered enterprises.

Product Life Cycle Modelling, Simulation and Synthesis (PLMSS)- 2019 is a platform to take stock of current PLM technologies and identify their applications in making futuristic products. The conference intends to bring together research institutes, academicians, design practitioners, government agencies, PSUs, industry representatives and management institutes for discussing the new approaches, innovative applications, the challenges and issues related to PLM PLM has the potential to make a significant contribution to the "Make in India" campaign. Seventh in the series, this conference aims to have an international debate on future trends in PLM and revamping the engineering culture to adapt the PLM for seamless engineering collaboration. The six previous PLMSS conferences were successfully hosted by ADA-Bangalore with IISc in Dec 2006, NAL, CSIR-Bangalore in Nov 2008, PSG College of Technology, Coimbatore in Dec 2011, VIT University Vellore in Jan 2014, ASL- Hyderabad, DRDO with BITS Hyderabad in Dec 2015 and, DIAT-Pune with Tech Mahindra in Dec 2017.

#### SCOPE

Centre for Airborne Systems (CABS), DRDO, Bengaluru, and Centre for Product Design and Manufacturing (CPDM), Indian Institute of Science(IISc), Bengaluru have come together to jointly host the seventh International Conference on "Product Lifecycle, Modeling, Simulation and Synthesis (7th PLMSS - 2019)" under the aegis of PLMSS Trust during December 18 - 20, 2019 at Hotel Taj, Bengaluru, preceded by a Pre-Conference Workshop on Industry 4.0 during 16-17 Dec 2019.

The central theme of PLMSS 2019 is Enterprise Life Cycle. The enterprise life cycle is a key concept in enterprise architecture, enterprise engineering and systems engineering. In Industry, Product Lifecycle Management (PLM) is the process of managing the entire life cycle of a product from inception, through engineering design and manufacture, to service and disposal. The conference is an avenue to promote, quide, manage, coordinate, execute and disseminate activities in areas such as:

- System Engineering
- Program Management
- Enterprise Resource Planning
- Computer Aided Design
- **Computer Aided Engineering Analysis**
- Product Lifecycle Management
- Industry 4.0 and other related topics

#### ABOUT CABS, DRDO, BENGALURU

The Centre for Airborne Systems (CABS) is a laboratory of the Defence Research and Development Organisation (DRDO) of India. Located in Bengaluru, its primary function is design, development & evaluation of airborne surveillance systems.

CABS is committed to design and develop Airborne Force Multipliers in cost effective ways to meet user requirements and continuously improve the systems / products through an efficient quality management system. CABS has successfully developed and inducted the indigenous Airborne Early Warning and Control System into IAF. CABS has adopted System Engineering and Product Lifecycle Management solutions in development of complex system of systems which is a pioneering effort in DRDO towards enabling collaborative effort & effective management. CABS has digitally connected all DRDO work centres spread across India, through PLM enabling concurrent development.

#### **ABOUT IISc. BENGALURU & CPDM**

IISc is among India's leading institutions for advanced education and research in sciences and engineering. IISc's faculty, numbering around 500, carries out research in 42 departments, attracting over 4000 students, with over 2,700 doctoral students, 900 master's students, and 400 students in a four-year, research oriented undergraduate programme in the sciences. IISc has a wooded, vibrant, 440 acre campus in the city of Bengaluru. The Institute also has a 1500 acre campus at Challakere in the Chitradurga district of Karnataka, training science teachers, and carrying out research in areas of immediate social impact.

Centre for Product Design and Manufacturing (CPDM) is the design and manufacturing face of IISc. It is the most research-intensive design & manufacturing school in India. It trains students in developing and making systemically-complex, technologically-intensive, and socially-impactful solutions that are functional, aesthetic, usable and sustainable. It is among the top design schools in the world, focusing on development of hardware products. It's two flagship programmes are MDes in Product Design & Engg, and MTech in Smart Manufacturing. CPDM pursues research in advanced design and manufacturing, e.g. Design Theory & Methodology, PLM, Human Factors, User Interface, Vehicle Safety, Sustainability, Industry 4.0, Digital Manufacturing, Supply Chains, Additive Manufacturing, New Materials & processes, etc., with applications in Automotive, Aerospace and Biomedical sectors.

#### **ABOUT PLMSS TRUST**

PLMSS Trust was registered on 3rd Dec 2014 at Bangalore by the Heads of DRDO, NAL, ADA, 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 other concerned industries. The conference is being planned to provide a platform to discuss the trends and advancements in the area of PLMSS for Engineering and Technology applications/processes. Active participation from Academia, Industry Professionals, Researchers, R & D Establishments and Innovators is solicited. PLMSS - 2019 will include Pre-conference workshop, Invited/Plenary talks, Oral and Poster presentations, Exhibition, Panel Discussions etc.

#### **THEMES OF PLMSS - 2019**

- Enterprise Life Cycle
- Product Definition: CAD/Geometrical Modeling, Requirements Engineering, Conceptual Design, Quality & Reliability, Computational Material Engineering, Integration aspects of Product Development and System Engineering.
- Product Visualization: Computational and Conceptual Graphics, Virtual Prototyping and Distributed Visualization.
- Product Modeling and Simulation: Computer Aided Engineering, Multi-Disciplinary Analysis and Optimization, Smart Structure Modeling and Analysis, Advanced Materials and Applications
- Product Realization: Advanced Manufacturing Techniques, Rapid Prototyping, Jigless Manufacturing, Process Planning & Control, Green Manufacturing and 3DPrinting.
- · Lifecycle Management: Standards, Metrics and Regulations, Simulation Tools, Lifecycle Managements Integration, Validations Maintenance and Recycling.
- Product Management: Program/Product Management, Supply Chain and Value Chain, Product Delivery System,
- Advanced Product Development Frame Work: Knowledge Based Engineering, Distributed Data Management, Secure Data Exchanges, Information and Knowledge Modeling, Architecture Development.
- · Emerging Trends of PLMSS: Data Analytics, Cyber Systems and Internet of Things, Cloud based PLM, Kanban methodology, Agile Development, Mobile PLM, Product Support, Services and Systems, Lifecycle Assessment and Sustainability, Eco PLM Design, Digitalization of PLM.
- Implementation of PLM: Case Studies, PLM Infrastructure, Redundant Architecture, Scalability, Agile PLM and Interoperability with Enterprise Solutions.

#### **PRE-CONFERENCE WORKSHOP**

A pre-conference workshop will be organized on 16 and 17 December 2019 at Taj, Bengaluru. The theme of the pre-conference workshop is INDUSTRY 4.0. Experts will share their experiences on INDUSTRY 4.0 with the audience.

#### **CALL FOR PAPERS**

Papers describing original research or an innovative application in any of the above topics or related areas are invited from prospective authors/participants. Only full papers submitted for the conference will be reviewed and considered for its possible publication/presentation. All papers should be submitted electronically in IEEE format for MS Word in A4 format from https://www.ieee.org/conferences/publishing/ templates.html. All papers will be reviewed by peer reviewers from within and outside the country. Oral and poster presentations will be decided based on the recommendations of reviewers.

E-Proceedings of the conference containing the full-length papers and souvenir containing the abstract of all papers will be made available to the registered participants. Efforts are being made to publish a few number of full length papers in Defense Science Journal. Also, best paper and poster shall be awarded during the conference. Formats/Templates for preparation of full paper and abstract can be obtained from the conference website plmss.org.in/conf/plmss19. Authors are required to register online in the format specified on the website.

#### **IMPORTANT DATES**

Last date for Submission of Abstract : 25 Aug 2019 : 15 Sep 2019 Last date for Submission of Full Papers Last date for Communicating Reviewer's Comments : 15 Oct 2019 Last date for Camera Ready Paper Submission : 01 Nov 2019 Last date for Registration with Payment : 15 Nov 2019

the conference. online only, details will be on the website)

#### PATRONS

- & Director General, ADA.

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- Panigrahi S K, DIAT, Pune, India
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(Only full papers will be reviewed. Abstracts are solicitated to match the scope of

(Please note that submission of paper, all correspondence and payment etc has to be made through

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