

6TH INTERNATIONAL CONFERENCE

Product Life Cycle, Modelling, Simulation and Synthesis (PLMSS-2017)

Organized By
DIAT(DU) Pune & Tech Mahindra

Date: 13th December, 2017 (Day 1)

Time	Detailed Activities	
08:00 – 10:00 am	Registration	
10:00 – 10:45 am	Inauguration	
10:45 – 11:30 am	Plenary Talk on Overview of PLM and Its Importance in Twenty First Century by Dr. Prahlada, 'Padmashree 2015', Former Vice Chancellor DIAT Session Chairman: Dr. S. Pal, Vice Chancellor, DIAT	
11:30 – 11:45 am	HIGH TEA	
11:45 – 12:30 pm	Keynote Lecture on PLM: A Key Enabler for Digitalization by Mr. Peter, President CIMdata, USA Session Chairman – Prof B Gurumoorthy, Professor, IISc Bangalore	
01:00 – 02:00 pm	LUNCH BREAK	
02:00 – 02:30 pm	Invited Talk on Systems Engineering: Its challenges and benefits by Mr. Frank, Sr Consultant, CIMdata, USA Session Chairman: Dr S E Talole, Dept of Aerospace Engineering	
02:30 – 03:00 pm	Sponsored Presentation	
	TECHNICAL SESSION – I Venue: Prithivi Chairman: Dr R K Ramanathan Co-Chairman: Dr Ajay Misra, Dept of Aerospace Engg	
03:00 – 03:15 pm	Modularization Approach of Aircraft Harness Design & Fabrication for Combat Aircraft using CAD Tools	V. Raghunandan A. Vijayakumar, M. Chowdaiah and P. Selvaraj
03:15 – 03:30 pm	Conceptual Design and Fluid-Solid Interaction Simulation of Micro Aerial Vehicle for High Speed Mission	Vijayanandh R, Naveen Kumar R, Raj Kumar G, Senthil Kumar and M, Ramganesht
03:30 – 03:45 pm	Decision Support System for Sustainability Assessment of Assembly in Conceptual Design	Jai Singh and Abinash K. Swain
03:45 – 04:00 pm	Systems Engineering based Integrated Enterprise Approach across Combat Platforms	Manjeet Kumar Tiwari
04:00 – 04:15 pm	TEA BREAK	
04:15 – 04:30 pm	A Methodology to Simulate the Bird Strikes on the Aircraft Structures and Components to Evaluate its Structural Integrity along with some Case Studies	Rajappa Banger, Rajesh Sundrani, Niranjana Sarangi, P. Ramesh and Anil Mahobia
04:30 – 04:45 pm	Smart Structures Modeling and Analysis: Electro-Thermo-Mechanical Behaviour of a Composite Beam with Smart Actuator and Sensor	Sharad Katiyar
04:45 – 05:00 pm	Electrical Modeling of Combat Aircraft Zoning of Aircraft for Lightning Study Using Modeling and Simulation	Shyni Thomas, Udaya Kumar and Prabhulla Chandranv.K
05:00 – 05:15 pm	Study of Fracture Parameter for Curved Cracked Bimodular Flexural Specimen under Application of Thermal Loading	Awani Bhushan, R. Kumar and S.K. Panda
05:15 – 05:30 pm	Numerical Approach to Weight Reduction of a Civil Aircraft Composite Wing	Kumari Asha, N. Lohith and Byji Varughese
05:30 – 05:45 pm	Investigation of Springback Phenomenon in V-Die Bending of 6061 Aluminum Alloy Sheets using Finite Element Method and Experiments	Rajesh.R, Saravanan.S and Karthik .T
05:45 – 06:00 pm	Experimental Evaluation of Structural Integrity of a Multistage Aero Engine Rotor	Niranjana Sarangi, Praveen Kumar and P. Ramesh
06:00 – 06:15 pm	Three-Dimensional, Non-Linear Finite Element Analysis of Bullet Penetration Through Thin AISI 4340 Steel Target Plate	Abhishek Soni and A. Kumaraswamy
06:30 – 07:30 pm	Cultural Program at POINTS Auditorium	
07:30 - onwards	Banquet Dinner at Main Lawn	

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Date: 14th December, 2017 (Day 2)

Time	Detailed Activities	
09:30 – 10:15 am	Keynote Lecture on Product information models in PLM by Prof. B Gurumurthy, IISc Bangalore, Session Chairman – Sh A Patki, Ex Scientist, ISRO	
10:00 – 10:30 am	Invited Talk on Importance Of Centralized Data In Product Life Cycle by Sh. A. V. Patki, Ex Scientist, ISRO, Session Chairman – Dr P K Khanna, Dept of Applied Chemistry	
	TECHNICAL SESSION – II	
	Chairman: Dr Niranjan Sarangi, Sc 'F', GTRE Bangalore	Co-Chairman: Dr D G Thakur, Dept of Mech Engg
	Venue: Prithivi	
10:30 – 10:45 am	HIGH TEA	
10:45 – 11:00 am	Modeling and Simulation of Network Security Game	C.R. Suthikshn Kumar
11:00 – 11:15 am	Study of Composite Armour Subjected to Low Velocity Impact	Mithilesh Kumar Dewangan and S.K.Panigrahi
11:15 – 11:30 am	Mass Optimization of Cass Bracket Through Topology Optimization Techniques	Saurabh Gupta, Venkatagovind and Rao D
11:30 – 11:45 am	Characterization, Modelling and Simulation of Deformation and Fracture Behavior of The ArmoX 500t Steel under Low Strain Rate	AmbujSaxena, A Kumaraswamy and Vemuri Madhu
11:45 – 12:00 pm	Modelling and Structuring the Knowledge of Failures using Design Structure Matrix (DSM) for Reuse During Product Life-Cycle	L. Siddharth Amaresh Chakrabarti and Prabir Sarkar
12:00 – 12:15 pm	Effect Of General Boundary Condition on the Vibration Characteristics of Rectangular Plate	KavikantMahapatra and S K Panigrahi
12:15 – 12:30 pm	Empty Space Modelling Using Primitive Shapes and Associated Constraints for Detecting Spatial Conflicts Across Multiple Design Domains	Arun Kumar Singh, B. Gurumoorthy and Latha Christie
12:30 – 12:45 pm	Magnetostriction and magnetization of TCC Terfenol-d Actuator under Prestress and Alternating current	Mukund A. Patil, Challapalli John Wesly and Raj Ravikiran Kadoli
12:45 – 01:00 pm	Geometrical Parameter Optimization Using Taguchi Optimization Technique for Swj: A Case Study	S.Rakshe, S.V. Nimje and S.K.Panigrahi
1:00 – 01:15 pm	Study And Establishment of Manufacturing Process of Copper Cone By CNC Two Roller Flow Forming Machine	Pssrk Prasad, Narendra Kumar, NavneetVerma and KM Rajan
01:15 – 02:00 pm	LUNCH BREAK	
02:00 – 02:30 pm	Invited Talk on Accelerating "Make in India" through successful PLM Deployments by Mr. Prashant Dhonde, GM, Dassault Systemes.	
02:30 – 03:00 pm	Sponsored Presentation	
	TECHNICAL SESSION – III	
	Chairman: Sh BS Anand Mohan, Sc 'G', GTRE Bangalore	Co-Chairman: Dr A Kumaraswamy, Dept of Mech Engg
	Venue: Prithivi	
03:00 – 03:15 pm	Process Modeling of Cutting Load Effects in Machining a Straight and Curved Wall Geometry	Akshay Kumar Pujari, L. Gopinath, S Ravishankar and Rudra Naik
03:15 – 03:30 pm	Comparative Study on Surface Properties of Electroless Ni-P-Zno And Ni-P Deposits on Az91 Alloy	M.I. Ansari and D.G. Thakur
03:30 – 03:45 pm	Quantitative Estimation of Manufacturability of Prismatic Parts	Manish Kumar Gupta, Abinash K. Swain and P. K. Jain
03:45 – 04:00 pm	Effect of Deep Cryogenic Treatment On Wear Properties of Bearing Material AISI 440C	K.N.Pandey and Prasant Gautam
04:00 – 04:15 pm	TEA BREAK	
04:15 – 04:30 pm	Combining Ontologies for Manufacturing Information In the Aircraft Domain	B. Damayanthi Jesudas, Madhusudanan N and B. Gurumoorthy
04:30 – 04:45 pm	Leveraging PLM for Effective Collaboration Between Design & Service Engineering during Development Phase of Combat Aircraft	Mr. Murali Krishna Teki,, Lavan Kumar Reddy, Satish Kumar and P. Selvaraj
04:45 – 05:00 pm	Framework for Systematic Practices and Integrated ProjectTeam Concepts for Snag Management on a Typical Military Aircraft Testing and Development	Ashakiran Gb, Ashit Kumar, Ravikiran G and V Subba Rao
05:00 – 05:15 pm	Naval Supply Chains in a Connected World	H. Brent Baker and Alexander Daly
05:15 – 05:30 pm	Derivative Design Process for Aero Engine	C K Shubin, Harsha
05:30 – 05:45 pm	Process Improvement & Cycle Time Reduction In Aerospace Structure Reuse Strategy Using Knowledge Based Engineering	M. Senthil Kumar, S. Arul Kumar, L Sheik Ismail and H S Nagaraj
05:45 – 06:00 pm	Application of Multiple Criteria Decision Making (Mcdm) Techniques for Selection of Platform to Develop the Centralised Project Monitoring System	Ronak R. Degaonkar and Rajiv B

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Date: 15th December, 2017 (Day 3)

Time	Detailed Activities	
09:30 – 10:15 am	Keynote Lecture on Leveraging Technologies for Design and Development of Aircraft by Dr Selvaraj , ADA, Bangalore, Session Chairman – Dr P N Srinivasamurthy, Sc 'G' GTRE Bangalore	
10:00 – 10:30 am	Invited Talk on Facilitating Integrated Product Engineering Through Platformization by Dr Shreehari,TCS, Session Chairman – Dr PN Tengli, Sc 'G', O/O DG (Aero)	
	TECHNICAL SESSION – IV Venue: Prithivi Chairman: Prof K P Ray, Electronics Engg Co-Chairman: Dr K Balasubramanian, Professor, Dept of Material Engg	
10:30 – 10:45 am	HIGH TEA	
10:45 – 11:00 am	Test Setup Automation for Geo based Transmitters	Harsh Dashora, Jitendra Kumar, Kamaljeet Singh, Selvi R, Av Nirmal and S V Sharma
11:00 – 11:15 am	Automation Approach For Ease of Productionization of C-Band Receiver Packages of Tt&C Transponders for ISRO Mission	Smruti Ranjan Panigrahi, Selvi R., Kamaljeet Singh, A.V Nirmal and S.V. Sharma
11:45 – 12:00 pm	Teamcenter Virtualization	Sunil Akunuri
12:00 – 12:15 pm	Guidelines for Secure Data Migrations	Venkata Ramanaiah Nellore and Avinash Satpathy
12:15 – 12:30 pm	Systems Driven Product Development	Shibin Charthakudath
12:30 – 12:45 pm	Digitalisation of Simulation Processes	Raghavendra Pandeshwar
12:45 – 01:00 pm	Design Of Single Piece Instrument Panel	Nootan Indulkar , Atul Khanapurkar, Narasimha Gupta, Debiprasad Pradhan, Abhijeet Shirsath, Pritam Mahajan and Santosh Banakar
01:00 – 02:00 pm	LUNCH BREAK	
02:00 – 02:30 pm	Sponsored Presentation	
	TECHNICAL SESSION – V Venue: Prithivi Chairman: Sh VR Koushik, Scientist, ADA Bangalore Co-Chairman: Dr CRS Kumar, Dept of Computer Science and Engg	
02:30 – 02:45 pm	Analysis of Ships Optimised Hybrid Power System	Divyajot
02:45 – 03:00 pm	Internet of Things: Technology LED Transformation In Health Sector	V. Pavan Kumar, G. Kavitha and M. Parvathi
03:00 – 03:15 pm	Cloud Plm: Opportunities and Challenges	V. Pavan Kumar, G. Kavitha and M. Parvathi
03:15 – 03:30 pm	Machine Learning Applications In PLM	Jayakumar Palanive and Hemanth Kumar Bathula,
03:30 – 03:45 pm	TEA BREAK	
03:45 – 04:00 pm	Rapid CAD Migration Approach In PLM	Sabyasachi Mishra
04:00 – 04:15 pm	Maintaining Customer Specific Product Configurations In PLM	Ganesh Natarajan and Raghuram Dharmapuri
04:15 – 04:30 pm	Semantic Interoperability Issues – An Introspection	B. Damayanthi Jesudas and B. Gurumoorthy
04:30 – 04:45 pm	Corrosion And Life Cycle Management of Steel Hulled Ships	Vikram Singh
04:45 – 05:00 pm	Challenges In Standardising Spacecraft Bus Configuration – A Case Study	Avinash. M, Ravi Chandra Babu. G, Chaitra Rao, S.K.Nagesh and G.Nagesh
05:00 – 05:15 pm	Case Study on Real-Time Production Overall Equipment Efficiency Analytics for Air Conditioner Production System	T Viswanathan, S Krishnakumar, R Velkumar and C S Ramshankar
05:15 – 05:30 pm	Simulation of Graphene Nanoribbon Based RF Transistor	Rohit Ramesh Nimje
05:30 – 05:45 pm	CTS Identification And Design Of Smart Ergonomic Subsystem for Shocker Assembly Line Workforce	Santosh Kumar and M. Muralidhar
05:45 pm	VALEDICTORY FUNCTION	

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	POSTER PRESENTATION SESSION – I Venue: Pinaka	
	Chairman: Sh SN Mistry, Sc G, RCMA (Eng)	Co-Chairman: Prof Sangeeta Kale, Dept of Applied Physics
03:00 – 03:15 pm	Conceptual Design of Unmanned Fighter	M. Sakthivel
03:15 – 03:30 pm	A New Perspective In Designing A Led Based Sun Simulator	Anish K Navalgund , Anusha Sheth, Shashank Shankar and Veena John
03:30 – 03:45 pm	Innovative Tray Design for User Comfort and Safety	Anant Vashistha and Inderdeep Singh
03:45 – 04:00 pm	Programme Management of Indigenous Fighter Aircraft Programme towards Initial Operational Clearance - A System Engineering Approach	Ashakiran GB, Ashit Kumar and V Subba Rao
04:00 – 04:15 pm	TEA BREAK	
04:15 – 04:30 pm	Fuel Sloshing Studies in an Inverted Flight Compartment of a Typical Combat Fighter Aircraft	V. Krishnaprasad, L. Sheik Ismail, G.Shankar and Abhishek Patil
04:30 – 04:45 pm	Stiffness Evaluation of Intermediate Casing With Ball Bearing & Squirrel Cage Damper Configuration of an Aero Gas Turbine Engine	G.V. Venkata Rao, Praveen Kumar and P.Ramesh
04:45 – 05:00 pm	Dynamic Crack Propagation in Gas Turbine Engine Rotating Discs using FEM Technique	Rajesh Kumar and Rajeev Jain
05:00 – 05:15 pm	Bond graph Modelling of Electro Hydraulic Servo System	A.Tony Thomas and J.Sidharth
06:30 – 07:30 pm	Cultural Program at POINTS Auditorium	
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10:30 – 10:45 am	HIGH TEA	
	POSTER PRESENTATION SESSION – II Venue: Pinaka	
	Chairman: Sh SD Lagavankar, Sc G, RCMA (AA)	Co-Chairman: Prof S K Das, Dept of Applied Maths
10:45 – 11:00 am	Micromechanical Modelling of Particulate Reinforced Metal Matrix Composites	D.G.Thakur and Mradul Ojha
11:00 – 11:15 am	Vibration Analysis of Plates Having Variable Thickness	Prasanta Bastia, KKMahapatra, and S KPanigrahi
11:15 – 11:30 am	A Numerical Approach to Investigate the Temperature Distribution on Amorphous Ribbon Surface During Annealing	Subhankar Sikder and Ashutosh C Abhyankar
11:30 – 11:45 am	Ballistic Impact of Projectile on Targets & Its Applications in Armour Technology	Pranav S. Oak and R. N. Pralhad
11:45 – 12:00 pm	Rapid Manufacturing of Mounting Bracket using Fused Deposition Modelling (FDM)	Komati Raghunath Rao
12:00 – 12:15 pm	Magnetostriction and Magnetization of CTC Terfenol-D Actuator under Prestress and Alternating Current	John Wesley Raj, MukundPatil and Ravikiran Kadoli
12:15 – 12:30 pm	Using SMED and Simulation to Improve Change over Process in Production Line	Shrithesh Kumar Garhewal and Rajiv B.
01:00 – 02:00 pm	LUNCH BREAK	
02:00 – 02:30 pm	Invited Talk on Accelerating “Make in India” through successful PLM Deployments by Mr. Prashant Dhonde, GM, DassaultSystemes. Session Chairman – Mrs Ashu Bhatia, Sc ‘G’, O/O –DG (Aero)	
02:30 – 03:00 pm	Sponsored Presentation	
	POSTER PRESENTATION SESSION – III Venue: Pinaka	
	Chairman: Smt Gracy Phillip, Sc G, RCMA (A/C)	Co-Chairman: Dr G Unnikrishnan, Dept of Applied Maths
03:00 – 03:15 pm	Practice in Production of Aerospace Vehicle	Sanjay Kumar
03:15 – 03:30 pm	Enforcing the Regulation on SDLC Process of Space Borne Software Systems through Metrics	Ashwin G.S, Prasanna Kumar N, Sudeesh B and Bhanumathy Y.R
03:30 – 03:45 pm	Restricted, Secured Access but Ability to Exchange Essential PDM Data	Aravinth Rajendran
03:45 – 04:00 pm	Project Portfolio & Product Data Management	Raju Malla and SaiSaripalli
04:00 – 04:15 pm	TEA BREAK	
04:15 – 04:30 pm	Automated Bill of Material Creation from CAD/CAM Designs	Mukund Kannan and Rana Banerjee
04:30 – 04:45 pm	Platform for Rapid PLM Analytics	Srinivasan PTS
04:45 – 05:00 pm	Emerging CAD –PLM Relationship	Purushothamunaid U Ganta

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	POSTER PRESENTATION SESSION- IV	
	Chairman: Dr. Somanchi VSSNKG Krishna Murthy, Dept of Applied Maths	Venue:Pinaka Co-Chairman: Prof S K Panigrahi, Dept of Mech Engg
10:30 – 10:45 am	Artificial Intelligence for Predictive Maintenance	Manish Prakash
10:45 – 11:00 am	Influence of Positioning of Locking Hole on Structural Integrity of a Hp Turbine Disc in Military Aircraft Engine: A Case Study	L.K.Sahoo, M.K.Sethi , Khs Narayana and BenudharSahoo
11:00 – 11:15 am	What Is Plbom and Its Effect in a Seamless Connect with ERP Applications	Ravi Yendru, SyedIbrahim
11:45 – 12:00 pm	Case Study On Remote Monitoring And Diagnostics Analytics of RO water System for medical Dialysis Process	K Nitish, SKaruppusamY, K Lakshman, C SRamshanka and TViswanathan
12:00 – 12:15 pm	Case Study on Industrial Thermal Energy as Services Business Model Using Industrial IOT Technology	T Viswanathan, S, Krishnakumar, SKaruppusamy, S Sakthivel, R Velkumar and C SRamshankar
12:15 – 12:30 pm	Hand Written Character Recognition	Ankit Jha and Debasish Pradhan
01:00 – 02:00 pm	LUNCH BREAK	
02:00 – 02:30 pm	Sponsored Presentation	
05:45 pm	VALEDICTORY FUNCTION	