

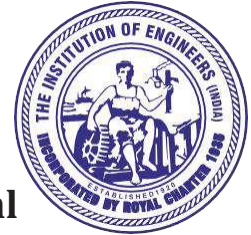


NATIONAL DESIGN AND RESEARCH FORUM (NDRF)

THE INSTITUTION OF ENGINEERS (INDIA)

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National Conference on “Additive Manufacturing in Aerospace, Defence (AMAD 2022) and other Engineering Sectors - Online Mode

Co - hosted by Department of Mechanical Engineering, BMS College of Engineering, Bengaluru

Program Schedule

2nd July 2022, 09:15 AM to 6.30 PM

Sl. No	Time	Inaugural Program	Inaugural Addresses
1.	9.15 AM - 10.00 AM	Moderator Welcome Address & about the Conference Inaugural Address by the Chief Guest Address by the Guest of Honour Address by the Guest of Honour Address by the Guest of Honour Presidential Address Vote of Thanks	Dr. J. R. Nataraj, Technical Advisor, NDRF Dr. S. Seetharamu, Director, NDRF Dr. Hemant Omkarrao Thakare, President, IEI Dr. P. V. Venkitakrishnan, Former Director, ISRO Dr. K. N. Subramanya, Principal, RVCE Dr. S. Muralidhara, Principal, BMSCE Dr. P. Raghothama Rao, Chairman, NDRF Dr. P. Sampathkumaran, Technical Advior, NDRF

INVITED LECTURES			
SESSION – I			
Sl. No	Time	Topics	Speaker
2.	10.00 AM -10.30 AM	Additive Manufacturing Technology Challenges and Opportunities in India'.	Dr. L. Jyothish Kumar President Additive Manufacturing Society of India
3.	10.30 AM – 11.00 AM	Applications of Metal Additive Manufacturing in Industrial and Strategic Sectors	Dr. U. Chandrashekar / Mr. V.A. Karthik Program Director – AddWiz – Wipro3D
4.	11.00 AM - 11.30 AM	Additive Manufacturing for Meta Materials	Prof. J. Ramkumar Professor IIT Kanpur
5.	11.30 AM -12.00 PM	Additive Manufacturing for Gas Turbine Hot Gas Path Components	Dr. Dheepa Srinivasan, Chief Engineer Pratt & Whitney R&D Center, Bangalore, India
INVITED LECTURES			
SESSION - II			
6.	12.00 PM - 12.30 PM	Additively Manufactured Metallic End-use Products for Aero-Engine Applications	Dr. S. Anandkumar Assistant Professor IIT Jammu
7.	12.30 PM - 1.00 PM	Design for Additive Manufacturing of Aerospace components	Dr. V. Rajkumar Assistant Professor IIT Jammu
8.	1.00 PM – 1.30 PM	Modelling and Simulation of Metal Additive Manufacturing Processes	Dr. Srikanth Bontha Associate Professor

			National Institute of Technology Karnataka
9.	1.30 PM – 2.00 PM	Airworthiness certification of metal additive manufactured parts	Dr. Shirish Kale / Dr. T. Ram Prabhu Scientist 'G' - Group Director (Materials) CEMILAC -DRDO
SESSION – III – CONTRIBUTED PAPERS - PARALLEL SESSIONS			
PARALLEL SESSION - A			
Session Chair: Prof. J. Ramkumar, Professor, IIT Kanpur			
10.	2.30 PM – 2.45 PM	Understanding the microstructural evolution in PBF-LB/IN939	Mr. Nandha Kumar Eswaramoorthy Senior Engineer Pratt and Whitney R&D Center Bangalore
11.	2.45 PM – 3.00 PM	Introduction of Additive manufacturing in any automotive or aerospace sector and its impact on the cost increment of the company	Ms. A. Roopashree Research scholar & Assistant Professor NMKRV College for Women
12.	3.00 PM - 3.15 PM	"Optimisation of Printing Parameters of Fused Deposition Modelling of Carbon Fibre Reinforced PLA Composite."	Dr B. Mallikarjuna / Dr. N. Jayanth Assistant Professor (Sr. Gr.) Amrita School of Engineering
13.	3.15 PM - 3.30 PM	Optimized Additively Manufactured Stochastic Structure for Hip Implant Application	Dr. J. R. Nataraj Associate Professor RV College of Engineering
14.	3.30 PM - 3.45 PM	On the Origin of Solidification Cracks and its Interplay with In-Process	Mr. Shreehard Sahu Project Staff IIT Bombay

		Developed Residual Stress in CM247 LC superalloy via PBF-LB technique"	
15.	3.45 PM – 4.00 PM	Grey Taguchi approach for multi-objective optimization of Fused deposition modelling process parameters	Ms. Lakshmi Kala Assistant Professor Sree vidyanikethan Engineering college
SESSION – III – CONTRIBUTED PAPERS - PARALLEL SESSIONS			
PARALLEL SESSION - B			
Dr. Srikanth Bontha, Associate Professor National Institute of Technology Karnataka			
16.	2.30 PM – 2.45 PM	Microstructure and Mechanical Properties of CuCrZr Alloy Produced by Laser Powder Bed Fusion	Mr. Anup Kulkarni Senior Engineer Pratt and Whitney R&D Center Bangalore
17.	2.45 PM – 3.00 PM	Effect of Process Parameters on Tensile Strength Using Fused Deposition Model (FDM)	Dr. Hariprasad Tarigonda Professor & BOS Chairman, Sree Vidyanikethan Engineering College
18.	3.00 PM - 3.15 PM	Scratching Abrasive Wear Behaviour of Laser-Sintered H2O-SiC Steel Composites	Dr. K. Raghavendra Naik Research Scholar Central Power Research Institute (CPRI)
19.	3.15 PM - 3.30 PM	Effect of various parameters on stainless steel 316L components fabricated by WAAM Process	Dr. P. S. Gowthaman Assistant Professor PSNA College of Engineering & Technology
20.	3.30 PM - 3.45 PM	Additive manufacturing processes for advanced ceramic fabrications: a review	Dr. M. G. Anand Kumar Joint Director Central Power Research Institute

21.	3.45 PM – 4.00 PM	3-D Printing of Blended and Raked Winglet	Mr. Veeresh Hanagi / Dr Nagesh.D Student SJC Institute of Technology
SESSION – III – CONTRIBUTED PAPERS - PARALLEL SESSIONS			
PARALLEL SESSION - C			
Session Chair: Dr. V. Rajkumar, Assistant Professor, IIT Jammu			
22.	2.30 PM – 2.45 PM	Enhancement of aerodynamic efficiency of modified co-flow jet corrugated airfoil with active and passive flow control	Mr. Prasad Belgundkar Student S J C Institute of Technology
23.	2.45 PM – 3.00 PM	Process optimization of FDM type 3D printer: A way towards sustainable manufacturing	Ms. Pavana Salunkhe Student KLS Gogte Institute of Technology
24.	3.00 PM - 3.15 PM	Development of Metallic Component: An Overview on Additive Manufacturing	Mr. Jagannath Prasad Sahoo Student Ramaiah Institute of Technology
25.	3.15 PM - 3.30 PM	Redesigning the boring bar for Additive Manufacturing	Mr. Shashwat Panigrahi Student Presidency University
26.	3.30 PM – 3.45 PM	3D Printed hybrid material for Aircraft Interior dashboard designing	Dr Krushna Gouda Assistant Professor HITS, Chennai

INVITED LECTURES**SESSION – IV****Session Chair: Dr. G. Giridhara, Professor & HOD, BMSCE**

27.	4.00 PM - 4.30 PM	Dr. Baldev Raj Memorial lecture - Mitigation and Control of Residual Stresses in Additively Manufactured Components	Dr. P. Ramesh Narayanan Group Director, Materials and Metallurgy Group VSSC - ISRO
28.	4.30 PM - 5.00 PM (7.00-7.30, NYK, USA)	Enabling future manufacturing: Additive manufacturing, machine learning and cybersecurity	Dr. Nikhil Gupta Professor Department of Mechanical and Aerospace Engineering New York University, USA
29.	5.00 PM - 5.30 PM	Application of Additive Manufacturing in Medical and Healthcare Industry	Mr. Maltesh Somasekharappa CEO & Co-Founder Supercraft3d

PANEL DISCUSSION - 5.30 PM - 6.30 PM**Chairman - Dr. M. T. Shyam Sunder, NDRF, (Ex. G. E. Global)****Members:****Dr. P. Ramesh Narayanan**

Group Director, Materials and Metallurgy Group, VSSC – ISRO

Dr. L. Jyothish Kumar

President, Additive Manufacturing Society of India

Dr. S. Anandkumar

Assistant Professor, IIT Jammu

Dr. Ing. Priyanshu Bajaj

Regional Manager, Asia Pacific, m4p material solutions GmbH

Mr. Srikanth N. V

Assistant Professor, BMSCE