

**TWO DAYS WORKSHOP ON
Recent Trends in**

Metal Additive Manufacturing

21st – 22nd November 2019

REGISTRATION FORM

Name: Mr/Ms/Mrs/Dr: _____

Academic Qualification: _____

Designation: _____

Organization: _____

Institution Address: _____

Mobile: _____

E - Mail: _____

Registration Fee Details:

D.D. No.: _____

Bank Name: _____

Accommodation Requirement : YES / NO

Date: _____ Signature _____

The above information along with D.D may be sent to the coordinators on or before **31st OCT, 2019**

RESOURCE PERSONS / SPEAKERS

The resource persons for this course are from premier Institution and industrial expert on metal additive manufacturing.

Dr. K.P. KARUNAKARAN

Professor, Department of Mechanical Engineering, IIT Bombay

Dr. M. KAMARAJ

Professor, Department of Metallurgical engineering and material science, IIT Madras

Mr. Rashmi Ranjan Mohapatra

Managing Director, Kemppi India

Mr. SASIANAND PARTHASARATHY

Zonal Manager, FRONIUS India Private LTD.

REGISTRATION FEE DETAILS

For Students, academic/ research scholar - INR 750/ participant
For Industry - INR 1000/ participant

BANK DETAILS

Account Name: Mechanical Engineering Association
Account No.: 459777734
Name of the Bank: Indian Bank
IFSC Code: IDIB000S181
MICR No.: 600019171

FOR REGISTRATION

<https://qrگو.page.link/mJvLm>



For any queries, please contact

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Recent Trends in
Metal Additive
Manufacturing
21st-22th November 2019**



**Organized by
MECHANICAL ENGINEERING ASSOCIATION**

Convener

Dr. S. PRABHU
Professor and Head

Co-Convener

Dr. N. Harshavardhana
Assistant Professor

Co-Ordinators

Dr. S. Madhavan
Dr. T. Geethapriyan
Mr. S. P. Sundar Singh Sivam
Assistant Professor

Venue:

G. D. Naidu Hall,
Mech B- Block, 1st Floor,
SRMIST, Kattankulathur, Kancheepuram - 603203

ABOUT THE INSTITUTE

SRM Institute of Science and Technology is one of the top ranking Universities and most premier engineering destinations in India. It was established in 1985 by the Founder Chancellor Dr. T.R. Paarivendhar. SRM IST is functioning in four campuses located at Kattankulathur, Vadapalani and Ramapuram in Tamilnadu and a fourth campus at Modi Nagar, Ghaziabad with over 50,000 students and 3,020 faculty members. SRM IST offers a wide range of undergraduate, postgraduate and doctoral programs in Engineering, Management, Medicine & Health Sciences, Law and Science & Humanities. The Institution has grown up through international alliances and collaborative initiatives to achieve global excellence. Over 150 students are sponsored for 35 foreign Universities like MIT, Carnegie Mellon, UC Davis, Warwick and Western Australia. Now the Institute enjoys an unsurpassed reputation in academic and corporate circles being as the preferred human resource, for its vision to be as a world - class learning institution. SRM IST has been categorized as grade A University by Ministry of Human Resource Development (MHRD); Government of India. SRM IST is accredited by NAAC with highest A+ + Grade in the year 2018.

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering is one of the pioneering department of SRM IST. The present faculty strength is 137. About 500 research papers have been published in international journals and about 700 papers in international / national conferences. The department is functionally divided into three areas of specialization: (i) Design, (ii) Manufacturing and (iii) Thermal Engineering. The National Board of Accreditation had accredited the Mechanical Engineering program in 1997, itself. The Mechanical Engineering department at Kattankulathur campus is accredited by ABET, USA. The department also offers Doctoral programs in these three areas of specializations.

The following salient workshops and conferences conducted by Mechanical Department were 10th Asian symposium of visualization, 2010. National Workshop on fuel cell technology, 2008, International Conference on Advances in Mechanical Engineering 2006, Short Course

on Mechanics of Composite Materials and Structures: 2015, Workshop on Development, Manufacturing and Analysis of Advanced Composites, 2015 and short course on FEM, 2015, National Conference on Advances in Mechanical Engineering (NCAME 2016), Brain Wave Robotis, 2017, International Conference on Advances in Mechanical Engineering (ICAME 2018).

Various Research facilities available in the department are 51/2 axis CNC Machine, IRB 1410 robot, IRB 360 FlexPicker Vision ABB robot, wear and friction monitor Apparatus, thyristor controlled 64 – segment program electric furnaces, 7 Mill volt He – Ne with spatial filter, vision systems, computerized surface roughness tester, Fazo portable CMM, Carl Zeiss size CMM, six axes spine simulator, computerized IC engine test Rig, gas analyzer, Kistler Impact hammer, RPT, solar steam cooking plant and FMS systems, DSC, CFD, Stir Casting, Friction Welding, Composite Equipments.

ABOUT THE WORKSHOP

Metal Additive Manufacturing (MAM) has gathered more industrial attentions in recent years (in past 10 years) due to its complex geometry manufacturing, short lead time manufacturing, high strength to weight ratio etc. Now a days, additive manufacturing parts has a great demand in aerospace and bio-medical industries. However, there are some technical challenges in metal additive manufacturing. For example, the powdered raw material is difficult to melt and the finished product strongly dependent on the initial raw materials size, microstructure and particle morphology. So the understanding of microstructure and manufacturing processes is crucial in the production of parts by Metal Additive Manufacturing. So the aim of this workshop is to provide insight on 3D metal additive manufacturing and to fill the gap from both industrial and research perspective.

This workshop on Metal additive manufacturing will have 2 parts:

- a) Talks from premier research institute with a specific focus on experimental and computational work on 3D metal additive manufacturing
- b) Talks from the industrial expert with the focus on the production, consultancy and feasibility of metal additive manufacturing in industries and in research labs.

ABOUT THE SPEAKERS:

1) Dr. K.P. Karunakaran is a professor in the Department of Mechanical Engineering, IIT Bombay. His current research area includes Rapid Manufacturing including Additive Manufacturing, 5-axis Hybrid Manufacturing, Rapid Casting, Reverse Engineering, Computer Graphics, Automation etc. He is a pioneer in Metal additive manufacturing and has worked on additive manufacturing over two decade. He was also a Visiting Professor in the University of Metz in 2005 and in Ecole Centrale de Nantes since 2006 and a recipient of Humboldt Fellowship.

2) Dr. M. Kamaraj is a professor in Department of Metallurgical engineering and material science, IIT Madras. His current research area includes Rapid Manufacturing, Surface engg., thermal spray coatings, laser cladding, High temp. mech. behaviour of aerospace & power plant materials, Hot-corrosion of high temperature superalloys, Welding metallurgy of light metals, Cr-Mo steels, Failure analysis of industrial components. He has a research experience of more than 20 years

3) Mr. Rashmi Ranjan Mohapatra is currently working as Managing Director, Kemppi India (pioneer in welding and metal additive manufacturing) for more than 4 years. Before he was associated with Ador Welding Limited for 4 years, Sabre Safety LTD. for 5 years, and BOC India Ltd. for 5 years and Roots Industries Ltd. for 3 years. His academics include Marketing, at National Institute of Technology (NIT) Tiruchirappalli and BE Mechanical, at National Institute of Technology (NIT) Rourkela.

4) Mr. Sasianand Parthasarathy is currently working for FRONIUS - India and was previously employed with EWAC Alloys Limited wholly owned subsidiary of M/s L & T as Asst General Manager-Training & Development. His specialization includes Certified International Welding Technologist (IWT) from International Institute of Welding (IIW), Involved in providing solutions for selection/recommendation of Microprocessor controlled Digital Welding power sources with experience in Welding Training, Product/Business development of welding consumables having a wide application/ strong process knowledge in various Engineering sectors.