

AM 3D AERO 2022



CONFERENCE & EXPO

**December 08-09, 2022** 

Ramaiah Institute of Technology Bengaluru, India



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# Greetings! Welcome to the ASME India AM 3D Aero 2022 Technical Conference.

It gives us a great pleasure to invite you to participate and contribute to this event scheduled for **December 8-9, 2022** in Bengaluru, India.

Additive Manufacturing is vital to advanced manufacturing and is a transformative technology enabling mass customization of products through self-learning environments. It offers substantial design flexibility and leads to substantial saving of time and cost in the industrial parlance particularly in aerospace and defense sectors.

In contrast to other industries, aerospace and strategic sector like defense have very stringent and unique set of requirements relating to materials, manufacturing, reliability, inspection, regulatory, traceability, and business considerations relating to production systems, supply-chain, etc,. It is therefore, imperative that the various stakeholders work together in a synergistic manner to drive these developments in a fast and efficient manner. These include engineers working in design, manufacturing & testing industry, scientists & engineers in industrial and academic research, regulatory institutions, supply-chain specialists, educationists and the engineering student who are our future workforce.

It is with above goal in mind, that we introduce the ASME India AM 3D Aero 2022 conference with a dedicated focus to additive manufacturing science, technology, practice, and trends relative to aerospace and defense applications.

The first edition of this annual conference will be held in the city of Bangalore on December 8-9' 2022. This is a not for profit technical conference, curated by the engineers & scientists for the engineers & scientists. The technical program will comprise of a series of invited talks providing in-depth account of various topics covering industry challenges, needs and best practices, academic research, supplychain considerations, and development trends in materials, manufacturing, equipment, certification, education, sustainability.

The technical program will be supplemented by posters and exhibits on emerging R&D efforts within multiple players including OEMs in the aerospace and AM end users community, AM service providers, AM modeling and simulation resources, hardware developers etc., within various scientific and industrial organizations. This conference series will map and benchmark the high-value additive technologies into the industrial ecosystem supporting the aerospace and defense sectors. This conference marks the formation of an ASME Additive Manufacturing Advisory group in India. This group currently comprises of AM practitioners from leading OEMS in the Aerospace & Defense industry, top research organizations and premier academic institutes.

We look forward to your active participation in the upcoming conference.



**Dr. Om Prakash**Conference Chair
Boeing India



**Prof. NVR Naidu** Conference Co-Chair Principal RIT



# **Patron**

#### **Mr Ahmed Elsherbini**

MD, Boeing India, Engineering & Technology Center, Bengaluru

# Dr M R. Jayaram

Chairman, Gokula Education Foundation Bengaluru

# **Organising Committee**

# **Dr Arun Muley**

Technical Fellow, Boeing Research & Technology, Huntington Beach, US

# Dr Ing. Priyanshu Bajaj Mr Jite

Regional Manager, Asia Pacific, m4p Material Solutions GmbH, Bengaluru

### Mr Mukundhan Srinivasan

Senior Manager, Boeing India Engineering

#### **Dr Om Prakash**

Associate Tech Fellow, Boeing India, Bengaluru

#### **Prof Roy Mahapatra**

Indian Institute of Science, Bengaluru

### **Prof Shantanu Bhattacharya**

GVMM Chair and Professor Indian Institute of Technology, Kanpur

## **Mr Boopathy Saravanan**

Manager, Collins Aerospace, Bengaluru

## **Mr Jitendra Singh**

Flight Test Engineer, Fmr Defence Scientist, Govt of India, Bengaluru

#### **Prof N V R Naidu**

Principal, Ramaiah Institute of Technology, Bengaluru

#### **Prof Pradeep Dixit**

Vice-Principal, Ramaiah Institute of Technology, Bengaluru

### **Prof S Suryakumar**

Professor, Indian Institute of Technology, Hyderabad

## **Dr Smita Mohanty**

Director - LARPM CIPET, Bhubaneshwar

## **Dr Dheepa Srinivasan**

Chief Engineer, Pratt & Whitney R&D Center, Indian Institute of Science, Bengaluru

# **Dr Jeffrey H. Hunt**

Senior Tech Fellow, Boeing USA

#### **Dr Narendran Balan**

Senior Manager, Boeing Research & Technology, Bengaluru

# **Prof Raji George**

Professor and HOD, Ramaiah Institute of Technology, Bengaluru

#### **Mr Sasikumar Muthusamy**

Director - Advanced Structures Engineering, Collins Aerospace, Bengaluru

# **Mr Yathiraj Kasal**

General Manager & Head Wipro3D, Wipro Enterprises, Bengaluru

# **Conference Highlights**

- Pre-conference workshops
- Invited Talks
- invited falks

- Industrial Expo
- Poster competition

- Panel discussions:

Local and global imperatives and opportunities for growth of AM in aerospace sector



# **Invited Talks**

- A birds eye and ground level view on the Global and Indian AM ecosystem and industry and future trends
- Indian Military Airworthiness
   Certification procedure of AM parts and path ahead to achieve self-sufficiency in the field
- Overview of NDT Approaches for Inspecting AM Components
- Advances in New Materials and

- Test methods for accelerated AM qualifications for Gas Turbines
- Clean and reliable metal powders
   a statistical approach
- Sustainable Machining Solutions for Additively Manufactured Parts
- Structural integrity of 3D printed metals
- Potential impact of additive manufacturing in sustainable aviation

Check conference website for more details...

# **SPEAKERS**

#### **KEYNOTE**

#### **Dr Melissa Orme**

Vice President, Boeing Additive Manufacturing

#### Mr Alex A.

DY Director, CSC LPSC, Bengaluru

# Dr Andreas Pelz

CTO & Managing Director, M4P, Germany

# **Mr Ankit Sahu**

Objectify, Noida

#### **Mr Ashok Varma**

EVP & Global Leader AM, Bharat Fritz Werner India

# **Prof Asim Tewari**

Professor, Mechanical Engg. IIT Mumbai

#### **Prof B. Gurumoorthy**

Professor, IISc, Bengaluru

# Mr Bhrigu Ahuja

Objectify Noida

## Dr C. P. Paul

RRCAT, Indore

#### **Prof C. S. Kumar**

Depart. Mechanical Engg. IIT Kharagpur

### **Dr Dheepa Srinivasan**

Chief Engineer, Pratt & Whitney R&D Center, Bengaluru

### **Dr Gururaj Telasang**

ARCI, Hyderabad

#### Mr Jitendra Singh

Flight Test Engineer, Fmr Defence Scientist, Govt of India, Bengaluru

# **Dr Jeffrey H. Hunt**

Boeing USA

#### Mr Karthik J.

Wipro3D, Bengaluru

# Prof Krishnan Balasubramaniam

Institute Professor, IIT Madras

### Dr Nagahanumaiah

Director CMTI, Bengaluru

#### **Dr Navneet Khanna**

Associate Dean, IITRAM Ahemdabad

#### **Prof Prabhu Nott**

Prof (HAG), IISc, Bengaluru

#### **Prof Ramesh Singh**

Professor, Mechanical Engg. IIT Bombay

# **Prof Roy Mahapatra**

IISc, Bengaluru

#### **Prof S Suryakumar**

Professor, Mechanical & Aerospace Engg., IIT Hyderabad

# Dr S. Narayanaswamy

A\*STAR Research Entities, Principal Scientist and Director of Engineering

# **Prof Satish Bukkapatnam**

Rockwell International Professor, Texas A&M University

#### **Prof Shantanu Bhattacharya**

Professor, Dept. of Mech. Engg., IIT Kanpur

#### **Dr Smita Mohanty**

Director, LARPM CIPET, Bhubaneshwar

## **Prof Srikanth Bontha**

Asso. Prof, Department of Mechanical Engineering, NIT Surathkal

### **Mr Steve Chisholm**

VP, Boeing Commercial Aircraft , USA

#### Mr Steve Yahata

VP, Boeing Research and Technology, USA

#### Mr Suhaib Abdurahman

Wipro3D Bengaluru

#### Dr T. Ram Prabhu

Scientist & Jt Dir, Centre for Military
Airworthiness and Certification

# **Dr Upadrasta Ramamurty**

President's Chair Prof., School of Mech & Aerospace Engg, NTU, Singapore

# Dr Vidyashankar Buravalla

Principal Engineer, GE Global Research

Sponsorship Opportunities					
Benefits	Platinum INR 10,00,000	Gold INR 7,50,000	Silver INR 5,00,000	Bronze INR 3,00,000	Session INR 1,50,000
Conference Registration	15	8	5	3	2
Exhibition Space	<b>/</b>	<b>V</b>	<b>/</b>	-	-
Logo on conference website, Brochure, Conference Backdrop	<b>~</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>V</b>
Promotional material in conference kit	<b>V</b>	<b>~</b>	-	-	-
Logo at the Registration Desk	<b>~</b>	<b>V</b>	-	-	-
Logo at Gala Dinner	<b>~</b>	<b>~</b>	-		-
5 Min Presentation and Video Streaming at Gala Dinner	<b>~</b>	-	-	-	-
Logo and mention during Promotional Emailers and Social Media Posts	<b>/</b>	-	-	-	-
Advertisment in Conference Souvenir	1 Full Page	1 Half Page	1 Half Page	-	-

# **Exhibition Opportunities**

**Stall Space 3m x 3m** INR 1,00,000

**Stall Space 5m x 5m** INR 1,80,000

# **Registration Fee**

Category	Fee		
Professional	INR 10,000		
Faculty	INR 4,000		
Student*	INR 2,000		

<sup>\*</sup>College / Institute id copy is required to confirm the registration

# **Registration fee inlcudes:**

- Access to all sessions
- Conference Souvenir
- Conference Content
- Lunches on 8th & 9th December
- Access to Exhibition Area
- Cultural program by MSRIT students

To register for this conference, please visit <a href="https://www.am3d.org.in/registration.php">www.am3d.org.in/registration.php</a> or scan the QR Code



# **Pre - Conference Workshop**

# Workshop-1: Manufacturing, Materials, Modeling for Metal Additive Manufacturing

- Basics of processing for Metal Additive Manufacturing (MAM)
- Importance of structure property correlations in materials
- Importance of modeling MAM
- Post processing & non-destructive evaluation in developing standards for certification

Dr Dheepa Srinivasan

**Pratt & Whitney** 

# **Workshop-2: 3D Printing for Hobbyists**

- Spin-off advantage of 3D Printing
- Simplification of fabrication
- Digital fabrication techniques
- Evolution of open-source, free to use hardware architectures and software tools
- Familiarize participants with the latest tools and software
- Emphasis will be laid on open-source tools for easy adoption.

**Prof S Suryakumar** 

IIT Hyderabad

# Workshop-3: Additive Thinking Workshop

- Operational knowledge on AM processes
- · Workflow, data preparation, materials
- Additive engineering & QMS practices for Metal AM
- Details of Case studies derived from the AM pursuits

Yathiraj Kasal

Wipro3D

# Workshop-4: Hands-on model building - Wright-Flyer static model

- Demystify Wright Flyer design and development
- Construction of a scale down Wright Flyer model
- Each participant/team (3 members) gets to build the model hands-on
- Model kit (wingspan 300 mm) will be provided

Ms. Ashwini JS

**Airytails** 

# Registration fee INR 500 + GST

Please visit <a href="https://bit.ly/3U1s4D1">https://bit.ly/3U1s4D1</a> to register for the workshop

Scan the **QR** Code



#### CONTACT

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