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భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్  
भारतीय प्रौद्योगिकी संस्थान हैदराबाद  
Indian Institute of Technology Hyderabad

# 30<sup>th</sup> International Conference on Processing of Advanced Materials and Fabrication of Products



Theme:

**Smart NextGen PAMFP:  
Sustainable Materials and  
Green Manufacturing**

**Conference Venue: IIT Hyderabad, India**

Conference Brochure

[www.iapmfp.org/2024](http://www.iapmfp.org/2024)



## Welcome Message

Dear "Valued" Colleague,

On behalf of the organizing committee, the International Association for Processing of Materials and Fabrication of Products (IA-PMFP), in collaboration with IIT Hyderabad, India, we extend a warm and enthusiastic welcome to participate in the 30th International Conference on Processing of Advanced Materials and Fabrication of Products (PAMFP).

This event marks the 30th in a prestigious series, with the most recent conference held in India. At IIT Hyderabad, we are committed to ensuring an excellent experience that spans the domain of education, enabling and ensuring enlightenment and excellence for all participants and attendees.

We are expecting to host more than 300 participants. In addition to plenary talks, this scholarly technical conference event will have a healthy combination of the following: (i) technical sessions, (ii) poster sessions, (iii) panel discussions, (iv) industry-academia interaction, (v) awards ceremony, and (vi) cultural programs.

In keeping with the tradition of previous conferences, there will be ample time for each technical presentation and the discussions that follow.

We have also planned a tour of nearby places of interest and inspiration, providing opportunities for continued discussions with the aim of initiating, nurturing, and promoting collaborations within the professional community, while also facilitating socialization.

The beginning of December is a particularly pleasant time in Hyderabad, with comfortable temperatures. Against the backdrop of beautiful weather, we eagerly look forward to your physical presence and enthusiastic participation in this significant scholarly event.



Prof. T. S. Srivatsan  
(President, IA-PMFP)



Prof. B. S. Murty  
Director IIT Hyderabad

Sincerely,

### Important Deadlines

Submission of Abstract	15 September'24 (Extended)
Abstract Acceptance Intimation	31 August'24
Full paper Submission	31 October'24
Early Bird Registration	15 September'24 (Must for Presenters)
Regular Registration	15 October'24

## Plenary Speaker (S)



**Dr. Anil K. Sachdev**  
 Principal Technical Fellow & Lab Group  
 Manager General Motors Company R&D USA



**Prof. Ramamoorthy Ramesh**  
 Rice University, USA

## Keynote Speaker(S)



**Prof. Andre Katterfeld**  
 Otto-von-Guericke Univ.  
 Magdeburg, Germany



**Prof. B. Vaidhyanathan**  
 Loughborough  
 University, UK



**Prof. Eric MacDonald**  
 The University of Texas USA,  
 Editor-in-Chief, Additive Manufacturing  
 Letters, Elsevier Publishing



**Prof. Gandham  
 Phanikumar**  
 IIT Madras, India



**Prof. Dr.-Ing. habil.  
 Thorsten Halle**  
 Otto-von-Guericke-Universität  
 Magdeburg, Germany



**Prof. Kuldeep Kumar Raina**  
 Vice Chancellor,  
 RUAS Bangalore India



**Prof. Nikhil Gupta**  
 NYU-Tandon School of  
 Engineering USA



**Prof. Raman Singh**  
 Monash University  
 Australia



**Prof. Satish V. Kailas**  
 IISc Bangalore  
 India



**Prof. Satyam Suwas**  
 IISc Bangalore,  
 India



**Dr. Sharad K. Pradhan**  
 THDC-Institute of  
 Hydropower Eng. & Tec.,  
 Govt of Uttarakhand, India



**Dr. Sheela Siddappa**  
 Kyndryl, India



**Dr. Sujit Pillai**  
 Ministry of New and Renewable  
 Energy, Govt. of India



**Prof. Surya Kalidindi**  
 Georgia Institute of  
 Technology, USA



**Padma Shri Prof. Vaidya  
 Balendu Prakash**  
 VCPC Res. Foundation,  
 Uttarakhand, India



**Dr. Vikas Kumar**  
 Former DMRL Director &  
 Chairman ARDB DRDO, India

## Invited Speaker(S)



**Prof. Anbukkarasi  
 Rajendran**  
 IIT Dharwad, India



**Prof. Giampaolo  
 Zuccheri**  
 University of Bologna Italy



**Prof. Indrani Sen**  
 IIT Kharagpur, India



**Dr. Shailesh K. Singh**  
 CSIR IIP Dehradun, India

*More Eminent Speakers are being added..*

## Local Organizing Committee

### President



Prof. T. S. Srivatsan  
President, International Association for Processing of Materials and Fabrication of Products (IA-PMFP)

### Patron



Prof. B. S. Murty  
Director IIT Hyderabad

### Conveners



Prof. Saswata Bhattacharya  
Materials Science & Metallurgical Engineering  
IIT Hyderabad India



Prof. Pinaki P. Bhattacharjee  
Materials Science & Metallurgical Engineering  
IIT Hyderabad India



Prof. Kishalay Mitra  
Chemical Engineering  
IIT Hyderabad India



Dr. Ajay Kumar  
Mechanical Engineering  
IIT Tirupati India & IA-PMFP

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Prof. Rajesh Korla  
Materials Science & Metallurgical Engineering, IIT Hyderabad India



Prof. Gopinath Muvvala  
Department of Mechanical & Aerospace Engineering, IIT Hyderabad



Dr. Nagendra Pratap Singh  
Associate-Dean Research  
MSRUAS Bangalore India & IA-PMFP

### Organizing Secretary



Prof. Ashok Kamaraj  
Materials Science & Metallurgical Engineering, IIT Hyderabad India



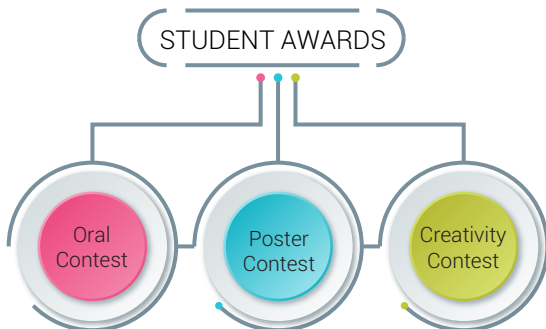
Dr. Govind Narayan Sahu  
Mechanical Engineering  
IIT Tirupati India & IA-PMFP

## The “Theme” of this Scholarly Technical Event

### 1. Design and Manufacturing of Sustainable Materials, Process and Products

- Design and Manufacturing of Sustainable Materials, Process and Products
- Manufacturing of advanced materials for information technology (Semiconductors, Electronics, Energy)
- Innovations in materials and processing for aerospace, automotive, and defense applications
- Materials Informatics: accelerated design for processing of materials & products, process optimization, database modelling applications of AI/ML in processing of materials
- Smart Manufacturing: metal additive manufacturing, process monitoring and control

### 2. Sustainable Metallurgy and Energy-Efficient Materials for Transition & Decarbonization in Metal Manufacturing Sectors



## IA-PMFP Executive Council (EC)/Board of Members

### President



Prof. T. S. Srivatsan  
President, International Association for  
Processing of Materials and Fabrication of  
Products (IA-PMFP)

### Vice President (Academia)



Prof. B. Vaidhyathan  
University Special Envoy (India)/  
Loughborough University, UK

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Dr. Shankar Venugopal  
Vice-President (Industry & Lab),  
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Indian Institute of Technology  
Kharagpur (IITKgp) India

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Dr. Nagendra Pratap Singh  
Director at Techno Centre  
Engineering, MSRUEAS  
Bangalore, India

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Dr. Ajay Kumar  
Indian Institute of Technology  
Tirupati (IITT), India

### Joint Secretary



Dr. Govind Narayan Sahu  
Indian Institute of Technology  
Tirupati (IITT), India

## Topics

### Topics Specific to the "World" of Materials

#### Materials and Processing

- Biomaterials
- Carbon-Carbon Composites
- Ceramics/Ceramic-Matrix Composites
- Energy Materials
- Fuel Cell Materials
- Functionally Graded Materials
- High Energy Materials
- Intermetallic(s)
- Magnetic Materials
- Metals and Metal-Matrix Composites
- Metallic Sponge and Foam Materials
- Nano Materials and Nano Composites
- Phase Change Materials
- Polymer, Polymer-Matrix Composites
- Porous Materials, Foams
- Semi/Super Conducting Materials
- Surface Coatings, Thin Films, Colloids
- Self Healing Materials
- Shape Memory Alloys

### Topics Specific to the "Marvels" of Manufacturing

#### Manufacturing Technologies

- Additive Manufacturing
- Advanced Tribology
- Artificial Intelligence and Machine Learning, IoT
- Advanced Sustainable Smart Manufacturing
- MEMS/NEMS

#### Modelling and Simulations

- Materials Properties Predictions
- Process - Microstructure - Property Relationship
- Process and Defect Formation

#### Industry Specific Focus

- Biomedical and Healthcare
- Energy Storage and Energy Harvesting
- Manufacturing Specific to Semiconductor Materials
- Functional Materials for Interdisciplinary Research (Health, Phytochemicals, Agriculture, and Environment)



## Registration

### Registration Fee

		Upto 15 September'24 (Early Bird) <i>(Must for Presenters)</i>	Upto 15 October'24 (Regular)	Late Registration
Indian (INR)	Research Scholars / Students	₹ 6,000	₹ 7,500	₹ 9,000
	Delegates (Academic - Faculty, PDF & Public Sector R&D)	₹ 10,000	₹ 12,000	₹ 15,000
	Delegates (Non Academic - Industry)	₹ 12,500	₹ 15,000	₹ 18,000
	Spouse/Accompanying	₹ 6,000	₹ 7,500	₹ 9,000
Foreign (USD)	Research Scholars / Students	\$ 300	\$ 400	\$ 500
	Delegates (Academic - Faculty, PDF & Public Sector R&D)	\$ 400	\$ 500	\$ 600
	Delegates (Non Academic - Industry)	\$ 500	\$ 600	\$ 700
	Spouse/Accompanying	\$ 300	\$ 400	\$ 500

N:B:

Registration fees exclusive of 18 % GST

Registrations are accepted online only

Banquet will be included in the registration fee only.

**Register Now!**

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For sponsorship opportunity, please contact [secretariat@iapmfp.org](mailto:secretariat@iapmfp.org)

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For Sponsorship details

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Please note: GST @ 18% extra on total amount

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## About Indian Institute of Technology, Hyderabad

Indian Institute of Technology Hyderabad (IIT Hyderabad), established in 2008, is a premier institute known for its emphasis on research and innovation. Located in the vibrant city of Hyderabad, this institute has quickly gained a reputation for excellence in science, engineering, and technology education. IIT Hyderabad offers a diverse range of undergraduate, postgraduate, and doctoral programs, fostering an environment of interdisciplinary collaboration and cutting-edge research.



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Indian Institute of Technology Hyderabad

The campus boasts state-of-the-art facilities, a dynamic academic community, and a commitment to nurturing future leaders and innovators. With its strong industry connections and focus on real-world applications, IIT Hyderabad continues to make significant contributions to the global academic and research landscape.

## A 'Quick' Overview of IA-PMFP

International Association for Processing of Materials and Fabrication of Products (IA-PMFP), which was initially established and started as a conference series in 1991 and registered under guidance of Professor Dr. T.S. Srivatsan from The University of Akron [Akron, Ohio, USA] under the Companies Act, 2013 (18 of 2013).



The Conference Series has over the years, spanning three decades, been held at the following nations: (i) Hong Kong, (ii) India, (iii) Japan, (iv) New Zealand, (v) Singapore, (vi) Sweden, and (vii) USA.

The founding president of the Association is Professor (Emeritus) Dr. T.S. Srivatsan from The University of Akron [Akron, Ohio, USA].

For additional details, please go through the website  
<https://iapmfp.org/about.html>.

## Contact us

### Organizing Secretaries

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### Conference Secretariat

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