

International Conference on 3D Printing & Vacuum Technology October 23 – 25, 2024



Organized By

National Centre for Physics, Islamabad, Pakistan

Introduction

Pakistan Institute of Additive Manufacturing (PIAM3D) and National Institute of Vacuum Science & Technology (NINVAST) are organizing 'International Conference on 3D Printing & Vacuum Technology' at NCP, Islamabad, Pakistan from October 23 - 25, 2024.

Objectives & Takeaways of the Conference

The conference aims to promote the knowledge and adoption of future-defining industry 4.0 3D Printing & Vacuum technologies within Pakistan's R&D organizations, local industry, and academic institutes. By leveraging insights from renowned international experts, it seeks to explore the latest advancements, address key challenges, and foster discussions on emerging trends, and innovative solutions in these technologies.

Key takeaways include gaining cutting-edge knowledge from technology experts, learning realworld applications, and enhancing professional skills, with the added opportunity to visit state-ofthe-art 3D printing & vacuum facilities at NCP.

Topics and Coordinators

A. Additive Manufacturing (AM)

- Additive Manufacturing of Porous Ceramics
- 3D Printing of Aero structures at Turkish Aerospace
- Design for Additive Manufacturing & Numerical Simulation of Geometrical Irregularities
- 3D printed Honeycomb Cores
- Post-Processing Techniques of AM Components
- Impact of Heat Treatment on AM Multi-Material Structures
- Indigenous Development of 3D Printing Materials

Coordinators: Mr. Hammad Nadeem, Mr Numan Ghazali

B. Vacuum Science & Technology (VST)

- Classical & Optical Standards for Vacuum Metrology
- Development of new Ionization Gauge now standardized in ISO/TS 6737
- ISO Standards for Vacuum Metrology
- R&D of materials for Vacuum applications
- Vacuum & Outgassing and relevance for semiconductor industry
- Partial Pressure Calibration Standard at PTB.
- Hot Helium leak testing

Coordinators: Ms Irum Munir, Mr Jawad Ali

Target Participants

- Research scientists & engineers from R&D organizations
- Graduate / postgraduate students, faculty from academia related to the field. Applicants with poster presentations will be preferred. Best posters will be awarded.

How to apply

The online registration form can be accessed at: http://www.ncp.edu.pk/ic3vt.php. The application form should be submitted by Oct 5, 2024. Selection will be made by the Technical Committee and selected applicants will be informed through email.

Registration Fee

Students: Rs 3,000/-Professionals: Rs. 6,000/-Accommodation Charges: Rs. 3,000/-

> For further Information, please contact Collaborations & Academic Activities Directorate (CAAD) National Centre for Physics, Shahdara Valley Road, Islamabad, Pakistan Tel: +92-51-2077300 – (ext. 348, 520), Fax: +92-51-2077395 www.ncp.edu.pk, email: sem@ncp.edu.pk

Patron-in-Chief Dr Qaisar Ahsan, DG NCP **Conference Directors** Dr Muhammad Maqsood Dr Ageel Ahsan Khurram **Technical Committee 3D** Printing Dr Aamir Raza Dr. Naveed Ahsan Dr Rizwan Alam Mufti Mr Faisal-u-Zaman Vacuum Technology Dr Yasin Shami Dr Ahmed Yar Mr Riaz-ud-Din **Organizing Committee** Dr M. Usman Waheed Mumtaz **Kashif Sarfraz**

Key Speakers

<u>3D Printing</u> Prof Dr Zhangwei Chen (Shenzhen Univ, China) Dr Ilhan Sen (Turkish Aerospace Industries, Ankara) Prof Dr Yusuf Kaynak (Marmara Univ, Istanbul)

Vacuum Technology

Prof Dr Karl Jousten (PTB, Germany) Dr Chen Jiming (SWIP, China) Dr Annas Bin Ali (PTB/ASML Outgassing Group, Germany)

For Queries;

3D Printing Technology Ms Sara Anwar (Conference Secretary) Email: info-piam3d@ncp.edu.pk Tel: 051-9006230 Fax: 051-9006298

Vacuum Technology

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Application Deadline Oct 5, 2024