



# International Additive Manufacturing & Vacuum Technology Conference (IAMVT Conference)

October 21 – 23, 2025

Organized By

National Centre for Physics, Islamabad, Pakistan



## Conference Objectives & Takeaways:

Pakistan Institute of Additive Manufacturing (PIAM3D) and National Institute of Vacuum Science & Technology (NIN VAST) are jointly organizing the 2nd International Additive Manufacturing & Vacuum Technology (IAMVT) Conference, to be held from October 21–23, 2025 at NCP, Islamabad. With the essence and experience of last year's successful conference, this event aims to promote the practical adoption of additive manufacturing and vacuum technologies across Pakistan's R&D institutions, industry, and academia. Valuable technical perspectives from leading global experts will help shape meaningful dialogue and open avenues for future collaboration.

Participants will gain exposure to the latest advancements, engage in expert-led discussions on real-world challenges and innovations, and explore advanced 3D printing and vacuum systems at NCP through guided technical visits and demonstrations.

## Topics and Coordinators:

### A. Additive Manufacturing (AM)

- Emerging technologies and innovative applications in AM.
- Polymer AM: mechanical behavior, functional materials, direct/indirect applications, and large-format printing
- AM for lightweight structures and advanced designs for space applications
- DfAM best practices encompassing support reduction, process simulation, and design standards
- AM of ceramics, refractory metals, intermetallic compounds, and high-entropy alloys
- Quality assurance of AM parts, processes, and feedstock materials
- Qualification of AM components for aerospace and biomedical applications

**Coordinators:** Mr. Numan Ghazali, Mr Hammad Nadeem

### B. Vacuum Science & Technology (VST)

- Primary/Secondary Standards for Vacuum Metrology
- Development and Challenges of new Ionization Gauge
- ISO Standards for Vacuum Metrology
- Achieving ultra-high vacuum through nonevaporable thin films
- Lubricative Sealing Techniques as vacuum to atmosphere barrier
- R&D of materials for Vacuum applications
- Vacuum Outgassing and its relevance for satellite industry
- Advanced Leak Testing Techniques
- Hot Helium leak testing
- From LHC, LIGO and Tokamak- why vacuum?
- Vacuum as a Gateway to Explore and win in Space

**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.

### Patron-in-Chief

Dr Qaisar Ahsan, DG NCP

### Conference Directors

Dr Aqeel Ahsan Khurram  
Dr Ahmed Yar

### Technical Committee

#### Additive Manufacturing

Dr Naveed Ahsan  
Dr Rizwan Alam Mufti  
Mr Mushtaq Khan Burki  
Dr Muhammad Munawar  
Mr Qamar Maqbool  
Mr Hamid Zubair Warraich

#### Vacuum Technology

Dr M. Yasin Shami  
Dr Wakil Khan  
Mr Khalid Mehmood  
Mr Mazhar-ul-Islam  
Mr Sulaiman Malik

### Foreign Speakers Expected from:

#### Additive Manufacturing (03)

China  
Turkey  
Russia

#### Vacuum Technology (03)

China  
Switzerland  
Germany

### For Queries;

#### Additive Manufacturing

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#### Vacuum Technology

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**Application  
Deadline  
Sep 15, 2025**