

**IUVSTA TTC**  
**VACUUM TECHNOLOGY APPLICATIONS**  
**April 14-16, 2020**



Venue: Islamabad Hotel, Islamabad

By  
**Dr. Javaid Ahsan Bhatti**  
President PVS

Application of the

## Pakistan Vacuum Society

**For Financial assistance from IUVSTA**

**Title: IUVSTA Technical Training Course on  
Vacuum Technology Applications**

**Venue: Islamabad Hotel, Islamabad - Pakistan**

**Date / time: April 14-16, 2020 (0900 hrs-1600 hrs)**

**Organized By**



**Pakistan Vacuum Society**

**39, St 17, I-9/1, Islamabad**

**Website: [www.pvs.com.pk](http://www.pvs.com.pk); Email: [pvs@comsats.net.pk](mailto:pvs@comsats.net.pk)**

**In Collaboration with**

**International Union for Vacuum Science,  
Technique and Applications (IUVSTA)**



## **Objectives of the course**

- To provide knowledge about the vacuum science, technology and its applications in the modern and applied fields of research and production
- To cope with the latest trends, applications and future role of the vacuum technology in the latest research and industrial applications
- To realize the barriers for adaptation and promotion of vacuum science and technology and resolve the practical problems related to this technology for a better, clean and healthy future.
- Enhance collaborative research and development activities.

# Short Course Details

- ✓ **Lectures**
- ✓ **Practical demonstrations**
- ✓ **Handouts / notes**
- ✓ **Hands on training**
- ✓ **Industrial trip**



# Course Outlines

- Introduction to IUVSTA
- Vacuum technology and its applications
- Fundamental concepts of vacuum technology
- Vacuum pumping techniques and equipment
- Vacuum measurements and controls
- Vacuum standardizations
- Leaks and leak detection techniques
- Design of industrial vacuum systems
- Vacuum insulations techniques
- Vacuum in food processing industry
- Vacuum in renewable energy technologies
- Vacuum in nanotechnology
- Vacuum in electron microscopy
- Vacuum applications in lasers
- Bio interfaces
- Practical demonstrations

# Targeted Audience

- ✓ Students, PhD and M Phil researchers, faculty members of universities
- ✓ Technicians, engineers, factory workers, system designers, process managers, plant operators, equipment suppliers, etc
- ✓ Technicians / engineers from all types of industries, including automotive, electrical & electronics, glass & ceramics, foods & beverages, fiber optics, refrigeration & air conditioning, image processing, lasers & optics, robotics, packaging, textile, soap & detergents, data storage device manufacturing, flat display panels, power plants, x-ray tubes, cathode ray tubes, telecommunications, printings, renewable energy technologies, heat treatment, purification, drying, batteries, fuel cells, semiconductors, coating, tobacco, aerospace, marine, pharmaceuticals, solar panels, paper and pulp, plastic moulding, petro-chemicals, oil refineries, medical, sugar, cement, fertilizers, agriculture, steel, accelerators, oil & ghee, leather processing and many more....

# Faculty

## All Pakistani Nationals

- Prof. Dr. Muzaffar Mehmood, KIET University, Karachi
- Prof. Dr. Khursheed Mehmood, NED Uni. of Eng. and Tech., Karachi
- Prof. Dr. Javaid Ahsan Bhatti, IVC (Pvt) Limited, Islamabad
- Ch. Tariq Sattar, PVS, Islamabad.
- Dr. Haji Akram, PVS, Islamabad.
- Prof. Dr. Attiya Rizwan, National Univ. of S&T. (NUST), Islamabad
- Prof. Dr. Suleman Qaiser, UET, Lahore
- Mr. M. Yousaf Gondal, PVS
- Dr. M. Maqsood, NINVAST, Islamabad
- Dr. A. H. Hamdani, PILO, Rawalpindi
- Dr. M. Yasin Shami, PVS, Islamabad
- Mr. Muhammad Shoaib, NINVAST, Islamabad
- Dr. Wakil Khan, PVS, Islamabad



# Registration

- Course language: **ENGLISH**
- All participants are required to register. Please fill the form following the link [pvs@comsats.net.pk](mailto:pvs@comsats.net.pk) **before April 10<sup>th</sup>, 2020**

## Registration Fee

- ✓ General Participants: € 80 ( $\approx$  PKR. 12,000)\*
- ✓ PVS Members & Students: € 60 ( $\approx$  PKR 10,000)\*

\* Subject to currency exchange rates

# Expenditures

**Total Estimated Expenditure as detailed below:**

<b>Sr. Items No</b>	<b>Estimated cost</b>
1. Hired articles (Audio-visual aids:	€ 500
2. Stationary and writing material:	€ 1,000
3. Boarding / Lodging for participants	€ 2,500
4. Travel grant / Transport facilities	€ 1,000
5. Lunches and teas	€ 3,000
6. Printing of course notes / brochures	€ 1,000
7. Contingencies	€ 1,000
<b><u>Total (Euros):</u></b>	<b>€ 10,000</b>

**Expected support from IUVSTA: € 2500/-**

# Contact Information

**TTC Coordinator**

**Dr. Javaid Ahsan Bhatti**

**Pakistan Vacuum Society**

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**THANK YOU**