

# SYMPOSIUM PROGRAM

10:00 – 20:00

**Registration**

Date: 01-11-2010

Day-1 (Tuesday)

Date: 02-11-2010

<b>08:00-10:00 Registration</b>			
<b>10:00-10:45 Inaugural Ceremony</b>			
<b>10:45-11:00 Tea Break</b>			
<b>1<sup>st</sup> Session</b>		<b>Surface Science and Engineering (SSE)</b>	
<b>Session Chair: Dr. Tatsuo Okano</b>			
<b>Co-Chair: Dr. Asghari Maqsood</b>			
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>	<b>Paper No.</b>
11:00-11:40	Surfaces of Materials	John T Grant	Invited Talk
11:40-12:00	Novel Copolymers of 2-Methylaniline and 1,2-Diaminobenzene, Synthesis and Characterization	Dr. Salma Bilal	SSE-1-O
12:00-12:20	Electrochemical Synthesis and Spectroelectrochemical Characterization of Poly( <i>o</i> -Aminophenol)	Dr. Anwar-ul-Haq Ali Shah	SSE-2-O
12:20-12:40	Evaluation of polycarboxylate ether for use in locally manufactured cement composite materials	Dr. Anwar Khitab	SSE-3-O
12:40-13:00	Heavy metals biosorption by using agricultural waste materials: Batch and continuous study	Dr. Suleman Qaiser	SSE-11-O
13:00-14:00	<b>Lunch &amp; Prayer Break</b>		
<b>2<sup>nd</sup> Session</b>		<b>Surface Science and Engineering (SSE)</b>	
<b>Session Chair: Dr. John T Grant</b>			
<b>Co-Chair: Dr. Ghenoun M</b>			
14:00-14:40	Corrosion protection by metallic coating	Prof. Dr. Khursheed Mehmood	Invited Talk
14:40-15:00	Evaluation of Mineral constituents of Medicinal Plants used for the treatment of asthma and other ailments	Dr. Shamroz Bano Sahito	SSE-14-O
15:00-15:20	Adsorptive Removal of Methylene Blue by Low Cost Citrus sinensis Bagasse: equilibrium, kinetic and thermodynamic characterization	Dr. Nazia Saleem	SSE-8-O
15:20-15:40	Assesment of heavy metal accunmulation in the grains of eight barley cultivars	Dr. Ghulam Qadir Shar	SSE-9-O
15:40-16:00	Improvement In The Design Of X-Ray Fluorescent Meter	Dr. M. Asghar	SSE-4-O
16:00-16:20	Role of surface compressive stresses on the deformation behavior of Zr-based bulk metallic glass	Dr. Mohammad Naeem	SSE-15-O
16:20-16:40	Phase Transformation and Effect of Sintering Time in Nd-Si-O System	Dr. Imran Khan	SSE-16-O
16:40-17:00	<b>Tea Break</b>		



Day-3 (Thursday)

Date: 04-11-2010

<b>5<sup>th</sup> Session Nano-Science and Technology (NST)</b>			
<b>Session Chair: Dr. Tajammul Hussain</b>			
<b>Co-Chair: Dr. Ahmad Jassim</b>			
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>	<b>Paper No.</b>
09:00-09:40	Nanotechnology & its dependence on vacuum system	Dr. N M Butt	Invited Talk
09:40-10:00	Magnetic Properties Of X/T-Metal/X; X=(Fe,Ni) Multilayers	Dr. A. Zolanvari	NST-22-O
10:00-10:20	Effect of zirconium nanoparticles on the mechanical strength of light-cured resin based dental composites	Dr. Tanveer H. Bokhari	NST-2-O
10:20-10:40	Electrical Characterization Of Ni (1-X) Co(X) Fe <sub>2</sub> O <sub>4</sub> Nanoferrites	Dr. Kishwar Khan	NST-4-O
10:40-11:00	Application of TiO <sub>2</sub> Nanostructures for Gas Phase Destruction of H <sub>2</sub> S gas at high temperatures	Dr. Naeem Shahzad	NST-6-O
11:00-11:20	<b>Tea Break</b>		
11:20-11:40	Synthesis And Characterization Of Fe/Cr Co-Doped Titania Nanotubes With Enhanced Photocatalytic Activity Under UV & IR Radiations	Dr. Asima Siddiq Malik	NST-7-O
11:40-12:00	Nanostructured CdTiO <sub>3</sub> thin films prepared from a single source precursor by AACVD	Dr. Shahzad Abu Bakar	NST-10-O
12:00-12:20	Experimental technique for fabrication of nanoporous membranes and template based synthesis of magnetic nanostructures	Dr. Rehana Shahid	NST-15-O
12:20-12:40	Synthesis, characterization and photocatalytic activity of Bi <sub>2</sub> O <sub>3</sub> – Co <sub>3</sub> O <sub>4</sub> Nanocomposite	Dr. Syed Munir Aslam	NST-12-O
12:40-13:00	Thermoelectric Studies Of Cr Doped Cobalt Ferrites Nano Particles	M. Anis-ur-Rehman	NST-13-O
13:00-14:00	<b>Lunch &amp; Prayer Break</b>		
<b>6<sup>th</sup> Session Nano-Science and Technology (NST)</b>			
<b>Session Chair: Dr. N. M. Butt</b>			
<b>Co-Chair: Dr. M. Zaka Ullah</b>			
14:00-14:40	Nano Catalytic Conversion of Natural Gas into Aromatics/Aliphatic Hydrocarbons	Dr. Tajammul Hussain	Invited Talk
14:40-15:00	The Effect Of The Carbon Nano Tubes In The Polyurethane Base Composite Materials	Dr. Abdul Quddos	NST-19-O
15:00-15:20	Research Facilities in Centralized Laboratory.	Dr. M. Riaz Khan	NST-17-O
15:20-15:40	Crossover of Easy-Axis for Magnetization of CoPt Nanowire Arrays	Dr. S. Shamaila	NST-16-O
15:40-16:00	Use of kino waste (orange peel) as biofuel by nanotechnology	Dr. Tariq Mahmood	NST-23-O
16:00-16:20	Catalytic Conversion of Syngas to Ethylene and higher Hydrocarbons	Dr. Nisar Ahmad	NST-21-O
16:20-16:40	Synthesis, Characterization and Arsenic Adsorption Studies of Nascent & Metal-Doped Titania Nanoparticles	Dr. Akif Zeb	NST-1-O
16:40-17:00	<b>Tea Break</b>		

Day-04 (Friday)

Date: 05-11-2010

<b>7<sup>th</sup> Session Plasma Science and Technology</b>			
<b>Session Chair: Dr. Mahbubul Alam</b>			
<b>Co-Chair: Dr. Dr. M. Aslam</b>			
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>	<b>Paper No.</b>
09:00-09:40	Understanding Plasmas	Prof. Dr. M Zaka Ullah	Invited Talk
09:40-10:00	Laser Induced Plasma Assisted Ablation (LIPAA) Process for Different Optical Glasses Under Vacuum	Dr. Ajmal H. Hamdani	PST-6-O
10:00-10:20	Plasma nitriding of aluminum in a pulsed dc glow discharge of nitrogen	Dr. Shahid Naseer	PST-2-O
10:20-10:40	Simulation of Semiconductor Diode Array-Pumped Nd:YAG Laser	Dr. Samia Qazi	PST-4-O
10:40-11:00	The effect of preionization and anode shape on correlation of pinch energy with neutron and x-ray emission of 2.25 kJ plasma focus.	Dr. S.S. Hussain	PST-1-O
11:00-11:20	<b>Tea Break</b>		
11:20-11:40	Wavelet Analysis of Electromagnetic Waves Interaction with Ionospheric Plasma at Pakistan Atmospheric region	M. Ayub Khan Yousuf Zai	PST-3-O
11:40-12:00	Improving radial uniformity of inductively coupled etching plasmas	Dr. Mujahid Zaka Ullah	PST-12-O
12:00-12:20	Laser Ablation Plasma Thrusters with Different Plastics	Dr. Salman Iqbal	PST-5-O
12:20-12:40	Aluminum Plasmas Generated By High Power Laser Matter	Dr. Hafiz M. Yasin	PST-11-O
12:40-13:00	Spectroscopic Study on Vibrational Temperature of Nitrogen Second Positive System in Inductively Coupled RF Plasma	Dr. A. R. Gilani	PST-7-O
13:00-14:00	<b>Lunch &amp; Prayer Break</b>		
<b>8<sup>th</sup> Session Electronic materials and processing</b>			
<b>Session Chair: Dr. Rashid Sarkar</b>			
<b>Co-Chair: Dr. Menouaor H</b>			
14:00-14:40	Electronic nose: An artificial olfaction system	Prof. Dr. M. Aslam	Invited Talk
14:40-15:00	Thermionic Electron Beam Guns: Design & Applications	Dr. Munawar Iqbal	EMP-3-O
15:00-15:20	Temperature Sensing Properties of Organic-Inorganic Ag/p-CuPc/n-GaAs/Ag Cell	Dr. M. Tariq Saeed	EMP-1-O
15:20-16:40	<b>Poster Session</b>		
16:40-17:00	<b>Tea Break</b>		

Day-05 (Saturday)

Date: 06-11-2010

<b>9<sup>th</sup> Session      Thin Film &amp; Coating Techniques (TFCT)</b>			
<b>Session Chair: Dr. John T Grant</b>			
<b>Co-Chair: Dr. Rashid Sarkar</b>			
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>	<b>Paper No.</b>
09:00-09:40	Microstructure and microwave absorption properties of Ni(1-x)Co(x)Fe <sub>2</sub> O <sub>4</sub> (0.0 ≤ x ≤ 0.5) nanoferrites synthesized via co-precipitation route	Prof. Dr. Asghari Maqsood	Invited Talk
09:40-10:20	Deposition of zirconium using plasma device	Dr. Riaz Ahmad	TFCT-4-O
10:20-10:40	One the Characterization of Thermally Sprayed Coatings on Turbine Blades	Dr. Ashraf Ali	TFCT-2-O
10:40-11:00	Optical and thermal properties of poly (ethylene oxide) doped with FeCl <sub>3</sub>	Dr. M. Saleem	TFCT-6-O
11:00-11:20	Tea Break		
11:20-11:40	Characterization, magnetic properties and thermal annealing behavior of Ni/Au multilayer on n-type Si	Dr. H. Sadeghi	TFCT-13-O
11:40-12:00	Design and Development of a Distinctive Narrow Band Pass Filter	Dr. M. S. Baig	TFCT-3-O
12:00-12:20	Development of ZnO thin film gas sensors	Dr. Sana Munawar	TFCT-9-O
12:20-12:40	PVD growth methods and applications	Dr. Asghari Maqsood	TFCT-5-O
12:40-13:00	Deposition of ZnTe Semiconductor Films using High Vacuum Heat Resistive System and their Structural: Optical and Electrical Characterization	Dr. Manzar Abbas	TFCT-10-O
13:00-13:20	Fabrication and Characterization of ZnO thin films by pulsed laser deposition	Mahreen Akram	TFCT-8-O
13:20-13:40	Physical Properties of CdS Thin Films Fabricated under Vacuum	Dr. Nazar Abbas Shah	TFCT-12-O
13:40-14:00	Role of ion irradiation for the formation of crystalline AlN film	Dr. I. A. Khan	TFCT-1-O
14:00-15:00	<b>Lunch &amp; Prayer Break</b>		
15:00-16:00	<b>Closing</b>		

# **IUVSTA - WORKSHOPS**

## **PROGRAM**

# **ISVST 2010**

- **WORKSHOP ON VACUUM IN RENEWABLE ENERGY TECHNOLOGIES**  
Nov. 3-4, 2010
- **WORKSHOP ON VACUUM SCIENCE AND TECHNOLOGY**  
Nov. 3-4, 2010
- **WORKSHOP ON SURFACES OF MATERIALS**  
Nov. 3-4, 2010
- **WORKSHOP ON PLASMA IN INDUSTRY**  
Nov. 5, 2010

# IUVSTA - Technical Workshops

In conjunction with ISVST-2010, following IUVSTA - Technical Workshops will be held

- **2- day Workshop on Vacuum In Renewable Energy Technologies**

Date: 3-4 November 2010  
Time: 09:00 to 17:00 hrs.  
Workshop Chair: Dr. Pervaiz Akhtar, Air University, Islamabad  
Workshop Co-Chair: Dr. Talib Hussain, IICS  
Venue: Hall - A (107, Tech. Block)

- **2- day Workshop on Vacuum Science and Technology**

Date: 3-4 November 2010  
Time: 09:00 to 17:00 hrs.  
Workshop Chair: Mr. M. Amin Sabir, PVS  
Workshop Co-Chair: Mr. Munir Ahmed, PVS  
Venue: Room 109A, Academic Block

- **2- day Workshop on Surfaces of Materials**

Date: 3-4 November 2010  
Time: 09:00 to 17:00 hrs.  
Workshop Chair: Prof. Dr. John T Grant,  
Workshop Co-Chair: Mr. Muhammad Shafique, PVS  
Venue: Room 108A, Academic Block

- **1-day Workshop on Plasma in Industry**

Date: 5 November 2010  
Time: 09:00 to 17:00 hrs.  
Workshop Chair: Prof. Dr. Zakaullah, QAU  
Workshop Co-Chair: Mr. Muhammad Asif, PVS  
Venue: Room 108A, Academic Block

# Workshop on Vacuum Science & Technology (WVS&T)

Venue: Room 109A, Academic Block

**Day-1**

**Date: 03-11-2010**

<b>Workshop Chair: Mr. M. Amin Sabir Co-Chair: Mr. Munir Ahmed</b>		
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
09:00-09:30	Vacuum Techniques and Applications	Mr. Muhammad Shoaib
09:30-10:00	Basic Vacuum Physics (part –I)	Mr. Mubashir Hayat
10:00-10:30	Basic Vacuum Physics (part –II)	Mr. Zulfiqar Ahmed Khan,
10;30-11:00	Mechanical Rough & Medium Pumps	Mr. Munir Ahmed
11:00-11:20	<b>Tea Break</b>	
11:20-12:00	Mechanical High & Ultra High Vacuum Pumps	Dr. Muhammad Maqsood
12:00-12:30	Sorption, Ti- Sublimation Pumps	Dr. Suleman Qaiser
12:30-13:00	Entrainment Pumps	Mr. Saleem Iqbal
13:00-14:00	<b>Lunch &amp; Prayer Break</b>	
14:00-14:30	Chemical Cleaning Techniques	Mr. Abdul Ghafoor Yahya
14:30-15:00	Vacuum System Design	Dr. Talib Husain
15:00-15:30	Vacuum Electronics	Mr. Allah Bux
15:30-16:40	Practical Demonstration ( Stripping of Vacuum Pumps)	Mr. Sarwar & Mr. Shoaib
16:40-17:00	<b>Tea Break</b>	

# Workshop on Vacuum Science & Technology (WVS&T)

Venue: Room 109A, Academic Block

Day-2

Date: 04-11-2010

<b>Workshop Chair: Mr. M. Amin Sabir Co-Chair: Mr. Munir Ahmed</b>		
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
09:00-09:30	Rough & Medium Vacuum Gauge	Dr. Muhammad Rafiq
09:30-10:00	High & Ultra High Vacuum Gauge	Mr. Muhammad Asif
10:00-10:30	Calibration & Standardization Techniques	Dr. Haji M. Akram
10:30-11:00	Vacuum Valves	Mr. Sohail Ahmed Shah
11:00-11:20	<b>Tea Break</b>	
11:20-12:00	Leak Testing Methods	Mr. Tariq Sattar
12:00-12:30	Vacuum Seals & Sealing Techniques	Dr. Sadaf Saeed
12:30-13:00	Out gassing & its Reduction	Dr. Talib Husain
13:00-14:00	<b>Lunch &amp; Prayer Break</b>	
14:00-14:30	Vacuum Fluids	Mr. Amir Bux Soomro
14:30-15:30	Practical Demonstration Discussion	Mr. Allah Bux, Mr. M. Shoab
15:30-16:40	<b>Visit to NINVAST, Islamabad</b>	
16:40-17:00	<b>Tea Break</b>	

# Workshop on Vacuum in Renewable Energy Technologies (WVRET)

Venue: Room 107, Tech. Block

**Day-1**

**Date: 03-11-2010**

<b>Workshop Chair: Dr. Parvez Akhter Co-Chair: Dr. Talib Hussain</b>		
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
09:00-09:40	Use of Vacuum in Solar Energy Technologies.	Dr. Parvez Akhter Ex. DG, PCRET Islamabad
09:40-10:20	Status of Power Generation using Wind Energy in Pakistan	Mr. Arif Alauddin Alternate Energy Development Board, Islamabad, Pakistan
10:20-11:00	Solar Thermal Power Plants and their Future.	Prof. Dr. Mohammad Javed Hyder, PIEAS, Islamabad.
11:00-11:20	<b>Tea Break</b>	
11:20-12:10	Replacing Natural Gas Geysers With Solar Water Heaters in Pakistan.	Dr. Irshad Ahmed Air University Islamabad.
12:10-13:00	Micro Hydro Plants for the Economic Development of Deprived Classes.	Dr. Habib Gul PCRET Islamabad
13:00-14:00	<b>Lunch and Prayer Break</b>	
14:00-14:40	Renewable Energy Technologies in Pakistan- Accomplishment and Challenges.	Dr. Parvez Akhter Ex. DG, PCRET, Islamabad
14:40-15:20	Feasibility of Solar Water Pumping Systems in Pakistan.	Dr. Muhammad G. Doggar PD, PCRET, Islamabad
15:20-16:00	Role of Pakistan Renewable Energy Technologies for Development/Promotion of Renewable Energy Equipment in Pakistan.	Dr. I. A. Raja. Comsats Institute of Technology. Abbotabad.
16:00-16:40	Thin films for window glazing and solar thermal applications	Dr. Muhammad Farooq Director, Bahauddin Zakariya University, Multan, Pakistan.
16:40-17:00	<b>Tea Break</b>	

# Workshop on Vacuum in Renewable Energy Technologies (WVRET)

Venue: Room 107, Tech. Block

**Day-2**

**Date: 04-11-2010**

<b>Workshop Chair: Dr. Parvez Akhter Co-Chair: Dr. Talib Hussain</b>		
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
09:00-09:40	Use of Biomass- A Promising Option for Pakistan.	Mr. G. U. Sarhandi PCRET, Islamabad
09:40-10:20	Biotechnology and Renewable Energy Systems.	Dr. Muhammad Arshad Assistant Professor, IESE, NUST Islamabad.
10:20-11:00	Biomass and Biogas as an Alternate Source of Energy in Pakistan.	Dr. Muhammad Anwar Baig Prof. IESE NUST, Islamabad.
11:00-11:20	<b>Tea Break</b>	
11:20-12:10	Calibration of a Solar PV Fan under Solar Stimulator/ Lab. Conditions.	Dr. Muhammad G. Doggar PD, PCRET Islamabad
12:10-13:00	<b>Discussion</b>	
13:00-14:00	<b>Lunch and Prayer Break</b>	
14:00- till completion	<b>Visit PCRET + Bio-Gas Plant near Islamabad</b>	

# WORKSHOP ON PLASMA IN INDUSTRY (WPI)

Venue: Room 108A, Academic Block

**Date: 05-11-2010**

<b>Workshop Chair: Dr. M. Zakauallah Co-Chair : Mr. Muhammad Asif</b>		
<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
09:00- 09:40	Electrostatic Probes for Plasma Diagnostics	Dr. A. Qayyum National Tokamak Fusion Program, Islamabad
09:40- 10:20	Role of neon in the reactivity of low pressure nitrogen plasma	DR. Najeebur Rehman COMSATS Institute of Information Technology Islamabad
10:20- 11:00	Ion beam assisted materials surface modification	Dr. Muhammad Hasan
11:00- 11:20	<b>Tea Break</b>	
11:20- 12:10	Industrial Plasma Generation Techniques	Prof. Dr. M. Zakauallah QAU, Islamabad
1210-1300	Plasma Focus as an efficient X-ray source for Radiography	Dr. Sarfraz ahmed National Tokamak Fusion Program, Islamabad
1300-1400	Lunch & Prayer Break	
1400-1500	Toroidal ion temperature gradient driven wave instability in a multicomponent tokama plasmas	Prof. Dr. Arshad M Mirza
1500-1640	Visit to Plasma Lab, Quaid e Azam University	
1640-1700	<b>Tea Break</b>	

# **WORKSHOP ON SURFACES OF MATERIALS**

Venue: Room 107, Tech. Block

**3-4 November 2010**

## **Course Contents:**

What is a surface?, clean surfaces, vacuum pumps, pressure measurement, partial pressures of component gases, gas adsorption, crystals and poly crystals, orientation of crystals and grains, surface roughness, SEM, STM, AFM, compositions of surfaces, work function, binding energies, AES, XPS, SIMS, thin films, depth profiling methods including AES, XPS, SIMS and RBS, cross-section analysis with FIB, TEM. This course would a general overview of quiet a lot of material and would take about 15 hours

**Organized by: John T Grant**

**University of Dayton,**

**Dayton, Ohio, USA**

# POSTER SESSION

5 November, 2010

(15:20-16:40)

# Poster Session

5 November, 2010

Poster No.	Title	Author	Institution
EMP-2-P	MWCNT's-doped metal oxide biosensor	Dr. Masood A.K.Bangush	Kohat University of Science & Technology Kohat
NST-3-P	Laser Based Advanced Techniques for Synthesis of Nano Materials	Dr. M. A. Gondal	King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia
NST-5-P	Antibacterial activity of nanoparticles	Dr. Sarfraz Ahmed	National Centre For Physics, Quaid-i-Azam University campus, Islamabad
NST-8-P	Effect of Metal Nanoparticles on enzymatic Activity of Lactate Dehydrogenase	Miss Samina Nazir	National Centre for Physics, Quaid-i-Azam University campus, Islamabad
NST-9-P	Nano Catalyst for decrease in moisture contents and increase in GCV (Gross Calorific Value) of Solid Domestic Wastes	Dr. Zulfiqar Ali	Punjab University Lahore
NST-11-P	Synthesis, characterization and biocidal properties of various nano organotin(IV) bimetallic complexes	Dr. Syed Abbas	Quaid-e-Azam University Islamabad
NST-14-P	Synthesis and Characterization of Co doped Magnesium ferrite Nanoparticles	Dr. M. Anis-ur-Rehman	COMSATS Institute of Information Technology Islamabad
NST-18-P	Synthesis and characterization of supported nanocomposite as a dewaxing catalyst to upgrade heavy petroleum feeds	Dr. Ikhtiar Ahmad	University of Azad Jammu & Kashmir, Muzaffarabad
NST-20-P	Study of the effect of Carbon Nanotubes on the Properties of Epoxy Composites	Dr. Shahid Nisar Ahmad	National Centre for Physics, Quaid-i-Azam University campus, Islamabad
RET-1-P	Effects of global warming on earthquake frequency in northern areas of Pakistan	Dr. Muhammad Usman	Earth Science Department Bahria University, Islamabad
RET-2-P	The study of the bifunctional catalyst pt / re used in the platforming unit for obtaining high octane number of the gasoline.	Menouar Hanafi	Department of Chemistry ORAN (ALGERIA)
RET-3-P	The use of the photovoltaic technology and the experience with the solar energy electrification of some localities in the south of algeria	Dr. Mohamed Ghenoun	The Director of the Education of ORAN (ALGERIA)

RET-4-P	The treatment of the liquid rejects from the petroleum refinery of arzew–algeria to the mediterranean littoral	Dr. Nadjet Bekhtaoui	The School of Seddikia – ORAN (ALGERIA)
SSE-5-P	Low Temperature Recycling of Printed Circuit Boards' Etching Waste to Copper Oxide Semiconductor	Dr. A. Ghafar Watoo	Department of Applied Physics, Federal Urdu University of Arts, Science and Technology, Islamabad
SSE-6-P	Microstructure and microwave absorption properties of Ni(1-x)Co(x)Fe <sub>2</sub> O <sub>4</sub> (0.0 x 0.5) nanoferrites synthesized via co-precipitation route	Dr. Asghari Maqsood	NUST, Islamabad
SSE-9-P	Assessment of heavy metal accumulation in the grains of eight barley cultivars	Dr. Ghulam Qadir Shar	Shah Abdul Latif University, Khairpur, Sindh
SSE-120-P	Mechanism of heavy metals removal by using Ficus religiosa leaves	Dr. Suleman Qaiser	NINFAST, Islamabad
SSE-13-P	Heavy metals removal from aqueous solutions by using Ficus religiosa leaves ash & Rice husk ash	Dr. Suleman Qaiser	NINFAST, Islamabad
SSE-17-P	Impedance Hygrometer Based On Natural Organic Material	Dr. Kh. S. Karimov	GIK Institute of Engineering Sciences and Technology, Topi
VST-4-P	Vibration monitoring and analysis of mechanical rotary vacuum pump	Mr. Tariq Hafeez	NINFAST, Islamabad
VST-5-P	Reclamation of Vacuum Pump Oils	Dr. Suleman Qaiser	NINFAST, Islamabad
VST-7-P	Thermal Degradation Studies of some Alternating Copolymers under High Vacuum Conditions	Dr. Shafique A. Arain	Shah Abdul Latif University Khairpur Sindh
VST-11-P	Determination of Outgassing Rate and Total Mass Loss (TML) of PCBs for Space Simulation	Dr. T. Hussain	Institute of Industrial Control System, Islamabad
VST-12-P	Experimental evaluation of the dynamic gas seal effect Of a molecular drag pump	Mr. J. A. Bhatti	Department of Physics, Islamia University, Bahawalpur
TFCT-11-P	Metal-Organic interface: Impact of interface on the properties of metallic thinfilms deposited on organic molecules	Dr. Shahid Nisar Ahmad	National Centre for Physics, Quaid-i-Azam University campus, Islamabad
PST-8-P	Laser Eye Protection Filter for 1064nm	Dr. Kamal Ahmed	Institute of Industrial Control System, Islamabad