

Promoting Emerging Technologies & Creating Business Opportunities



VASSCAA-6

INTERNATIONAL CONFERENCE AND EXHIBITION

**6th VACUUM AND SURFACE SCIENCES
CONFERENCE OF ASIA AND AUSTRALIA**

**9-13 OCTOBER 2012
ISLAMABAD - PAKISTAN**

www.vasscaa6.pvs.com.pk

Endorsed by



- Vacuum Society of Australia
- Chinese Vacuum Society
- Indian Vacuum Society

Supported by

- Vacuum Society of Japan
- Korean Vacuum Society
- Vacuum Society of Iran

Jointly Organized by



International
Event
Management



Message by

J. J. Pireaux, President

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



Pakistan is blessed with tremendous human resource potential with a very large young population. Realizing the fact, the socio-economic development is possible only through promoting science and technology, the International Union for Vacuum Science, Technique and Applications (IUVSTA) has

brought together counterparts from the region to boost science and research.

It is indeed a matter of great satisfaction that Pakistan Vacuum Society (PVS) has taken the initiative to hold the 6th Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA-6), which will take place in Islamabad from 9-13 October 2012. The VASSCAA series is organized to create a new forum in Asia and Australia to discuss vacuum, surface, and related sciences, techniques and applications.

On behalf of IUVSTA, I assure full support for the success of VASSCAA-6. I hope that this international conference and exhibition will provide a forum for the advancement of various technologies in the buildup of high quality human potential. There is no better way to make connections within technology and industry than by face-to-face interaction with professionals. The VASSCAA-6 will broaden their understanding for the applications of advanced technologies, and will definitely reap the business prospects for the participants.

Message by

M. K. Aijazi

**General Chair, VASSCAA-6
President, Pakistan Vacuum Society (PVS)**



Pakistan Vacuum Society (PVS) always supports networking among academic and industrial professionals involved in variety of disciplines relating to vacuum science and technology. The vacuum science and technology is an essential tool to excel the technological development. I am pleased to share that during the last few

years a considerable potential has been gauged in Pakistan's economy and there is a lot of investment potential in these advance technologies.

It gives me great pleasure to apprise that the 6th Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA-6) is being held in Pakistan. This conference is officially endorsed by the International Union for Vacuum Science, Technique and Applications (IUVSTA). The IUVSTA is a union of national member societies whose role is to stimulate international collaborations in the fields of vacuum science and technology and related multi-disciplinary topics.

A five-day International Exhibition will also be a significant part of this mega event. This Exhibition will provide a stimulating opportunity to the international and local vendors to display their products.

I welcome all the international and local participants, and hope that this platform would be very interactive and useful. This event would play a catalyst role to flourish the growth of new technologies.

About Organizer

Pakistan Vacuum Society

Aims

Promotion and development of vacuum science and technology in the country through:

- Symposia and conferences
- Short training courses
- A linkage between international community and local industries, research institutions and universities
- Technical workshops
- Student support grants

Our visitors are your potential customers! For the cost of an advertisement in a trade journal... you can get the chance to speak face-to-face the existing and potential clients.

About Exhibition

Who Should Exhibit?

The Exhibitors are Expected to come from High-technology Frontiers, Manufacturers, Suppliers and Distributors of:

- ELECTRON BEAM VACUUM COATING SYSTEM
- ELECTRON BEAM WELDING
- ELECTRON MICROSCOPY
- ELECTRIC BULBS & TUBES
- GAS ANALYZER
- HIGH VACUUM ACCESSORIES
- HIGH VACUUM VALVES
- INDUSTRIAL VACUUM CLEANERS
- LENS CLEANING SYSTEM
- MATERIAL ANALYZER
- MEDICAL SUCTION SYSTEMS
- METALLURGICAL PROCESSES
- PLASMA VACUUM MELTING FURNACE
- ROOTS PUMP
- ROTARY PUMP
- DIFFUSION PUMP
- TURBOMOLECULAR PUMP
- ULTRA HIGH VACUUM ACCESSORIES
- VACUUM ACCESSORIES
- VACUUM ANNEALING FURNACE
- VACUUM ARC MELTING FURNACE
- VACUUM BOTTLE FILLING MACHINE
- VACUUM CLEANER
- VACUUM CLEANING OF OILS
- VACUUM COATING SYSTEMS
- VACUUM DE-AERATION / WATER TREATMENT
- VACUUM FOOD SEALERS
- VACUUM FREEZE DRYING
- VACUUM FURNACES
- VACUUM GAUGES
- VACUUM GLOVE BOX
- VACUUM HANDLING OF POST
- VACUUM HEAT TREATMENT FURNACE
- VACUUM INDUCTION MELTING FURNACE
- VACUUM INSULATION PANELS
- VACUUM LEAK TESTING
- VACUUM OVENS
- VACUUM PICKUP MACHINES
- VACUUM PRECISION CASTING FURNACE
- VACUUM SEWER SYSTEM
- VACUUM SINTERING FURNACE
- VACUUM VALVES

Host City: Islamabad

Combining a rich history, the confluence of many a civilization and temperate climate, Islamabad - the capital city of Pakistan, is one of the most beautiful cities in the South Asian region. Wide, tree-lined streets adorn the various sectors and zones of the city, making it accessible and spectacular. Islamabad is the fastest growing city of Pakistan in terms of education, fast developing economy, emerging sciences and an industrial hub of growing technologies. As this trend continues, the city is fast becoming truly metropolitan.

The entire Conference and Exhibition will be held at Pak-China Friendship Centre and the National Institute of Vacuum Science and Technology (NINVEST), National Centre for Physics (NCP), Quaid-i-Azam University, Islamabad, Pakistan.

Weather

The average climate in month of October is pleasant with temperature ranging from 18-25 °C.

About Venue: Pak-China Friendship Centre, Islamabad

Pak-China Friendship Centre is equipped with modern facilities. Ground floor has been allocated for offices, theater hall and cafeteria. First floor consists of study rooms, library, committee rooms and exhibition hall, while the third floor consists of residential compound of different categories with 57 rooms. The centre has centrally air-conditioned system with the latest fire-extinguish system. Pak-China Friendship Centre has been facilitated with a vast car-parking for 600 vehicles.



Exhibition Stand Fee:

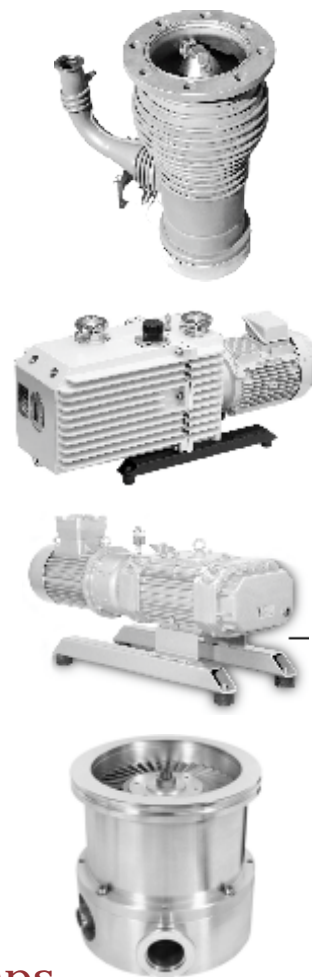
A booth of 3mx3m

- | | |
|-----------------------------|-----------------|
| a) For Foreign Exhibitors: | US\$. 2,500/- |
| b) For Domestic Exhibitors: | PK Rs. 70,000/- |

Imports of Vacuum Pumps *

Country	Fiscal Year 2006-2007		Fiscal Year 2007-2008		Fiscal Year 2008-2009		Fiscal Year 2009-2010	
	Quantity	Value (Rs)	Quantity	Value (Rs)	Quantity	Value (Rs)	Quantity	Value (Rs)
Australia	279	12,593,611	4	146,097	20	794,755	1	32,000
Belgium	1	37,784	1	41,002	12	389,088	20	473,247
Brazil	1	685,013	1,091	27,704,601	94	63,664	78	2,755,036
Canada	13	469,980	102	3,294,313	123	3,575,893	462	11,816,189
China	292	5,472,452	1,109	25,730,229	1,210	35,696,193	2,928	45,611,947
Denmark	1	43,109	57	1,185,755	105	2,709,498		
European Union	68	2,729,169	31	946,764				
Finland			1	51,436	8	161,176	10	297,053
France	12	480,087	7	1,990,265	12	394,029	11	344,651
Georgia	5	175,000	19	685,000				
Germany	1,425	99,498,765	430	19,374,741	5,152	184,989,994	560	19,569,638
Honduras					8	196,838		
Hong Kong	172	3,658,638	698	13,811,030	726	15,088,319	364	7,324,291
India	164	5,407,207	187	6,383,984	275	8,309,782	301	5,467,712
Italy	806	21,683,275	459	11,924,07	8,266	248,563,626	1,286	32,966,509
Japan	151	4,841,977	141	4,987,797	88	2,737,007	133	4,609,549
Kazakhstan			3	92,957				
Korea D.P. Republic					37	940,000	2	43,584
Korea Republic	50	1,779,645	548	17,007,678	374	10,822,771	600	14,967,725
Malaysia	1	6,151	26	618,784	6	82,322	7	205,311
Mexico							5	123,832
Netherlands	26	369,547	33	1,014,679	51	1,898,621	58	1,342,714
New Zealand					30	760,000		
Other Asia	9	181,332	69	1,990,341	59	1,564,595	97	2,183,203
Philippines							2	41,365
Poland					112	4,669,562	31	963,304
Singapore	1,470	52,766,412	529	16,545,131	529	12,767,309	50	1,221,433
Spain	3	139,845	2	56,707				
Swaziland							14	366,090
Sweden	34	1,528,483	41	3,912,594	16	160,000		
Switzerland	20	1,024,183	64	3,078,957	29	980,954	106	3,372,808
Thailand	58	1,882,236	96	2,333,541	9	217,275	153	4,181,411
Turkey	9	213,977	17	477,451	16	411,872		
U.A.E.	21	303,468	52	1,434,703	70	1,526,930	82	2,684,497
United Kingdom	799	35,449,547	494	16,365,731	643	20,051,812	658	19,640,946
USA	222	9,208,001	132	5,278,083	322	11,277,790	471	15,036,330
TOTAL	6,112	262,628,894	6,443	176,540,351	18,402	571,801,675	8,490	197,642,375

* Source: Federal Bureau of Statistics



Year-wise Imports of Vacuum Pumps

2006-7 Rs (Million)	2007-8 Rs (Million)	2008-9 Rs (Million)	2009-10 Rs (Million)	Total Rs (Million)
262.62	176.54	571.80	197.64	1208.06

Potential Users of Vacuum Technology in Pakistan

Selected Industries	Total
→ Air Conditioning, Refrigeration and Freeze Drying	295
→ Canning of Fruit, Vegetables, Fish, Sea Foods and Dairy Products Etc.	32
→ Drug and Pharmaceutical Products	170
→ Vegetable Ghee, Oil and Seed Oils	102
→ Rice Milling	228
→ Wheat and Grain Milling	300
→ Biscuits and Bakery Product	59
→ Refined Sugar	62
→ Confectionery and Candy	20
→ Beverage Industries	43
→ Tobacco Manufacturing	40
→ Blending of Tea	6
→ Manufacture of Textiles	1063
→ Paper and Paper Products	182
→ Wood Industry	35
→ Industrial Chemicals	94
→ Soap, Detergents, Cosmetics and Paints	133
→ Petroleum Refining, Products of Petroleum and Coal	13
→ Rubber and Plastic Industries	135
→ Milk and Dairy Industries	65
→ Non-Metallic Mineral Products (Pottery, Bricks, Tiles, Glass & Glass Product and Cement Product etc.)	139
→ Basic Metal Industries (Steel Industries, Aluminum & Alloys, Copper & Copper Alloys)	495
→ Metal Products, Machinery, Equipment (Razors, Hand Edge Tools and Metal Stamping)	702
→ Electrical Machinery (Television, Insulated Wires and Cables, Electric Bulbs, Tubes etc.)	157
→ Labeling and Printing Industries	68
→ Vacuum Metalizing Plants	47
→ Vacuum Packing and Forming Industries	58
Total No. of Industries	4743



About "VASSCAA"

The Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA), a conference series is organized to create a new forum in Asia and Australia to discuss vacuum, surface and related sciences, techniques and applications. This is an officially endorsed conference of the **International Union for Vacuum Sciences, Technique and Applications (IUVSTA)**. The International Steering Committee of VASSCAA is comprised of the chair of the surface science division of IUVSTA and the Presidents of the Vacuum Societies of **Australia, China, India, Iran, Japan, Pakistan and South Korea**. The VASSCAA-1 was organized by the Vacuum Society of Japan in 1999 at Tokyo, Japan. VASSCAA-2 was held in 2002 at Hong Kong and VASSCAA-3 in 2005 at Singapore. VASSCAA-4 was held at Matsue, Japan in 2008 and VASSCAA-5 at Beijing, China in 2010.

The conference is organized once every two years by the vacuum societies of the VASSCAA member countries. The conference location rotates among cities in Asia and Australia.

The **VASSCAA-6** will take place from October 9 - 13, 2012 in Islamabad, Pakistan.

Applications of Vacuum Technology in Industry

- Beverage Industry - Bottle Filling and Water Degassing
- Brick and Clay Industry - Clay De-aeration on Extruders
- Carpet Manufacturing - Vacuum Dewatering and Drying
- CD Manufacturing - Vacuum Pick Up
- Dairy Industry - Evaporation, Vacuum Conveying and Packaging
- Dentists - Oral Suction Units
- Die Casting Industry - Vacuum Degassing
- Electronics Industry - Circuit Board Testing and Parts Handling
- Food Canning Industry - Vacuum Pick Up
- Furniture and Cabinet Manufacturing - Vacuum Chucking on CNC Routers
- Hospitals - Central Vacuum Systems
- Liquor Industry - Vacuum Distillation
- Paper Industry - Vacuum Pick Up of Envelope, Tissue and Packing Material
- Plastics Industry - Thermo-Forming and Vacuum Calibration
- Poultry Industry - Evisceration and Packaging
- Pharmaceutical Industry
- Solvent Recovery, Bottle Filling
- Maintain Vacuum on Dryers and Reactors and for Central Vacuum Systems
- Pasta Production - De-aeration
- Soap Production - Vacuum Extrusion and Packaging
- Soil Remediation - Vacuum Extraction of Voc's and Groundwater
- Sterilization Industry - Ethylene Oxide Sterilization of Medical Products
- Sewage Treatment Facilities - Vacuum Filtration and Methane Gas Digesters
- Sign Manufacturing - Vacuum Chucking on CNC Routers
- Tobacco Industry - Vacuum Sterilization, Drying and Packaging
- Textile Industry - Vacuum Dewatering and Drying
- Tyre Manufacturing - Vacuum Degassing
- Research Laboratories - Central Vacuum Systems
- River Barge Unloading - Vacuum Stripping of Last Remaining Liquids
- Universities - Central Laboratory Vacuum Systems
- Vegetable Oil Production - Vacuum Distillation and Degassing
- Wire Manufacturing - Maintain Vacuum on Extrudes for Plastic Coating
- Wood Industry
- Sweets and Candies
- Fertilizers
- Power Plants
- Electric Tubes and Bulbs
- Paper and Tobacco
- Decorative Coatings
- Surgical Equipment Manufacturing
- And Many More.....

For details/booking of stall at VASSCAA-6 Exhibition

VASSCAA-6 Exhibition Secretariate:

9, Street # 15-A, Sector E-11/4, Islamabad-Pakistan

Phone: +92-51-4348700, Fax: +92-51-289 6070

Cell: +92-333-5101856, Email: exhibition@vasscaa6.pvs.com.pk

Website: www.vasscaa6.pvs.com.pk



About Conference

TOPICS:

- Surface Science and Engineering
- Electronic Materials and Processing
- Nanometer Structures
- Thin Film
- Vacuum Science and Technology
- Plasma Science and Technique
- Bio Interfaces
- Renewable Energy Technologies

TECHNICAL SHORT COURSES:

- Vacuum Techniques in Renewable Energy Technologies
- Modern Trends in Vacuum Technology
- Techniques for Surface Analysis
- Chemical Cleaning Techniques for Vacuum Systems

International Steering Committee

- Dr. Peter Varga - IUVSTA-SSD
- Dr. M. Ono - Japan
- Engr. M. K. Aijazi - Pakistan
- Dr. T. S. Park - South Korea
- Dr. A. Holland - Australia
- Dr. J. Hou - China
- Dr. K. C. Mittal - India
- Dr. Jalil Badraghi - Iran

International Organizing Committee

Dr. A. Z. Moshfeg	Sharif University of Technology	Iran
Dr. Agnes Granier	University of Nantes	France
Dr. Alberto Herrera	CINVESTAV- Unidad Queretaro	Mexico
Dr. Alberto Tagliaferro	Politecnico di Torino	Italy
Dr. Alex Shard	NPL	UK
Dr. Andras Berko	University of Szeged	Hungary
Dr. Arturo Lousa	Universidad de Barcelona	Spain
Dr. Bruce King	University of Newcastle	Australia
Dr. Carlos J.M. Tavares	Universidade do Minho	Portugal
Dr. Christian Teichert	University of Leoben	Austria
Dr. Christoph E. Sittner	Vienna Univ. of Technol	Austria
Dr. Diederik Depla	Ghent University	Belgium
Dr. Eiji Kusano	Kanazawa Institute of Technology	Japan
Dr. Espedito Vassallo	Instituto di Fisica del Plasma	Italy
Dr. Heiner Linke	Lund University	Sweden
Dr. Javier Barriga	Institute Tekniker-IK4	Spain
Dr. Jean J. Pireaux	University of Namur	Belgium
Dr. Jose A. M. Gago	Institute of Material Science	Spain
Dr. John Grant	University of Dayton	USA
Dr. Jeon G. Han	Sungkyunkwan University	South Korea
Dr. K C Mittal	BARC	India
Dr. Leszek Markowski	University of Wroclaw	Poland
Dr. Mats Fahlman	Linkoping University	Sweden

Dr. Mats Fahlman	Linkoping University	Sweden
Dr. Myung Mo Sung	Hanyang University	South Korea
Dr. M Ashraf Gondal	KFUPM	Saudi Arabia
Dr. Masaru Tsukada	Tohoku University	Japan
Dr. Milorad Milun	Institute of Physics	Croatia
Dr. Orlando Teodoro	Universidade Nova de Lisboa	Portugal
Dr. Peter Varga	Vienna University of Technology	Austria
Dr. Philip Moriarty	University of Nottingham	UK
Dr. Reinhard H. Schwarz	Fisica Institute	Portugal
Dr. Slobodan Milosevic	Institute of Physics	Croatia
Dr. Seizo Morita	Osaka University	Japan
Dr. Stephane Mangin	Nancy University	France
Dr. Tatsuo Okano	University of Tokyo	Japan
Dr. Thierry Czerwiec	Nancy University	France
Dr. Ulf Helmersson	Linkoping University	Sweden
Dr. Ugo Valbusa	University of Genova	Italy
Dr. Valdimir Vishngakov	Manchester Metropolitan University	UK
Dr. Vincenc Nemanic	Jozef Stefan Institute	Slovenia
Dr. Y. Huttel	Instituto de Ciencia de Materiales	Spain
Dr. Z. Dong	University of Science & Technol.	P. R. China
Dr. Ziyou Li	University of Birmingham	UK

For further information about the Conference, visit us at www.vasscaa6.pvs.com.pk or e-mail to info@vasscaa6.pvs.com.pk