



Union Internationale Pour La Science, La Technique et Les Applications du Vide
International Union for Vacuum Science, Technique and Applications
Internationale Union für Vakuum Forschung, Technik und Anwendung

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Wishing you all Happy Holidays and a Healthy and Successful 2016!

Ivan Petrov, petrov@illinois.edu
IUVSTA Publications Committee Chair



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Scientific Director Comments for the News Bulletin

David N. Ruzic, druzic@illinois.edu

This has been a very productive last 6 months or so. We had a robust presence of the scientific directorate at both the Graz, Austria and Morgan Hill, USA ECM meetings. By encouraging Divisional Vice-Chairs and Secretaries to come to the meetings if the Chairs could not, we had representation from every division. Quite a large number of workshops, schools, technical training courses, and short courses have been proposed, and most of them funded. The membership is encouraged to work through their division leaders to propose more of these activities. Funding these efforts is the highest-profile activity of the Union and strong programs only result from strong proposals.

One of the most important activities in the past 6 months was the Highlight Seminar, which was held as a session of the AVS meeting. Our statutes require one of these to be held each triennia. By holding as a part of a major scientific conference, we were able to accomplish two goals. The first is the dissemination of scientific content. The division chair of each of the 9 divisions was invited to present an overview of the most important advances plus at least one item in more detail. If the division chair was not able one of the other officers was selected. The second goal is to create more visibility for both the presenter and for IUVSTA. The Highlight Seminar was a huge success. The audience was diverse and quite large for this type of meeting. The presentations were excellent both in scientific quality and in their delivery. Your representatives came through!

Preparations for the IVC is an additional key activity for the STD. According to statutes, the leaders of each division should be on the program committee with the ability to propose invited speakers etc. This is often news to the in-country organizers. This year, the preparation for the IVC in Busan, Korea, is on track. The committees have been constituted correctly, and our division representatives are active in proposing programming. Overall, the STD has been very active and serving the membership. I encourage you to get involved and am always ready to answer questions or point you in the right direction.



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Executive Council Meeting 122, International Iberian Nanotechnology Laboratory (INL), Braga, Portugal

Ana Gomes Silva, acs@fct.unl.pt, On behalf of Portuguese Vacuum Society SOPORVAC

Executive Council Meeting 122

INL INTERNATIONAL IBERIAN NANOTECHNOLOGY LABORATORY

SOPORVAC **IUVSTA**

15 - 17 April 2016 **Braga- Portugal**

BRAGA

The 122th IUVSTA Executive Council Meeting will take place at International Iberian Nanotechnology Laboratory (INL) in Braga, Portugal, from Friday, April 15 to Sunday, 17 April 2016. The registration will be done online as well as the fee payment by credit card or bank transfer. The fee per participant is 370 € (Euros). For participant and accompanying person the fee is 500 € (Euros). Announcement and detailed information will be sent.



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14th IUVSTA School on Nano-Optics; from Principles to Basic Research and Applications

Ana Gomes Silva, acs@fct.unl.pt



The 14th IUVSTA School entitled “**Nano-Optics, from Principles to Basic Research and Applications**” will take place at International Iberian Nanotechnology Laboratory (INL) in Braga, Portugal, from Monday, April 11 to Friday, 15 April 2016. The school is organized by the Nanostructures Division (NSD) and supported by the Bio-Interfaces Division (BID) as well as the Surface Science Division (SSD).

The 2014 Nobel Prize in Physics for invention of efficient blue light-emitting diodes which has enabled bright and energy saving white light, and the 2014 Nobel Prize in Chemistry, for development of super-resolved fluorescence microscopy, together with the celebration of the International Year of Light are an evidence of the importance of light phenomena. Nano-optics is the branch of nanoscience and nanotechnology that deals with engineering and controlling optical fields on a scale that is smaller than the wavelength of light, i.e., that operates with nano-optical fields. The purpose of the IUVSTA School is to introduce the students and established scientists to the field and provide a comprehensive overview on experiment and theory, basic physics and applications as well as on nanofabrication and characterization. The school will begin from the consideration of fundamental principles, and will reach the frontiers of research in a systematic and didactic fashion, addressing the latest developments. Expected main topics will be nano-plasmonic, metamaterials, near-field, super-resolution imaging, ultrafast nano-optics, intelligent lighting and human centric lighting, among others. The school is organized under the leadership of Ana G. Silva (Secretary of NSD) together with Christian Teichert, (Chair of NSD). Local organizers are Carlos José Macedo Tavares and Jana Nieder. Besides Lars Montelius, INL, the International Scientific Committee was recruited from several National Representatives within NSD, Sidney R. Cohen (Vice- Chair of NSD), Antonin Fejfar, Steven Schofield, Yves Huttel, Maja Buljan, Hideaki Kasai, Ryszard Czajka, Nancy A Burnham, and Katalin Balazsi. A widespread advertisement of this school is just in preparation.




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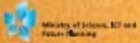

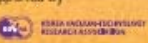
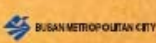












www.ivic20.com

20th INTERNATIONAL
VACUUM
CONGRESS
IVC-20

AUGUST 21-26, 2016
BUSAN, KOREA

Organized by


Supported by
   
   

	ICSS-16 16 th International Conference on Solid Surfaces
	ICN+T 2016 International Conference on Nanoscience and Technology 2016
	VASSCAA-8 8 th Vacuum and Surface Sciences Conference of Asia and Australia
	25th KVS 25 th Anniversary KVS Symposium
	ITC 2016 Industrial Topical Conference 2016
	ISPB 2016 International Symposium of Plasma Biosciences 2016



Dear Colleagues and Friends,

On behalf of the Organizing Committee, it is my great honor and pleasure to invite you to the 20th International Vacuum Congress (IVC-20), which will be held in Busan, Korea from August 21 to 26, 2016.

In the tradition of the IVC series, IVC-20 will integrate the 16th International Conference on Solid Surfaces (ICSS-16), International Conference on Nanoscience and Technology 2016 (ICN+T 2016), and 8th Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA-8). In addition, the International Symposium of Plasma Biosciences 2016 (ISPB 2016), 25th Anniversary KVS Symposium (25th KVS), and Industrial Topical Conference 2016 (ITC 2016) will also be incorporated. ITC 2016 has been specially included to emphasize the balance between academia and industry.

IVC-20 will not only provide a comprehensive overview of the most recent developments in the field of vacuum science and the latest technologies and applications, but also feature a unique and extensive technical exhibition. With her natural beauty and diverse tour attractions, the city of Busan will surely be the center of many unforgettable moments.

We look forward to welcoming you in Busan, Korea!

Sincerely yours,

Prof. Hee Jae Kang
General Chair, 20th International Vacuum Congress
President, Korean Vacuum Society



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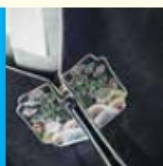
CALL FOR ABSTRACTS



Abstract Submission Deadline: January 31, 2016

IVC-20 cordially invites you to submit your abstracts for oral and poster presentations. All abstracts will be reviewed by the Program Committee and assigned to the appropriate session based on the author's application and program requirements. Abstracts should be submitted online. Please refer to the topics below and visit www.ivc20.com for more details.

LIST OF TOPICS



The topics will cover research and activities across all fields related to vacuum science and general categories including, but not limited to, the following topics;

- + Applied Surface Science
- + Biointerfaces
- + Electronic Materials and Processing
- + Nanometer Structures
- + Plasma Science and Technique
- + Surface Engineering
- + Surface Science
- + Thin Films
- + Vacuum Science and Technology
- + Advanced Semiconductors and Device Applications
- + Alternative Energy; Fuel Cells, Solar Cells, Battery, Capacitors, Catalysts
- + Low Dimensional Nano-materials
- + Plasma Bioscience and Medicine

PLENARY SPEAKERS



Meet world leaders at IVC-20 ! The following visionary speakers will share their experience and insights on the latest trends and developments in the industry.

- + **Joanna Aizenberg** (USA)
Director, Kavli Institute, Harvard University
- + **Kinam Kim** (Korea)
President, Semiconductor Business Device Solutions Division, Samsung Electronics Co. Ltd.
- + **Erwin Neher** (Germany) * *Nobel Laureate in Physiology or Medicine*
Director, Max Planck Institute for Biophysical Chemistry
- + **Hideo Ohno** (Japan)
Professor, Tohoku University
- + **Qi-Kun Xue** (China)
Vice President, Tsinghua University

JOURNAL PUBLICATION



By submitting your abstract to IVC-20, you will have the opportunity to submit your paper to the following journals. Please note that some journals are still under discussion. The final list will be announced on our website.

- + Applied Surface Science
- + Journal of Biomaterials and Tissue Engineering
- + Journal of Biomedical Nanotechnology
- + Journal of Nanoelectronics and Optoelectronics
- + Journal of Nanoscience and Nanotechnology
- + Nanoscience and Nanotechnology Letters
- + Science of Advanced Materials
- + Surface & Coatings Technology
- + Thin Solid Films



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SPONSORSHIP & EXHIBITION

An extensive technical exhibition will take place alongside the congress from August 23-25, 2016. The exhibition will also be open to non-participant visitors, thus maximizing interaction with potential buyers. IVC-20 will offer various packages for sponsorship and exhibition which will provide great opportunities to promote your brand identity. For more information, please visit our website www.ivic20.com.

VISIT BUSAN KOREA IN 2016!

The host city, Busan, is the second largest and most beautiful port city in Korea which best exemplifies the attractive balance between a long, rich heritage of dynasties and a recently developed modern culture.

REGISTRATION FEES

Participants are advised to register in advance to receive the pre-registration discount. Detailed information will be updated on the website.

Category	Pre-registration (until May 31, 2016)	On-site Registration (from June 1, 2016)
Regular	\$ 650	\$ 750
Student	\$ 350	\$ 400
Accompanying Person		\$ 150
Banquet		\$ 70

IMPORTANT DATES

Jan. 31
2016

Deadline for
Abstract Submission

Mar. 15
2016

Notification of
Abstract Acceptance

May 31
2016

Deadline for
Pre-registration



IVC-20 Secretariat: People-X, Inc.
16, Yeoksam-ro 17-gil, Gangnam-gu, Seoul 06246, Korea
Tel. +82-2-557-8422 Fax. +82-2-566-6087 E-mail. contact@ivic20.com



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ecoss 32
28 Aug. - 2 Sept. 2016
Grenoble, France

EUROPEAN CONFERENCE ON SURFACE SCIENCE

www.ecoss2016.org

Logos: ESRF, cea, NEUTRONS FOR SCIENCE, CNRS, UNIVERSITE GRENOBLE ALPES, France-Relax

Welcome of the Chair

On behalf of the Organizing Committee, it is my pleasure to announce the **32nd European Conference on Surface Science (ECOSS-32)**. ECOSS is a traditional annual meeting organized jointly by the Surface Science Division of IUVSTA and the Surface and Interface Section of the European Physical Society. After 10 years it is back in France.

The conference provides the occasion for European scientists to meet and discuss the latest advances, either experimental or theoretical, in surface physics and chemistry. The most recent technical developments are also presented.

Grenoble, capital of the French Alps, is the ideal place for this meeting. It is the location of the largest synchrotron radiation and neutron facilities in Europe as well as one of the most important areas for semiconductor research and industry.

Roberto Felici
Chair of ECOSS 32

Local Organising Committee (LOC)

Roberto Felici - ESRF, Grenoble
Chair

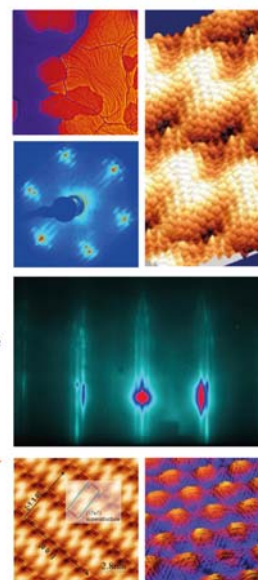
Aude Bailly - UGA/CNRS, Institut Néel, Grenoble
Eric De Vito - UGA/LITEN, CEA-Grenoble
Elisabeth Djurado - UGA, Grenoble INP
Giovanna Fragneto - ILL, Grenoble
Anouk Galtayries - SFV-ENSFCP, Paris

Gweltaz Hirel - SFV, Paris
Laurence Magaud - UGA/CNRS, Institut Néel, Grenoble
Gilles Renaud - UGA/INAC, CEA Grenoble
Olivier Renault - UGA/LETI, CEA Grenoble
Hubert Renevier - UGA, Grenoble INP

Conference Secretary

SFV **Société Française du vide**
19 rue du Renard F-75004 Paris, France
Phone: +33 (0)1 53 01 90 30 - Fax: +33 (0)1 42 78 63 20
E-mail: sfv@vide.org - www.vide.org

ecoss 32
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Grenoble, France





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Stress Evolution in Thin Films and Coatings

from Fundamental Understanding to Control

Joint ICMCTF-SVC Workshop

October 2-5, 2016, Chicago (IL), USA

Embassy Suites Hotel, O'Hare-Rosemont, IL



<http://STRESS-2016.org>

• Scope

The aim of this international workshop on stress is to discuss recent advances and cutting edge technologies associated with understanding, quantifying and controlling stress in thin films and coatings. Jointly organized by the SVC and ICMCTF/ASED of the AVS, this unique forum brings together scientists and technologists from the Materials Research and Surface Engineering communities to address both fundamental and applied research as well as technological problems and solutions of interest to both academia and industry.

• Workshop Topics

- Stress Fundamentals and Modeling
- Physical and Chemical Processes of Stress Development
- Stress Evaluation Methods, including optical diagnostics (wafer curvature, Raman), X-ray and neutron Diffraction, mechanical testing
- Stress in Industrial Processes, e.g., optical films and coatings, hard coatings for cutting tools, coatings for aerospace applications, coatings for manufacturing applications & welding processes
- Stress and Mechanical Properties in Thin and Thick Films
Stress and adhesion failure, fatigue, fracture, toughness
- Stress in Electronics/MEMS

• Program and Schedule

The stress workshop features a technical program consisting of invited lectures, contributed oral and poster presentations, as well as table top exhibits. There will be numerous opportunities for networking during the welcome reception, at lunch, at break times, in the Exhibit session and while reviewing the posters.

Short courses: October 2, 2016

Workshop: October 3-5, 2016

• Confirmed Invited Speakers

- | | | |
|------------------|--------------------|-------------------|
| E. Barthel (FR) | G. Greczynski (SE) | G. Ockenfuss (US) |
| E. Bemporad (IT) | J. Keckes (AT) | T. Suhonen (FI) |
| E. Chason (US) | C.E. Murray (US) | S. Zhang (SG) |
| G. Doll (US) | | |

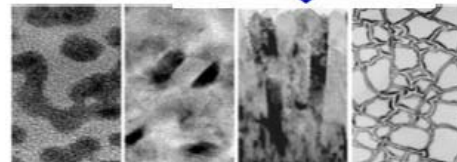
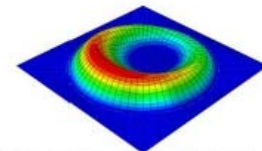
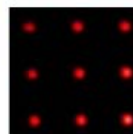
• Organizing Committee

- General Chair:** L. Martinu, Polytechnique Montreal (CA) ludvik.martinu@polymtl.ca
- Program Chair:** G. Abadias, Univ. of Poitiers (FR) gregory.abadias@univ-poitiers.fr
- Co-Chairs:** I. Petrov, Univ. of Illinois (US) petrov@illinois.edu
C. Stoessel, Eastman Chemical (US) cstoessel@eastman.com

Committee Members:

- A. Anders (US), M. Andreasen (US), R. Bandorf (DE), G. Exarhos (US), J.E. Greene (US), C. Lampert (US), C. Mitterer (AT), J. Patscheider (CH), K. Sarakinos (SE), J. Schneider (DE), R. Shimshock (US), R. Tietema (NL), B. Torp (DK), S. Walton (US)

Abstract Submission Deadline
Tuesday, March 1, 2016



Manager: Phyllis Greene phyllis.greene@mx.uillinois.edu
Secretary: Mabel Zabinski icmctf@icmctf.org



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Activity Report for the VASSCAA-7

Hsiung, Gao-Yu, hsiung@nsrrc.org.tw, President of the Taiwan Vacuum Society

The **7th Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA-7)** was held on the campus of National Tsing Hua University in Hsinchu city in Taiwan on October 5-9, 2014.

The VASSCAA series is organized to create a new forum in Asia and Australia to discuss the topics on vacuum, surface and related sciences, techniques and applications. This is thus an interdisciplinary conference for the presentation of new advances and research results in the fields of vacuum and surface science. The conference is officially endorsed by the International Union for Vacuum Science, Technique and Applications (IUVSTA), and has subsequently been organized initially once every three years since 1999 in Tokyo (Japan), 2002 in Hong Kong (China), 2005 in Singapore, and later every two years starting from 2008 in Matsue (Japan), 2010 in Beijing (China), 2012 in Islamabad (Pakistan), and 2014 in Hsinchu (Taiwan), the activity of which has been expanded to encompass numerous eminent speakers worldwide.

As the organizer of VASSCAA-7 for the first time, it was an honor for the Taiwan Vacuum Society (TVS) to host 349 registered participants from 12 countries, including Japan (41), Korea (15), China (7), USA (5), Pakistan (3), Malaysia (2), Singapore (2), Australia (1), Israel (1), Liechtenstein (1), India (1), and Taiwan (270). The program comprised 3-days of oral and poster sessions, with an exhibition in parallel, followed by a half-day excursion. The scientific presentations including 4 plenary talks, 35 invited talks, 63 oral presentations, and 135 poster presentations, covered ten major topics in Surface Science (SS), Surface Engineering (SE), Applied Surface Science (AS), Electronic Materials & Processing (EM), Nanostructures & Photocatalysis (NP), Thin Film (TF), Vacuum Science & Technology (VS), Plasma Science & Technique (PS), Biointerfaces (BI), and Renewable Energy Technologies (RE). To encourage students to present their works at VASSCAA-7, the TVS has provided five "Student Awards". Each winner has been awarded a testimonial and NT\$10,000 scholarship. The exhibition was held throughout the 3-day conference period, in which various vacuum systems, equipment, components, and domestic manufacturing products were presented. The 35-booth exhibition provided a platform for face-to-face technical discussions between the customers and the suppliers. More communications between the participants in academic as well as industrial fields were effectively expanded through the excursions and the Banquet.

The collected papers presented in the conference were submitted to two reputable journals as special issues in *Applied Surface Science* and *VACUUM* for publication, through their stringent reviewing process. The papers published in *Applied Surface Science* are mostly in the fields of SS, SE, AS, EM, NP, TF, and BI, while those in *VACUUM* are mainly from VS, PS, and RE fields. There have been 14 papers out of 18 submissions published as the special issue in ***VACUUM, Volume 121***, in November 2015; while 44 papers out of 58 submissions have been published as the special issue in ***Applied Surface Science, Volume 354 (Part A)***, in November 2015. The next VASSCAA-8 will be joined with ***IVC-20*** and held in August 21-26, 2016, in Busan, Korea.



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VASSCAA-7 participants



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78th IUVSTA workshop, October 5 to 9, 2015 in Braga – Portugal

José Filipe Vilela Vaz, fvaz@reitoria.uminho.pt

The 78th IUVSTA workshop (<http://www.multifunctioncoatings.com/78thiuvstaworkshop>) was held in the International Iberian Nanotechnology Laboratory (INL) premises, from October 5 to 9, 2015 in Braga – Portugal. The workshop was entitled “New horizons in oxynitride thin films: from synthesis to applications”, focusing on the design, synthesis, properties, including the defect structure and applications, of several different types of oxynitride protective and functional thin films and coatings. The workshop attracted 52 attendees from 14 countries.

Invited talks given by renowned speakers from leading international groups, as well as some contributed posters presented the latest trends and results within this area of knowledge. With the topics chosen and the presence of attendees from the different areas of oxynitride research and neighboring fields, the 78th IUVSTA Workshop revealed to be an important forum for inspiring international and interdisciplinary exchange between the participants.

In terms of the scientific event itself, the workshop was composed of 4 main parts:

- 1) *Nucleation and growth of thin films.*
- 2) *Preparation and characterization of Oxynitrides, divided into 3 sections:*
- 3) *Properties and applications of Oxynitrides, divided into 3 sections:*
- 4) *Special session on properties and applications of Oxynitrides (for junior researchers).*



Participants of the 78th IUVSTA workshop in front of the INL building



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Report on Pakistan Vacuum Society event

Dr. Javaid Ahsan Bhatti, javidbhatti@yahoo.com, President of the Pakistan Vacuum Society

Pakistan Vacuum Society organized a training event, entitled: IUVSTA WORKSHOP ON VACUUM, COATINGS AND NANOTECHNOLOGY from November 17-19, 2015 in the National Institute of Vacuum Science and Technology (NINVEST), Islamabad, Pakistan. A large number of participants from industries, universities, scientific and research organizations of the countries took part in this training session. This three day event mainly focused on (1) vacuum technology (vacuum pumps, gauges, valves, oils and seals) (2) Coatings (Coating fundamentals, CVD, Surgical coatings, Surface characterization techniques, etc.) and (3) Nano-technology (prospects of nano-technology, nano materials and processing, nano catalysis) Eminent researchers of the respective areas delivered lectures and conducted trainings. Practical demonstration and hand-on training were also took place. Students and industry technicians took keen interest in the practical sessions and hands on training. Senior members of PVS chaired the certificate awarding ceremony. President of PVS, Dr. Javaid Ahsan Bhatti, welcomed the participants coming from all areas of the country. He appreciated the efforts of the PVS technical committees on nanometer structures, surface science and thin films for jointly organizing this event in a successful way. He applauded the role of IUVSTA in promoting the cause of vacuum science and technology and its applied areas around the world. He thanked the management and scientific division of IUVSTA for its entire support to PVS in organizing such events in Pakistan. He thanked the organizing committee for making wonderful arrangements for this event. In the end, certificates were awarded to the participants.



**Group photo of the participants of the
IUVSTA WORKSHOP ON VACUUM, COATINGS AND NANOTECHNOLOGY**



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Prof. Dr. N. M. Butt is delivering a lecture on the topic of nano-materials



Training session - Participants of the workshop visiting vacuum laboratories



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Short Course Supported by IUVSTA and Offered by the Brazilian Vacuum Society

Pedro Nascente, nascente@ufscar.br, SBV's representative to IUVSTA (councilor)

The IUVSTA Short Course entitled “**Plasma-Assisted Surface Modification Treatments**” was offered in conjunction with the XXXVI Brazilian Congress of Vacuum Applications in Industry and Science, and occurred in Vitória, ES, Brazil, in September 5th and 6th, 2015. Four lecturers were responsible for the offering: Milton Kayama, State University of Sao Paulo (UNESP), Konstantin G. Kostov, State University of Sao Paulo (UNESP), Angelo L. Gobbi, Brazilian Center for Research in Energy and Materials (CNPEM), and Pedro A. P. Nascente, Federal University of Sao Carlos (UFSCar). Approximately 20 undergraduate and graduate students of engineering, physics, and chemistry attended the course. The IUVSTA grant of 2,000 Euros covered partially the expenses, and the students' fees were waived.





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AVS 62 Summary for IUVSTA Newsletter

Anthony J Muscat, Muscat@erc.arizona.edu, AVS 62 Program Chair

Once every three years, a Highlight Seminar is held where a representative of each IUVSTA division presents an overview of the scientific and technological advances in areas of interest of the division. This year the Highlight Seminar capped the weeklong AVS 62nd International Symposium & Exhibition (AVS 62), which was held from October 18-23, 2015 in San Jose, California. On Monday Dr. Robert Chau gave the AVS 62 plenary lecture on “Electronic Materials Research and Development for Future Computation and System-On-Chip Applications”. Dr. Chau summarized the technology pipeline that Intel and other companies use to build chips for computers, smartphones, and wearable computers.

In addition to the IUVSTA Highlight Seminar, the Industrial Physics Forum (IPF) of the American Institute of Physics (AIP) was integrated with AVS 62 this year. The forum spanned two days, consisting solely of invited talks on the theme, “Mesoscale Science and Technology of Materials and Metamaterials.” Mesoscale science examines what happens to material properties when the dimensions of objects are shrunk smaller and smaller. Tony Heinz from Stanford University gave a talk entitled “2D Materials: Graphene and Beyond” that described potential uses for two-dimensional materials using graphene, such as ultrathin lenses. In the Plasma Sciences Division Richard van de Sanden from the Dutch Institute for Fundamental Energy Research gave the Plasma Prize Talk on “*Plasma Processing of Materials: What makes Plasma Special and Future Outlook?*”. Also Steve George from the University of Colorado, Boulder spoke about the “*Prospects for Thermal Atomic Layer Etching: Materials and Selectivity.*” Miquel Salmeron from Lawrence Berkeley National Laboratory gave a talk on “*Microscopy, Spectroscopy, and Reactivity of Surfaces in Vacuum and under Ambient Reaction Pressures.*”. A panel discussion was held on Tuesday afternoon on “*Moore’s Law and the Future of the Semiconductor Industry,*” which marked the 50th Anniversary of Moore’s law. Bill Bottoms from 3MTS spoke about “*Maintaining the Pace of Progress as we Approach the end of Moore’s Law: Heterogeneous Integration, New Materials, New Processes, New Architectures.*”



The AVS 62 plenary lecture by Dr. Robert Chau



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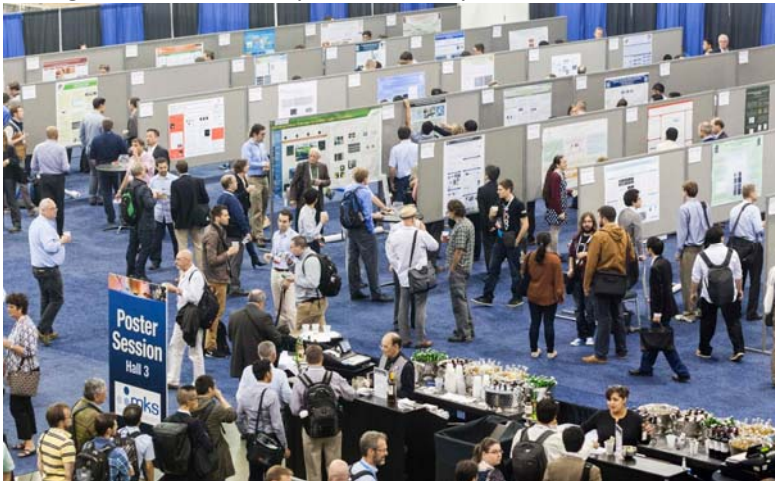
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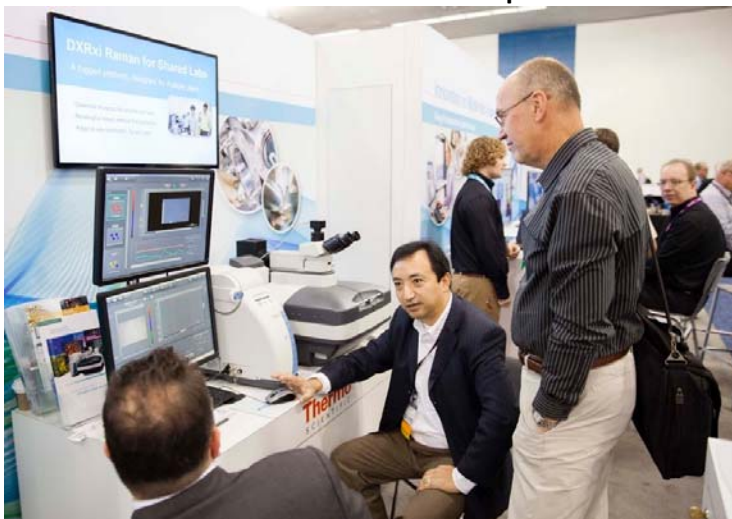
Union Internationale Pour La Science, La Technique et Les Applications du Vide
International Union for Vacuum Science, Technique and Applications
Internationale Union für Vakuum Forschung, Technik und Anwendung

Social events at AVS 62 included the welcome mixer held in the main hallway outside of the conference rooms, which gave attendees a chance to meet colleagues both familiar and new and the Awards Ceremony Reception held on Wednesday. This year Charlie Campbell from the University of Washington who received the Medard W. Welch Award and Alfred Grill from IBM who received the John A. Thorton Memorial Award were recognized for outstanding research over their careers. Petro Maksymovych from Oak Ridge National Laboratory received the Peter Mark Memorial Award for outstanding research by someone who is younger than 35 years old. Marc Landry from the National Renewable Energy Laboratory received the George T. Hanyo Award for outstanding performance in technical support of research.

Over 2600 people attended AVS 62 from 41 countries. There were 165 companies represented at the Equipment & Product Exhibition. Next year the AVS International Symposium will be held November 6-11, 2016 in Nashville, TN. Home of country music! The Call for Abstracts will launch in January 2016. Lisa Porter <lporter@andrew.cmu.edu> is the AVS 63 Program Chair and Amy Walker <amy.walker@utdallas.edu> is the AVS 63 Program Vice-Chair.



The poster session at AVS 62 is very lively



A major exhibit with 165 companies



The social program enabled interactions



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19th VEIT'2015, Sozopol, Bulgaria

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Endorsed by IUVSTA, the 19th International Summer School on Vacuum, Electron and Ion Technologies (VEIT'2015), was held in the Bulgarian Black Sea coast resort town of Sozopol in September 21-25, 2015. This is a traditional event organized biennially since 1979 by the Institute of Electronics, Bulgarian Academy of Sciences, with the purpose of providing a forum for researchers from all around the world. Co-organizer of the last three editions (from VEIT'2011) has been the Dutch Institute for Fundamental Energy Research, Eindhoven with Professor Richard van de Sanden and Dr. Miglena Dimitrova as Co-Chairs. The main scientific topics of the school are:

- Thin films deposition
- Surfaces and thin films processing and analysis
- Coatings for advanced applications
- Plasma-surface interaction and plasma diagnostics
- Modeling and computer simulation

VEIT serves to stimulate young researchers working in these fields to participate in the school sessions and to benefit from the possibilities to discuss their own results with internationally recognized scientists in the respective research areas. In the latest issue of the school, lecturers from 21 leading laboratories presented their most recent results. Ivan Petrov made a presentation on the organization and goals of IUVSTA. There were 101 participants from Bulgaria, Czech Republic, France, Germany, Greece, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Sweden, the Netherlands, Turkey, Ukraine, the United Kingdom, and USA.

Next, jubilee, 20th VEIT will be held in the second half of September 2017 in Bulgaria. We intend to make a bid for IUVSTA ECM in conjunction with the event.



VEIT'2015 group photo