



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



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Executive Council Meeting 123, Hotel Hyundai, Gyeongju, Korea

Christoph Eisenmenger-Sittner, christoph.eisenmenger@ifp.tuwien.ac.at

ECM 123 was held on Sunday, August 21st 2016 at the Hotel Hyundai, Gyeongju, Korea, right in advance of the 20th International Vacuum Congress (IVC 20) which started at the evening of the same day. In a brief address, the President of the Union, Mariano Anderle, expressed his gratefulness to all persons active in the Union during the last triennium for their continuing efforts which made it possible to maintain and improve all items and events related to IUVSTA. All major events of the triennium are approaching a successful conclusion, cumulating in IVC 20 and the 19th General Meeting (GM 19) which would be hosted during the IVC.



The IUVSTA Officers for triennium 2013-2016: A. Vincze, Recording Secretary David Sykes, Francois Reniers, zChristoph Eisenmenger-Sittner, Lars Montelius, Mariano Anderle, David Ruzic, Jean Jacques Pireaux

The Secretary General, Christoph Eisenmenger-Sittner expressed his thanks to the Portuguese Vacuum Society for organizing an excellent ECM 122 in which several important issues were discussed and settled, like the bids for IVC 22 and the selection of a candidate for the President Elect of the Union. Thanks were also expressed to the hosts of this meeting, the Korean Vacuum Society, for the flawless organization of ECM 123, IVC 20 and all meetings associated to the Vacuum Congress.



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The Secretary General reported on the status of negotiations with tentative new member societies. Bulgaria was granted provisional membership at ECM 120. The Philippines have submitted all relevant documents for the application as a member and a vote on provisional membership would be taken during ECM 123. It can be expected that full membership will be granted to Bulgaria and the Philippines at GM 19. We expect, in the near future, Turkey and Romania to complete the application process.

In conjunction with GM 19 the Secretary General thanked the representatives of the national Vacuum Societies for timely supplying the names of the Delegation Members to GM 19 as well as the National Representatives and Division Representatives for the new triennium. Finally, the Secretary General expressed his thanks to all members of the Union to which he had frequent contact and emphasized the fast and efficient way in which required information was given.



The participants in ECM123

Within the STD report one workshop, one school and one Short Course were recommended for funding by STD and IUVSTA. These proposals were approved for funding by ECM. The workshop No 81, entitled "Workshop on Response of Biological Materials to Plasma Treated Medium" will be held in Rogla, Slovenia, from March 12 – 16, 2017. The School No. 16 entitled "International Summer School on Physics at Nanoscale", will be held in Devět Skal, Czech Republic in June, 5 – 10, 2017. The Short Course entitled "Short course for new ideas on Secondary Ion Mass Spectrometry and related analytical techniques", will be held in conjunction with the 21st International Conference on Secondary Ion Mass Spectrometry, SIMS21 held in Krakow, Poland, in September 9, 2017.

Moving on in the agenda, first the Treasurer, Francois Reniers, chair of the Finance committee reported on the framework budget planned for the next triennium which contains a special focus on providing the financial means to improve the interaction of the Union with the outside world.



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The decision on the venue of IVC 22 was taken by a secret vote during the report of the Congress Planning Committee. Three bids were put to a vote by (in alphabetical order) Japan, Mexico and the U. K. The bids had been thoroughly discussed during the meeting of CPC the day before and the result of the vote by ECM was that IVC 22 will take place in Sapporo, Japan, from Sunday, September 11 – Friday, September 16, 2022. After the vote the president thanked all bidders for their efforts and emphasized the high quality of all bids. All other committees briefly reported on their meetings and announced continuous progress of all items related to their work.



Dinner at a traditional Korean restaurant, Choi's Family Noble Dining



IUVSTA President Mariano Anderle thanks President of the KVS Prof. Hee Jae Kang for the exceptional hospitality

After the committee reports the Agenda was continued with a vote on the provisional membership of the "Vacuum Society of the Philippines" to the Union. The society is willing to contribute one annual share, and provisional membership was unanimously granted by ECM. To finish the voting items, the Agenda was continued with the item "Future Executive Council Meetings". Two bids for ECM 126, due in fall 2017, were received, one by the tentative member society of Bulgaria and one by the U. K. The result of a secret vote by ECM was a tied vote for both candidates. According to the statutes and bylaws of the Union, in the case of a tied vote the venue of the event is decided by president's action. After a brief discussion of the president with the vice presidents, the President, Mariano Anderle, decided that Bulgaria will host ECM 126 from September 29th to October 1st, 2017.

After the voting items the Secretary General briefly informed the members of ECM about the Agenda of GM 19. After that the history and the main fields of the Korean Vacuum Society (KVS) were presented by Professor Geun Young Yeom.

After the successful completion of the Sunday morning meetings the participants were invited to have lunch and to continue discussions. Finally the delegates were transported to Busan, the Venue of IVC 20 after this very productive and successful last meeting of the Triennium.



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General Meeting 19 for IUVSTA, BEXCO Conference Centre in Busan, Korea

Christoph Eisenmenger-Sittner, christoph.eisenmenger@ifp.tuwien.ac.at

The 19th Ordinary General Meeting (GM 19) and the Extraordinary General Meeting of 2016 took place on Wednesday, August 24th at the BEXCO Conference Centre in Busan, Korea. After a brief welcome message and a short introduction of the host of the meeting, the Korean Vacuum Society (KVS), by the president of KVS, Prof. Hee Jae Kang, the President, Mariano Anderle, asked the present delegates to briefly introduce themselves. The Secretary General, C. Eisenmenger-Sittner, confirmed that all member societies were represented except of the Russian Vacuum Society, so both meetings, GM 19 and the Extraordinary General Meeting of 2016 were quorate.

After his brief opening statement the President remembered John Robins, Jean-Paul Langeron and Serge Choumoff who passed away in the last Triennium. All three contributed significantly to IUVSTA and to their respective national After this minute of silence the Secretary General announced the good news that during the last triennium two new member societies, the Union of Physicists in Bulgaria and the Vacuum Society of the Philippines were granted provisional membership and that the General Meeting could take a vote on the full membership of these societies. Both societies submitted all relevant documents and are willing to contribute one annual share to the Union if full membership was granted. A secret vote was taken and both societies were unanimously granted full membership.

Moving on in the Agenda, the minutes of GM 18 were approved as a true record and the Treasurer, Francois Reniers asked the General meeting for the approval of the of the Accounts for the Financial Year 2015 and of the Budget for Financial Year 2016. Both items were approved unanimously.

After this the Presidency was transferred from Mariano Anderle to Lars Montelius. Mariano Anderle will act as Past President. As the new President Elect, Anouk Galtayries was proposed by the former Executive Council to the General Meeting. The new officers proposed by Lars Montelius are: Scientific Director David Ruzic, Scientific Secretary Andrej Vince, Secretary General Christoph Eisenmenger-Sittner and Treasurer François Reniers. These persons were ratified in their respective positions unanimously by the General Meeting.

As the new President, Lars Montelius signed a new Memorandum of Understanding with Elsevier Publishers. In the Triennium 2016 – 2019 the ICTF in New Delhi (India), ECOSS in Szeged (Hungary), EVC in Geneva (Switzerland) and VASSCAA in Cronula (Sidney, Australia) will be supported by Elsevier with, 2,000 € each, and the IVC in Malmö (Sweden) jointly with ECOSS will be supported with 4,000 €. This support is allocated for travelling grants for students from lesser developed countries.

With the new Officers ratified, the meeting proceeded with the presentation of the framework budget for the Triennium 2016 – 2019 by the Treasurer, Francois Reniers. The Treasurer emphasized that this proposed budget significantly deviates from the previous ones as more financial means are allocated to support scientific and educational activities like workshops or schools and a significant contribution is devoted for a one shot expense like improving and re-designing the website of the Union and to develop a communication strategy. Despite the fact that within this proposal the general fund of the Union will be tapped it was unanimously approved by the delegates, after the treasurer clarified several items.



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Passing of the gavel



Many thanks to Prof. Jean-Jacques Pireaux for 9 years of service as an IUVSTA officer



The Presidents for triennium 2017-2019



Prof. Hee Jae Kang addresses GM19



Many thanks to David Sykes for his service as Recording Secretary for 12 years, ASSD Chair 1995-98 and ASSD Vice-Chair 1998-2001



Thanks to Nikola Radic for outstanding service to IUVSTA



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Standing ovation for the leadership of Mariano Anderle as IUVSTA President 2013-2016

After the ratification of the framework budget also the new members of the Executive Council, i. e. the new Councillors and Alternates were unanimously ratified by the General Meeting. Finally, to conclude GM 19 all persons who finished their activities in the Union received a Certificate of Recognition by the Past President, Mariano Anderle. Along with the certificate he communicated special thanks to the leaving Recording Secretary, David Sykes, who kept the records of the Union in impeccable order during several Triennia.

As there was no other competent business, GM19 was adjourned by the President, Lars Montelius, and the Extraordinary General Meeting of 2016 was seamlessly started. As no delegation left the room, also this Extraordinary General Meeting was safely quorate and could instantly be constituted. The meeting was devoted to the Report of the Past President to the General Meeting and to the Reports of the previous Executive Council (Secretary General, Committees, Scientific and Technical Director, Divisions, as well as the Treasurer and the Finance Committee). These reports are available in the Book of Reports at http://iuvsta-us.org/iuvsta2/assets/docs/GM19/GM19_Book_of_Reports_2016_08_29_V1_3.pdf. Finally, the incoming President, Lars Montelius ended the meeting by delivering his inaugural statement, available at <http://iuvsta-us.org/iuvsta2/index.php?id=2038>, in which he stressed the new challenges and opportunities which the Union will have to face in the coming three years and beyond. His opening statement was well received by the delegates and the meeting was adjourned thereafter.



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President's Inaugural Statement

Lars Montelius, Busan, Korea, August 2016



The goal during the next three years is to further develop IUVSTA and its identity as an inspiring, competent, engaging, well known and influential international organization that proudly serve society. Our new activities, being discussed during the past triennium related to setting up a communication plan and develop a completely new and modern web-interface, are instrumental for achieving the goal.

Further, we shall continue the good work during the last triennium when it comes to enlarging IUVSTA by attracting new member states and helping new member states to form national organizations. In addition, we shall continue the discussions about developing IUVSTA as an organization that clearly has an important role for the development of a resilient society. We shall bring IUVSTA into the international dialogue by active engagement in important science policy actions and discussions.

The paradigm in science is changing. In the past it was all about individual achievements - whether individual mean individual nation or individual scientists. A typical example of the past paradigm was putting a man on the moon. Nowadays, we are facing complex grand challenges such as Ageing Population, Obesity, Clean-Water for everybody, Safe Society etc that need to be addressed in concert. Hence, the perception of science – from a community perspective – has become more and more important. In a further reduction and in one sentence, it is all about engagement of the citizens – and ultimately to knowledge empowerment of the consumers/citizens. This new paradigm implies that we have to be able to tell and explain our scientific and engineering world to the common people in the streets. In short, this is our scientific social responsibility.

We need to articulate clearly our role in problems that the younger generation is interested in, i.e. to convey the importance of Vacuum Science in relation to social innovation and societal development and thereby increase the interest of young people for becoming members in national societies and for work within IUVSTA, i.e. making students and post-docs more interested in the subject of Vacuum Science. Here our new initiatives for awards and prizes for younger scientists will be instrumental. Presently, internet-of-everything, industry 4.0 and augmented reality/virtual reality are hot subjects into which IUVSTA have to discuss its role.

I believe from the bottom of my heart that IUVSTA has a very important role to play in the research, technology and innovation processes fostering a sustainable societal development. I will work together with all members of IUVSTA and specifically together with the officers, to develop IUVSTA to become an influential entity that students and professionals in the vacuum community worldwide will be proud of being a part of.



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Retiring President's Report Mariano Anderle: triennium 2013-2016



IUVSTA is a Union of 31 Societies representing around 15,000 professionals working in vacuum and related topics. It is an "itinerant" organization. In fact every ECM is organized in a different place. Let me start, therefore, to thank the Societies which, in this triennium, have been in charge of the ECM's organization: French Vacuum Society for ECM 117 held in Paris, Italian Association of Science and Technology for ECM 118 held in Trento, Croatian Vacuum Society for ECM 119 held in Dubrovnik, Austrian Vacuum Society for ECM 120 held in Graz, AVS - The Science and Technology Society for ECM 121 held in Morgan Hill, Portuguese Vacuum Society for ECM 122 held in Braga, and Korean Vacuum Society for ECM 123 held in Gyeongju.

My three years of activity as IUVSTA President has really been a privilege! Chairing this triennium ECMs, I always felt a deep emotion meeting with people so strongly committed to collaboration and sharing of their knowledge and experience. And this is wonderful!

In this General Meeting a detailed descriptions of the triennium activities is reported by Officers and Committee Chairs. I will therefore highlight some key points that the Union has achieved together with some issues not properly addressed. Among the latter I would like to underline the necessity to renew the IUVSTA web site and to work effectively in the direction of involving new scientific topics and communities.



Prof. Jean Marie Dubois, recipient of the IUVSTA Science Prize with Prof. Spomenka Kobe (left) and Dr. Anouk Galtayries (middle)



Prof. Taeghwan Hyeon recipient of the IUVSTA Technology Prize with Prof. Francois Reniers (left) and Prof. Heon Kang (right)

Having in mind what I promised in my inaugural statement three years ago, here there are some highlights we have achieved that I consider important for the Union continued progress:

- At the beginning of the triennium we formally established the ninth division of the Scientific and Technical Directorate, the Bio Interfaces Division. During the triennium, this division has been very active not only in the preparation of the relative scientific program for IVC-20 but also in proposing and organizing a workshop (Frejus,



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- October 2014) on surface biocompatibility issues which reflects how IUVSTA continues to evolve and to welcome new areas of scientific exploitation.
- Scrolling through the list of the workshops and schools approved in this triennium one has the distinct impression about the high scientific quality of these events together with the variety of the topics proposed indicating the effective contribution by all the scientific divisions.
- We have continued to run the Highlights Seminars and have, for the first time, developed the content into a very success scientific paper by incorporating the presentations into a full article. The final manuscript was published as an open-access topical review ("Recent advances in vacuum science and applications", J.Phys.D Appl.Phys. 47, 153001) which has downloaded more than 14900 times since it was published. I know we are now working on a second review paper which will underline new areas of development and the major results from groups worldwide based on talks presented at the last, so well organized, Highlights Seminars that was a co-chaired session of the AVS International Symposium 2015, San Josè, California.
- This triennium sees the growth in the number of Union members. Thanks to the efforts and the great contribution of the Emerging Societies Committee members, we note that the Bulgarian and Philippine Societies have been granted provisionally membership and I look forward to them being granted full membership at this General Meeting. We are also looking forward to having positive feedback from the Turkish Society, a potential new member, still working on official approval by its Government.
- Finally I should highlight that, thanks to the work of the ASC chair in organizing and coordinating the evaluation process, we met our objective of awarding the two IUVSTA Prizes. I congratulate the two winners, Prof. Jean Marie Dubois for the Science Prize and Prof. Taeghwan Hyeon for the Technology Prize.



2016-2019 Presidents with Milena Damyanova, Bulgarian councillor, who presented a successful bid to host IUVSTA ECM126 in Sofia, Bulgaria in the fall of 2017

Since the credit of the success belongs to all of you, I wish to thank all the Officers, the STD members, Committees and Divisions chairmen and chairwoman and all the ECM members for having devoted so much of your time to the IUSTA issues. Then let me say few final words for three persons:

First of all I would like to express my appreciation to our Past President, Jean Jacques Pireaux, who will retire from office today. I am really happy to recognize Jean Jacques' role in steering, so professionally, the Union over the previous nine years. Secondly, I would like to deeply thank our Secretary General, Christopher Eisenmenger Sittner, who has by far the largest workload of any of the officers, always on top of everything and so effectively managing the administration of the Union. Finally let me express my strong gratitude to David Sykes for his untiring activity in IUVSTA. David has not only been for twelve years the perfect recording secretary but also the reference point for all the matter related to IUVSTA procedure, manual, statute and history issues.

For what we have done together, it was a great pleasure to work with all of you!

For what it is still remaining to do, I am sure I leave the Presidency in good hands. Best wishes Lars and happy to serve as immediate Past President!



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Executive Council Meeting 124, BEXCO Busan, Korea, August 25th, 2016

Christoph Eisenmenger-Sittner, christoph.eisenmenger@ifp.tuwien.ac.at

ECM 124 was held on Thursday afternoon, August 25th, 2016 at the BEXCO Convention Centre in Busan Korea. It was the first constituting meeting of the IUVSTA executive council of the Triennium 2016 – 2019.

In his opening statement the new president, Lars Montelius, emphasized the new challenges and opportunities which the Union will face in the coming years. Significant financial means will be dedicated to improve the visibility of the Union to the outside world, including a modernization and improvement of the Union's website to make it more attractive and informative for both, the general public and the scientific community.

In their forward view on the coming triennium, the treasurer Francois Reniers and the Scientific Director, David Ruzic, gave a brief overview on the financial and scientific framework of the years to come.

After the presentation of the financial framework the Scientific Director invited Sander Otte, the Alternate Councillor of the Netherlands, to give a brief summary of his ground-breaking scientific work "Atomic Scale Engineering" in which, for the first time, a method of stable data storage on the atomic level is described. This new item of "Breaking Science News" in the Agenda of this very first ECM of the Triennium was brought into being by Lars Montelius, and it can be anticipated that it will be incorporated also in ECM's to come.

After this Breaking News report, which triggered a lively scientific discussion, the meeting went on with the constitution of the new standing committees of the Union. The participants were asked to sign up for the 8 standing committees. It was communicated that the committees are open for joining also for persons not present at this meeting. The new members of the ECM were asked to take this message home. As the committees are the entities of the Union in which significant input for future developments is generated, once again this call for joining the committees shall be repeated.

After the constitution of the committees, the Secretary General Christoph Eisenmenger-Sittner announced that the next ECM125 will be held in Rogla Slovenia 10-12 March 2017. Miran Mozetic gave a brief presentation with details. He also introduced the IUVSTA workshop on 'Response of biological material to plasma treated medium' that will be held 12-16 March 2017 just after ECM125 in the same location. The Secretary General also announced that ECM126 will be held 29 September - 1 October 2017 in Sofia Bulgaria.

Before closing the meeting, the president asked Pär Omling, Councillor of Sweden and Conference Chair of IVC 21 to give an overview of the status of organization of IVC-21. Pär Omling gave a brief summary and introduced the roles of relevant organizing people. He also highlighted the close connection with IUVSTA and asked for close collaboration and input from IUVSTA.

Finally, after the closing remarks of the President, the meeting was adjourned and the Triennium 2016 – 2019 was officially started, with all bodies of the Union, the Executive Council, the Scientific and Technical Directorate, the Scientific Divisions and the Standing Committees being operative. The next Executive Council Meeting, ECM 125, will take place in Rogla, Slovenia, March 10th – 12th, 2016.



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IVC-20/ICSS-16

*In conjunction with ICN+T 2016 / VASSCA-8 / 25th KVS / ISPB 2016/ ITC 2016
Busan, Korea, August 21 to 26, 2016*

Hee Jae Kang hjkang@cbu.ac.kr

The 20th International Vacuum Congress and partner conferences were held in BEXCO, Busan, Korea from August 21 to 26, 2016. In the tradition of the IVC series, IVC-20 integrated with the 16th International Conference on Solid Surfaces (ICSS-16), International Conference on Nanoscience and Technology (ICN+T 2016), and 8th Vacuum and Surface Science Conferences of Asia and Australia (VASSCAA-8). In addition, the Korean Vacuum Society (KVS) invited 3 other conferences: the 6th International Symposium of Plasma Biosciences 2016 (ISPB 2016), 25th Anniversary Symposium of the KVS, and Industrial Topical Conference (ITC 2016). By integrating these related meetings together, IVC-20 was not only richly varied but also emphasized the balance between academia and industry.

The congress program consisted of oral and poster presentations, short courses and a public lecture, as well as an exhibition.

Figure 1. Overview by Numbers





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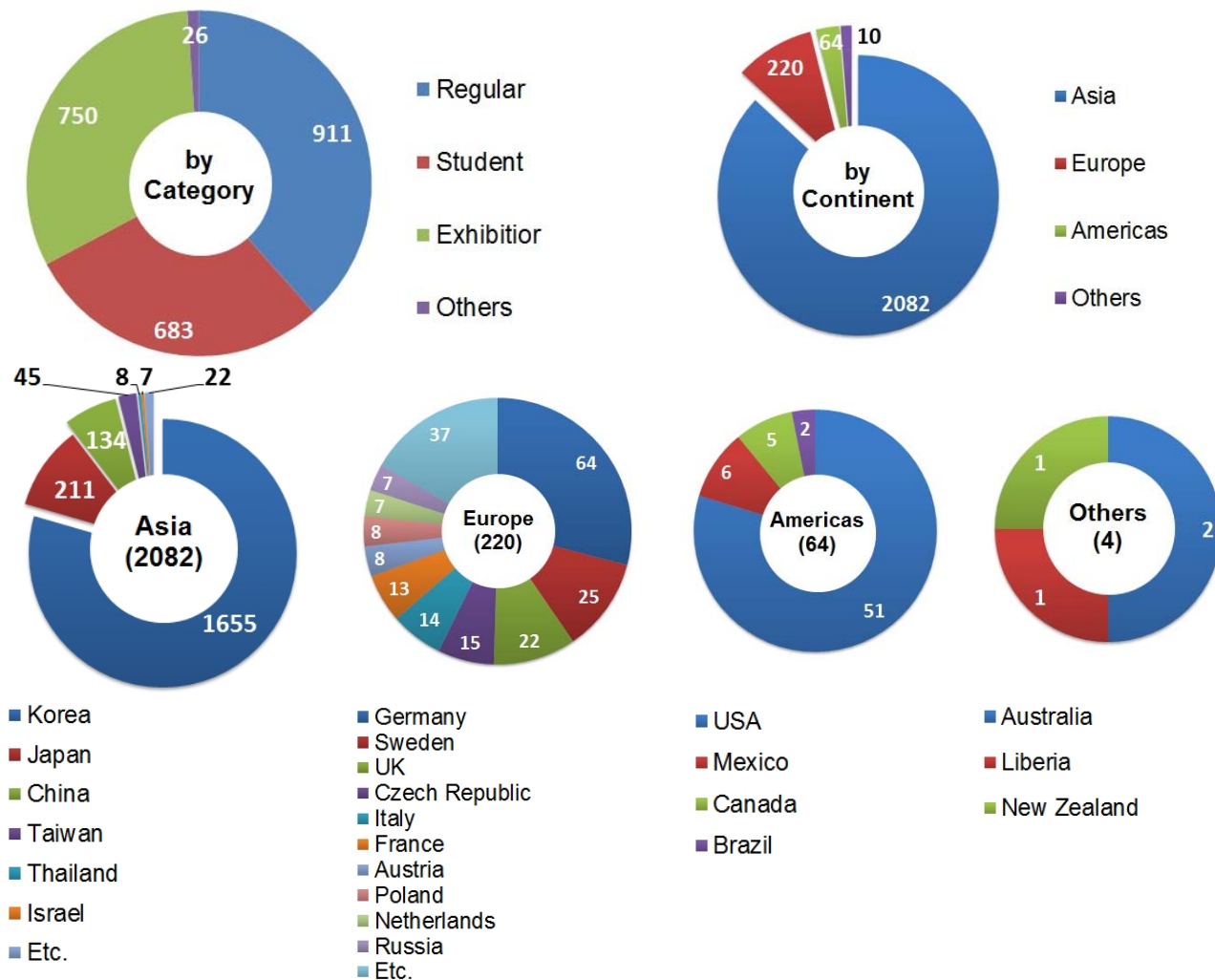
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Participant Demographics

Over 2,370 participants (conference 1,620 plus exhibition 750) from 46 countries gathered. The majority of participants were from Eastern Asia.

Figure 2. Registration Statistics



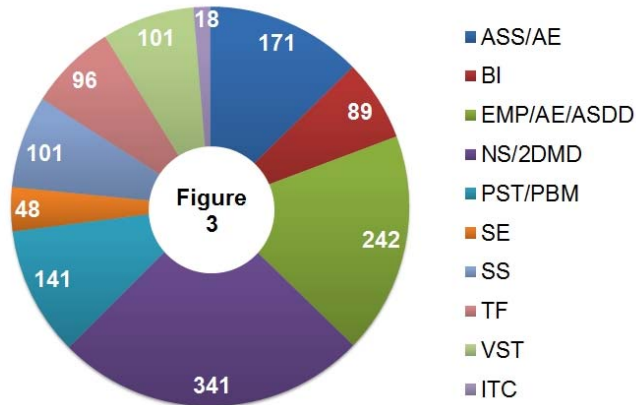
Scientific Program

A total of 1,356 presentations were presented in addition to 6 short courses and 1 public lecture. 8 plenary lectures were invited in the order of presentation: Erwin Neher (Nobel laureate in Physiology or Medicine), Joanna Aizenberg, Kinam Kim, Taeghwan Hyeon (2016 IUVSTA Prize Winner for Technology), Jean-Marie Dubois (2016 IUVSTA Prize Winner for Science), Qi-Kun Xue, Chang Ho Oh (ITC 2016 Plenary) and Hideo Ohno.



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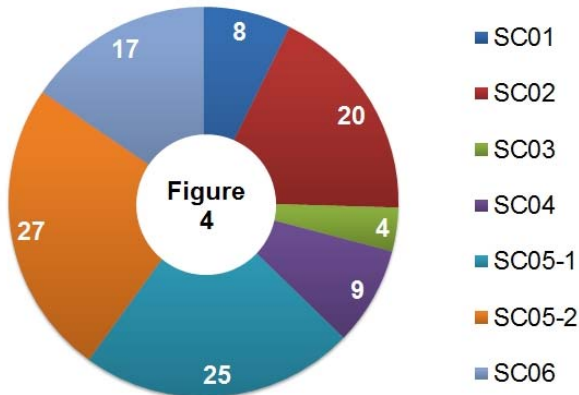
Figure 3. Presentation Statistics



A total of 1,348 presentations were held in divisional sessions (602 oral in 122 division sessions and 746 posters in 3 daily sessions). 13 topics covered the 9 IUVSTA scientific divisions in addition to the 4 specific themes selected by KVS: 2D Materials and Devices (2DMD), Alternative Energy (AE), Advanced Semiconductor and Display Devices (ASDD), and Plasma Bioscience and Medicine (PBM). Those 4 topics were included in related IUVSTA division sessions. As for the partner conferences, the ICN+T program was merged with the NS division and the same applied for the ISPB to the PST division. 9 VASSCAA-8 invited speakers

were included among the divisions and ITC had an independent program during the congress.

Figure 4. Course Statistics



Short Courses

Leading experts provided 6 short courses from Sunday to Tuesday. Over 100 participants signed up for the following courses in total.

- SC01: Fundamental aspects of reactive magnetron sputtering - Diederik Depla
- SC02: Scanning Probe Microscopy - Franz J. Giesibl
- SC03: Design of Vacuum Pumping System for Semiconductor/FPD Processes - Janghun Joo
- SC04: Vacuum Gas Dynamics: Theory, Experiments and Applications - Felix Sharipov, Irina Graur & Oleg Malyshev
- SC05: X-Ray Photoelectron Spectroscopy (XPS/ESCA) - John Grant
- SC06: Thin Film Nucleation, Growth, and Microstructural Evolution - Joe Greene

Public Campaign

To raise the public's awareness of the vacuum science and technology field, KVS organized a public lecture with a Vacuum Experience Center in celebration of its 25th anniversary. On Monday afternoon, congress plenary speaker Erwin Neher gave a public lecture. Over 300 people, mostly local high school students, attended the event led by the Nobel laureate and learned about basic science as well as the qualities that make a good scientist. The curious teenagers showed great enthusiasm and asked endless questions, praising and elevating Dr. Neher to the level of a rock star. Hopefully some of them will become vacuum scientists!

The KVS 25th Anniversary Vacuum Experience Center operated in the exhibition hall, consisting of 15 exhibits which



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taught about common vacuum technologies found in daily life. Not just participants, but the general public that visited the center with their families also enjoyed the various vacuum experiences.

Public Lecture



The Vacuum Experience Center

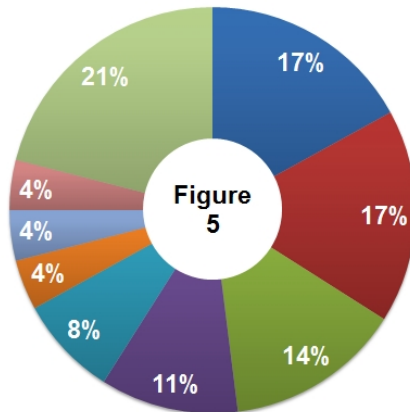


Exhibition

From Tuesday to Thursday, the technical exhibition was held which consisted of 94 companies and 153 exhibition booths that 2,000 people visited during the period. It provided an excellent platform for domestic and international companies to market their products and services. After opening the exhibition, ITC 2016 was also held for two days to foster industrial collaboration.

Figure 5. Exhibit Items

- Components
- Vacuum Pumps
- Measuring Instruments
- Vacuum Valves
- Vacuum Gauges
- Vacuum Bellows
- Materials
- Flow Materials
- Others



Social Program

Following the welcome reception on Sunday evening, the official opening ceremony was held on Monday morning. It announced the grand opening of the 20th congress along with an award ceremony presenting 2 IUVSTA Prize winners and 20 student scholarship winners. The congress banquet was held on Wednesday evening. Participants enjoyed traditional Korean performances and as well as a pleasant meal among friends and colleagues. On Friday afternoon, the congress reviewed the highlights of the week and celebrated in anticipation of next congress.



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Banquet



Exhibition Ribbon Cutting Ceremony



Closing

The congress aimed to raise not only the level of academic and industrial knowledge, but also the public's awareness of the vacuum science and technology field. Thanks to the devotion of the IUVSTA officers, organizing and program committee members and participants from all over the world, we believe this goal has been achieved.

We hope the event will add new momentum to strengthen the relationships among our national societies as well as individuals in this field, and wish for it to continue into the future. On behalf of the organizing committee, we thank everyone once again who supported and made it to the congress and hope to see you again at IVC-21 in Malmö, Sweden.



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2nd Pacific Rim Symposium on Surfaces, Coatings and Interfaces – PacSurf 2016

<http://www2.av.s.org/conferences/PACSURF/2016/pdfs/call.pdf>



Pacific Rim Symposium on Surfaces, Coatings & Interfaces

General Information

Abstract Submission

Manuscript Submission

Technical Program

Presentation Guidelines

Housing & Travel

Registration

Sponsors

General Information

Overview & Focus

The Pacific Rim Symposium on Surfaces, Coatings and Interfaces (PacSurf 2016) will be held on the Big Island of Hawaii from December 11 - 15, 2016. This conference is being organized by AVS (United States) with a Steering Committee composed of representatives from Australia, Canada, Chile, China, Japan, Korea, Mexico, New Zealand, Singapore, and Taiwan. Symposium attendees will interact during morning and evening sessions that will include plenary, invited, and contributed presentations.

The main topics for PacSurf 2016 will be focused on the latest advances in **Biomaterial Surfaces & Interfaces, Energy Harvesting & Storage, Nanomaterials, and Thin Films**. We will have morning and evening technical sessions with the afternoons free for other activities and discussions.

The conference will be held in the Hapuna Beach Prince Hotel, which is ideally located on the Kohala Coast of the Big Island of Hawaii. We are confident you will benefit by attending PacSurf 2016 and networking with the other attendees.

Steering Committee

General Chair:
Dave Castner (Univ. of Washington)

Program Chair:
Charles R. "Chip" Eddy, Jr., (U.S. Naval Research Lab)

Australia: Sally McArthur
Canada: Adam Hitchcock
P.R. China: Hongjun Gao
Japan: Katsuyuki Fukutani
Korea: Tae Geol Lee
Mexico: Alberto Herrera Gomez
New Zealand: Duncan McGillivray
Singapore: Sam Zhang
Taiwan: Jinn Chu
United States: Joe Greene

Technical Sponsor



Information

AVS
Della Miller
110 Yellowstone Dr.,
Suite 120
Chico, CA 95973

Phone: 530-896-0477

Fax: 530-896-0487

E-mail: della@av.s.org





IUVSTA NEWS BULLETIN

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October, 2016

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

5th International Conference on Reactive Sputter Deposition Ghent, Belgium Dec. 1-2, 2016

www.rsd2016.be

Fifteenth international conference
on
Reactive Sputter Deposition



December 1st and 2nd, 2016
Ghent Belgium

Sponsors



Institutional sponsors



Scientific committee

Prof. D. Depla (UGent)
Prof. Em. R. De Gryse (UGent)
Prof. R. Snyders (UMons)
Dr. F. Boydens (UGent)
Dr. K. Strijckmans (UGent)
Dr. S. Konstantinidis (UMons)

Organizing committee

Prof. D. Depla (UGent)
Prof. Em. R. De Gryse (UGent)
Dr. W.P. Leroy (UGent)

Organised by
Research group DRAFT
Ghent University



Dedicated Research on Advanced Films and Targets



www.rsd2016.be



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44th International Conference on Metallurgical Coatings and Thin Films San Diego, USA, April 24-28, 2017

<http://www2.avs.org/conferences/ICMCTF/2017/>



The **International Conference on Metallurgical Coatings and Thin Films (ICMCTF)** is recognized as the **premier international conference on thin-film deposition, characterization, and advanced surface engineering**. It provides a forum and networking venue for scientists, engineers, and technologists from academia, government laboratories, and industry all over the world to present their findings, exchange ideas, share insights, make new friends, and renew old acquaintances. The Conference typically draws more than 700 attendees, covering 40 oral technical sessions and a well-attended Thursday evening poster session.

ICMCTF 2017 will have eight technical symposia A through H and three topical symposia, addressing experimental, theoretical, and manufacturing issues associated with the development of new coating materials and processes, novel methods of analysis and characterization, and approaches to scale-up for commercial applications.

In addition to the technical program, the Conference features a two-day industrial exhibition, Tuesday and Wednesday, April 25 and 26, showcasing the latest in equipment, materials and services used for the deposition, monitoring, and characterization of coatings and thin films. The Exhibition is open to the public. An educational program of Short Courses and Focused Topic Sessions (FTS) will be offered throughout the week.

The **Plenary Speaker, Chris Schuh (Massachusetts Institute of Technology, Cambridge, MA, USA)** will be speaking on *"Grain Boundary Alloying: The Key Ingredient for Commercializable Nanocrystalline Coatings"* and the **Exhibition Keynote Speaker, Chris Engdahl, Vice-President Technology Crystallume, Santa Clara, CA, USA** will be speaking on *"Success and Failure in the Commercialization of CVD Diamond."*

The conference includes a well-attended poster session on Thursday, April 27, 2017 (5:00 pm - 7:00 pm). Authors show a detailed summary of their work. During the two hour session, authors will be standing with their posted materials to lead discussions and answer questions.





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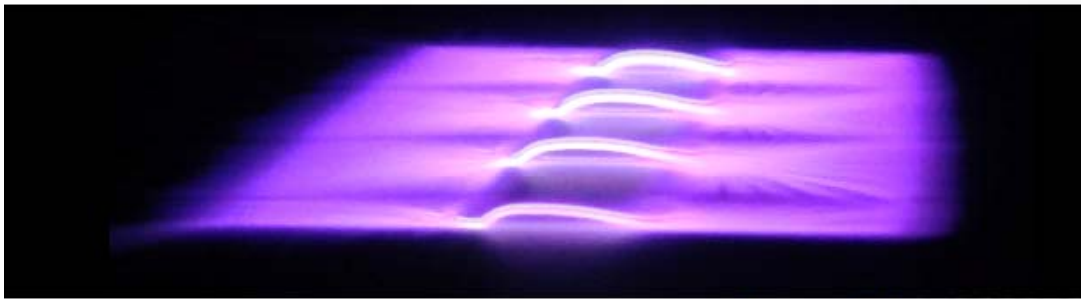
October, 2016

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<http://www.cip-miatec.com/>

CIP2017
21th
INTERNATIONAL COLLOQUIUM
ON PLASMA PROCESSES

MIMATEC
2017
5th
MAGNETRON ION PROCESSING & ARC
TECHNOLOGIES EUROPEAN CONFERENCE



www.cip-miatec.com

FIRST ANNOUNCEMENT

26 - 30 June 2017

Nice, France



In connection with SVTM 2017,
International Exhibition on
Vacuum and Surface Engineering



Organised by French
Vacuum Society (SFV)

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ECASIA'17 **24-29 Sept. 2017**
MONTPELLIER, FRANCE
EUROPEAN CONFERENCE ON APPLICATIONS OF SURFACE AND INTERFACE ANALYSIS

4.5 DAYS CONFERENCE / 2.5 DAYS EXHIBITION
FOCUS ON "SURFACE AND INTERFACE ANALYSIS: THE LINK BETWEEN SCIENCE AND TECHNOLOGY"

SCIENTIFIC TOPICS

- Adhesion
- Metals
- Oxides
- Polymers
- Ceramics
- Glass
- Bio-interfaces & biomaterials
- Corrosion
- Tribology
- Environment
- Solid-liquid interface
- Micro- and optoelectronics
- Catalytic materials
- Nanomaterials
- In situ spectroscopy
- Thin films and coatings
- Surface functionalization
- Cultural heritage
- Geology and geochemistry
- Life science
- Nano-medicine
- Energy production and storage

SPECIAL SESSIONS / WORKSHOPS

- Data quantification
- Data processing
- Depth profiling
- Imaging
- Metrology and standardization
- Software development

IMPORTANT DATES IN 2017

February	Call for papers
April	Closing of submissions
May	Notification to authors

SFV CONFERENCE OFFICE
French Vacuum Society (SFV)
contact@ecasia2017.com

Cherche Paris
CNRS

www.ecasia2017.com

www.ecasia2017.com



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www.vide.org/itfpc17

ITFPC₁₇

*Innovations in Thin Film Processing and
Characterization*



www.vide.org/itfpc17/

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Taiwan Association for Coating and Thin Film Technology - TACT 2017 National Dong Hwa University in Hualien, Taiwan, October 15 to 18, 2017

<http://tact2017.conf.tw/site/page.aspx?pid=901&sid=1130&lang=en>



TACT is a professional association in the thin film related field in Taiwan. It was established in 1998 and is the biggest organization of its kind. The current President, Prof. Ting, is the Associate Dean of School of Engineering and Distinguished Professor in the Dept. of Materials Science and Engineering, National Cheng Kung University (NCKU). The goals of TACT are set to promote and develop the coating technology, through organizing short courses and workshops, and also to provide technical support services for the industry in Taiwan. Currently, TACT has approximately 500 members including individuals and groups; the membership is diverse, ranging from academia to industry.

TACT has since created significant impacts locally and internationally through holding various activities and conferences. TACT regularly holds domestic and international conferences (500-700 attendees) alternatively. We also actively participate related international conferences and regularly interact with peer international organizations to pursue the possibilities of international collaborations and signing MOU. To further enhance the functionality, visibility, and the international impact of the organization in the world, recruiting international members is always ongoing. We have specifically recruited 10 young and enthusiastic professors acting as regional secretaries this year, including USA, United Kingdom, Germany, Sweden, Mexico, Korea, Japan, Philippines, Vietnam, and Indonesia.

TACT always welcomes those who are interested. Please contact Prof. Chang (General Secretary, kschang@mail.ncku.edu.tw) for any questions.

Conference Topics

- A. Coatings for Sustainable Energy
- B. Nanostructured and Nanocomposite Coatings
- C. Optical, Semiconductor, and Optoelectronic films
- D. Tribological and Protective Coatings
- E. Organic and Biological Coatings
- F. Metallic and Magnetic Coatings
- G. Topical Symposia: Theory, Simulation, and Modeling ; Quantitative Surface Analysis



IUVSTA endorsement requested



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Taiwan Association for Coating and Thin Film Technology - TACT 2017
National Dong Hwa University in Hualien, Taiwan, October 15 to 18, 2017
(continued)



Plenary Speakers

Lars Hultman, Linköping University, Sweden
John Rogers, Northwestern University, USA

Keynote Speakers

1. Andre Anders, Lawrence Berkeley National Laboratory, USA
2. Steve Bull, Newcastle University, UK
3. Li-Chyong Chen, National Taiwan University, Taiwan
4. Yip-Wah Chung, Northwestern University, USA
5. Ali Erdemir, National Argonne Laboratory, USA
6. JH HE, KAUST, Saudi Arabia
7. Sam Zhang, Nanyang Technological University, Singapore
8. Paul Braun, University of Illinois Urbana-Champaign, USA

Important Dates

- 2016 Sep. 09 Abstract Submission Opens
- 2017 May 31 Abstract Submission Deadline
- 2017 Jun. 30 Abstract Acceptance
- 2017 Apr. 30 Registration Open
- 2017 Aug. 31 Early-Bird Registration Deadline
- 2017 Sep. 31 Full-Manuscript Submission Deadline



<http://tact2017.conf.tw/site/page.aspx?pid=901&sid=1130&lang=en>