

STD Minutes & Reports

ECM-99, April 30th-May 1st, 2005

San Diego, USA

Item 1

Dra. Asensio had opened the Scientific and Technical Directorate Meeting, welcoming the attendees, and thanking US hosts for their hospitality. She was glad that all the Division Chairs were present at this meeting.

- 1) Applied Surface Science, Monika Jenko,
- 2) Electronic Materials and Processing, Gary McGuire,
- 3) Nanometer Structures, Hans Joachim Güntherodt,
- 4) Plasma Science and Technology, David Ruzic,
- 5) Surface Engineering, Bill Sproud,
- 6) Surface Science, Neal Shinn,
- 7) Thin Film, Roger De Gryse,
- 8) Vacuum Science and Technology, Janez Setina

Item 2**Scientific Director's report**

Dr. Asensio has pointed out several subjects where the actions of the STD will be focussed:

1.- We have tried to contact Prof. Ulf Karlsson, chair of the Program Committee of the IVC17 in order to the participation of all IUVSTA Divisions will be assured to the Stockholm meeting. It was given attention to the delayed schedule in which the Division Chairs may be contacted in order to suggest the Program Committee members as well as the main topics and invited speakers.

2.- The Scientific Director has been in close cooperation with the Korean Vacuum Society in order to organize the Highlight ECM-100 in Seoul next September. Dr. Asensio together with the chair of the Symposium and Highlight meetings has tried to cover the wide scientific activities of the Union in order to have an equilibrated and harmoniously representation of all IUVSTA Divisions.

3.- Concerning new workshops proposed by IUVSTA Divisions, the Scientific Director has received four proposals, which will be evaluated at the STD meeting.

4.- Dr. Asensio has participated in virtual meetings discussing the structure and advancement of the new IUVSTA Website. Several practical problems have to be resolved due to the unfortunate and sudden desperation of Prof. Alain Roche, initially in charge of the development of the new Web site.

Item 3

An issue extensively discussed at the STD was the Divisional participation to the Program Committee of the IVC17 (2007). The following main actions were identified:

- 1) All IUVESTA Divisions should closely participate to the setting up of the committee members of the scientific program.
- 2) National Vacuum Societies should be largely informed in order to ensure their substantial contribution to the Conference content.
- 3) Identification and development of specific "**HOT TOPICS**" to be included in the Conference Program.
- 4) Scientific excellence should be highly promoted by developing innovative means.

Dra. Asensio, as a result of the first contacts with the Divisions, has identified the following ways to extend the participation of the IUVESTA members to the IVC17 :

1.- Each Division may edit a list of potential members for the IVC17 Program Committee. The list may include email as well as webpage address and recent published papers of the candidates

PLEASE: Contact all members of your Divisional Electoral College to ensure the inclusion of their suggestions !!!

2.- Each Division may try to look for selected Highlight Topics and Potential Invited Speakers

3.- Approximately by 15th June 2006, all the material recollected by the Division Chairs may be sent to Prof. Ulf Karlsson, Chair of the International Program Committee of the IVC17.

Item 3

As a next point, the Divisional participation to the ECM100 Highlights in Seoul has been discussed. The President of the Korea Vacuum Society has explained personally at the STD meeting the principal axes of the ECM-100 Highlights celebration. She has pointed out, that two different schemes could be envisaged:

Case 1:

- * Special Symposium, 18th-19th September 2006 (Monday-Tuesday)
- * ECM-100, Highlight Seminar, 20th September 2006 (Wednesday), with 8 Divisional contributions from IUVESTA & 8 from KVS. **Half a day !**
- * ECM-100, and associated Meetings will be held on 20th-22nd September 2006

Case 2:

- * Special Symposium, 18th-19th September 2006 (Monday-Tuesday)
- * ECM-100, Highlight Seminar, 20th September 2006 (Wednesday), with 8 Divisional contributions from IUVESTA & 8 from KVS. **Full day !**
- * ECM-100, and associated Meetings could be held on 21st-22nd September 2006

The only difference on both schemes is the extension of the ECM-100 Highlight Seminar. In the first case, it will be carried out during half a day, whereas in the second case, it will be accomplished throughout a full day meeting. The president of the KVS has indicated many of the practical details of the event organization, as well as gave us indications of the spirit and enthusiasm present at the Korean community for these scientific events.

Item 4

Several reports of IUVSTA Workshops and Schools have been received and discussed at the STD meeting in San Diego. A short list of them is indicated below:

1.- REPORT ON APROVED IUVSTA WORKSHOPS AND SCHOOLS

WS#43rd IUVSTA Workshop (Surface Science Division)

“ Chemical Resolution in scanning Probe Microscope”

Zakopane, Poland, 6-10 December 2005

Organizers: Prof. Marek Szymonski

Institute of Physics, Jagiellonian University, Krakow, Poland

Contact: ufszymon@cyf-kr.edu.pl

WS#45th IUVSTA Workshop (VSTD)

“ NEG (Non Evaporable Getter) coating for Particle Accelerators and Vacuum Systems”

Catania, Italy 5-8 April, 2006

Organizers: Prof. Oleg Malyshev (ASTeC) and Paolo Manini (AIV)

Contact: paolo_manini@saes-group.com

School #6: “ School On Science And Technology At The Nanoscale”

July 13-18, 2005

Sponsored By NSD

Venue Czech Republic

Approved ECM-95, 15.000 CHF

School #7: “International School On Advanced Synchrotron Radiation Techniques For The Fine Analysis Of Materials“

July 17-22, 2006

Sponsored By ASSD, SSD, TFD

Venue Salamanca, Spain

Approved ECM-95, 15.000 CHF

Item 5

Three new Workshop proposals have been submitted by the IUVSTA scientific divisions. EMPD, PSTD and ASSD have presented few slides explaining the objectives of PO1st and PO2nd proposals, respectively. See bellow a list with the details of each event.

The workshops are:

• **PO1st IUVSTA Workshop** (Plasma Science and Technology Division)

"Utilisation of signal control from plasma measurements to establish process control"

Venue: Dublin City University
Dates: 4th–6th September 2006
Organizers: Dr A.P.Webb
Contact: Dr A.P.Webb, alan.webb@bookham.com

• **PO2nd IUVSTA Workshop** (Electronic Materials and Processing Division, Nanometer Structures Division and Thin Film Division)
"Toward Novel Nanostructure-based Devices: Nanostructured materials fabrication, characterization and assembly for novel devices"
Venue: Inter-University Center, Dubrovnik, Croatia
Dates: October 22- 27, 2006
Organizers: Gary McGuire, USA, Vesna Borjanovic, Croacia and Branko Pivac, Croacia.
Contact: gmcguire@itc-inc.org
Web: www.nano2006.org

Dr. Asensio had proposed the motion “This STD approves IUVSTA Workshop N°49 on “*Utilisation of signal control from plasma measurements to establish process control*”, N°50 on “*Toward Novel Nanostructure-based Devices: Nanostructured materials fabrication, characterization and assembly for novel devices*”, each with expenditure of up to 10k CHF”. Prof. Ugo Valbusa seconded the motion, which was approved unanimously by the STD members. It had been decided to present at the ECM99, those Workshops approved by the STD, to get the final approval.

Item 6

The STD has received a request for endorsement submitted by the Czech Republic Vacuum Society, (see below).

Endorsement Requests

Conference
11th Joint Vacuum Conference (JVC11)
To be held in Czech Republic
24-28 Sept. 2006

Item 8

The reports of the eight IUVSTA divisions have been presented at the STD. A short summary of each report is indicated bellow:

Divisional Reports

8.1 Applied Surface Science Division (ASSD)

Prof Monika Jenko, chair of the Division, presented the ECM-99-10B-01_Division Report. She identified the need to expand the scope of the Division to include bio-materials and said that new committee members would cooperate to meet this need.

8.2 Electronic Materials and Processing (EMPD)

Dra. Asensio said that she had not received a formal report. However, she reported progress on the set up of the new members of the Division. Also, an active debate is being developed inside the Division to identify those main topics, in which will be focalized the Workshop that is planned to be presented in the near future by the Division.

8.3 Nanometer Structures Division (NSD)

Prof. H.J. Guntherodt chair of the Division talked about the ICNT at Basel and future plan about the NSD.

8.4 Plasma Science and Technology Division (PSTD)

Prof. David Ruzic chair of the Division has apologised for being unable to attend the ECM97. Joe Greene has read the corresponding Divisional report.

The newly constituted executive committee exchanged several emails and phone calls over the last month. The consensus opinion is that the Division would like to request IUUSTA sponsorship for a WS to be held in 2006. It would be a joint meeting with the second Center of excellence forum on plasma science and technology to be held in Postdam, Germany in July 2006. The first forum was held in Nagoya Japan in April 2004. The scope of that forum can be viewed by looking at the following website. [Http://www.plasma.coe.nagoya-u.ac.jp/coe_forum/index.html](http://www.plasma.coe.nagoya-u.ac.jp/coe_forum/index.html). Prof. Hideo Sugai, secretary of our Executive Committee is taking the lead in organizing both the WS and the Forum.

8.5 Surface Science Division (SSD)

Prof. Neal Shinn chair of the Division reported on the Division activities on behalf of the Division chair.

Prof. Marek gave a presentation describing the Workshop #43 proposed by the Division entitled "Chemical Resolution In Scanning Probe Microscopy". Also, he has informed that the Polish Vacuum Society has organized the "Short Training Course On Vacuum Technique" with the support of IUUSTA.

8.6 Thin Film Division (TFD)

Prof. Roger de Gryse chair of the Division, presented the Division Report. He invited Lars Johansson to give a short presentation on the forthcoming ICTF13 meeting to be held in Sweden in June 2005. Roger de Gryse showed a view graph summarising attendance at recent ICTF meetings, a clear decrease in number attending the conference series was evident. The importance of the Stockholm meeting for the Division was highlighted. It was reported that the Division committee had agreed upon Ghent, Belgium, as the venue for ICTF14 to be held in 2008.

Prof. Valbusa commented on the declining numbers attending the ICTF meeting and expressed the hope for a better attendance at ICTF13. He suggested that perhaps new material needed to be introduced into the conference content, possibly by holding joint meetings.

8.7 Surface Engineering Division (SED)

Bill Sproul chair of the Division, presented the Division Report. The Surface Engineering Division of IUVSTA in conjunction with the Thin Film Division has set up IUVSTA Workshop #48 on the "Influence of Trace Elements on the Nucleation and Growth of Thin Films" that will be held in Budapest, Hungary from August 26-31, 2006. The workshop is being organized by Professor Peter Barna. Further details on the workshop will be reported by the Thin Films Division chair, Professor Roger DeGryse.

The Surface Engineering Division will hold a divisional meeting at the ICMCTF-06 in San Diego on Monday, May 1, 2006. Topics to be discussed are the workshop in Hungary plus planning for the Surface Engineering Division sessions at the IVC-17.

8.8 Vacuum Science and Technology Division (VSTD)

Janez Setina chair of the Division, presented the Division Report.

Item 9

DIVISION WEB ISSUES

The need of a new IUVSTA Web site has been discussed at the STD. Dra. Asensio has commented that the best way to widely transfer and diffuse the information about the activity of each Division will be by completing the new IUVSTA web site content. It has been noticed the relevance of having the new IUVSTA web site on line in order to re-structure the Division sections, as soon as possible.

Respectfully submitted

M.C. Asensio

Scientific Director