

ACADEMIA NOT INTERNATIONAL

Science, Technology and Diagnostics in Non-Destructive Testing

Via D.C. Pontevia n°21 – 25010 – Folzano – Brescia – Italy www.academia-ndt.org

We work to Advance the Science of NDT! PRESS-RELEASE

It is now traditional to have a General Assembly of the Academia NDT International followed by the scientific workshop. In 2010, during the General Assembly meeting in Moscow, it was decided that, for the time being, all General Assembly meetings will be held in Brescia – home of Academia. In accordance with this decision, on November 13-15, 2011 a Council meeting, General assembly and scientific workshop of the Academia were held in Brescia (Italy) hosted by I&T Nardoni Institute. Participants from 13 countries visited these meetings.

Participants were welcomed by Academia President Dr. Giuseppe Nardoni and were honoured by the presence of Prof. Vjera Krstelj – EFNDT President and Dr. Mike Farley – ICNDT President.

During the GA the minutes of the 2nd Academia assembly held in Moscow (Russia) were approved. During this meeting new members were approved and heartily welcomed to the Academia. Another good tradition followed – each new member present at the meeting was given the opportunity to give a short presentation on their scientific interests and research areas. Eight new members were elected to the Academia: Prof. David K. Hsu (USA), Prof. Marc Kreutzbruck (Germany), Prof. Peter Trampus (Hungary), Dr. Guido Posso, Prof. Claudi Carci, Dr. Mario Certo, Prof. Giulio Maier, Prof. Franco Tonolini (all five from Italy) and two Honorary members: Academician, Prof. Norbert Kroo (Hungary) and Dr. Mike Farley (UK).

Currently, the Academia has 54 members including 45 Full members (including 6 council members) and 9 Honorary members, from 21 countries. Newly elected members received certificates confirming their elections. Members attending the meeting for the first time made interesting presentations of their research and achievements. Presentations were followed by interesting discussions.

Before the General Assembly, the Academia Council held a meeting on November 13, 2011 and coopted two members – Prof. Gerd Dobmann and Mr. David Gilbert. They are coopted for one year and in accordance with the Academia Statute can be re-appointed in a year. This was done to demonstrate respect for contribution these two persons provide to Academia.

During the GA several important for Academia matters were discussed: legalization, opening of bank account and financial support of Academia, approval of changes in the Statutes and matters of auditing and budget of Academia required to provide legalization.

It was decided that for the time being in Academia the fees will not be introduced but Academia strongly needs donations. All Academia members are invited to make donations to the account listed below:

Name: Banca Popolare di Vicenza

Branch: n° 08

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IBAN: IT19M0572811219848570774830

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As a result of some brainstorming by the participants, the following Academia Aims and objectives were formulated:

- To promote science, research and development and engineering, and encourage application of the findings in the field of NDT/NDE at universities, R&D centres and institutions and other relevant bodies throughout the world.
- To establish and maintain a network among scientists and technologists involved in the basic and applied sciences, research, development, education and engineering for NDT/NDE methods, techniques, equipment and implementation advancement.
- To highlight the work of the research, development and application in NDT/NDE, especially for safety-critical components.
- To be mindful of the contributions from scientists and distinguished professionals in the NDT/NDE field, inviting them to ACADEMIA NDT.
- To attract the attention of international authorities, government and public organizations to the importance of NDT/NDE for the benefit of society.

The above aims and objective were based on proposals received from Academia members during the last year (more details can be found in minutes of GA):

- Establish working group on signal processing
- Establish interest group for young scientists
- Establish mentoring service for graduates/postgraduates
- Publicize university positions vacant
- Provide online resource on NDT educational materials

And the following proposed during the GA:

- Establish a working group on ND Engineering in higher education
- Relationships with universities
- Knowledge transfer of fundamental principles of science to NDT application
- Technology watch monitor needs of new projects/developments in industry

Several times during Academia meetings the possibility to establish some kind of Award – similar to Nobel Prize was discussed. In connection with this Prof. Vjera Krstelj made interesting presentation relevant to history of Nobel Prize award and other similar awards. It was decided that Academia can establish its own award that can be given to best of best scientists or engineers working in the field of NDT and be given during each World NDT conference. This idea was met with enthusiasm and it was decided to establish special working group (draft name "Award") led by Prof. Dobman to discuss in more details and try to work out criteria for such award. Any Academia members who have proposals are welcome to contact Prof. Dobmann, e-mail Gerd.dobmann@izfp.fraunhofer.de and join this group. However of course this activity requires some efforts to make it valuable and not to be confused with other existing awards. Perhaps in the future someone may be interested to offer financial support for this award.

One more interesting discussion was held during GA - It was proposed to establish a group combining the efforts of specialists dealing with signal processing in the widest sense. The idea behind this group is to combine efforts of scientists working in different areas but implementing signal processing. All specialists understand that from fundamental research work you have to pass through several stages to finally come to practical realization. It is very important to arrange exchange of experience and to find areas, such as Medical Imaging and Applied Sciences, where different approaches can lead to joint efforts, not only in the field of NDT, but destined for Modern NDT.

It was decided to establish a working group (draft name "Signal processing") led by Prof. Serge Dos Santos. All interested Members are welcome – please contact Serge on email serge.dossantos@univ-tours.fr.

Special attention was dedicated to organization of the 18th World NDT Conference in Durban (South Africa) in 2012. Thanks to the efforts of Dr. G. Nardoni at the moment Academia has the following plans for this event:

Key speech of Nobel Prize Winner Prof. Harold Kroto "Message on research as key stimulus on economic development" on April 16, 2012, Plenary session, 12.20 - 13.00.

Academia workshop - open to the public - on April 17, 2012, 14.00 - 17.20.

Prof. Kroto will make presentation "Nanotechnologies: materials properties, technologies, applications" (45min).

It is expected that all Academia members participating in the World conference will contribute in the success of Academia workshop. In addition to the presentation of Prof. Kroto it is provisionally planned to have the following presentations given by Academia members:

Prof. Uwe Ewert "Potential of Tera Hertz radiation in NDT"

Prof. Marc Kreutzbruck "Nanosensors"

Prof. Zdenek Prevorovsky "Nonlinear Time reversal ultrasonics for NDT".

It was noted that currently most presentations are from European members of the Academia, but the list is still open and anyone wishing to make a presentation should. send information to the Academia Secretariat before the deadline date of January 29, 2012).

Please do not forget to put these dates in your calendar of events.

Other important decisions were made at GA relevant to providing links to good sources of information on NDT; working out of materials of different level of difficulty on various NDT methods for students and engineers. Some discussions initiated by Prof. V. Krstelj were also suggested and concern the promotion of international partnerships between Universities to facilitate NDT education at University level throughout the world. Some orientations were also suggested within ICNDT WG3 group and within "Erasmus Mundus" programs supported by EU and applicable worldwide.

Prof. Z. Prevorovsky invited all Academia members to become members of the 11th European NDT conference Scientific committee. We kindly ask you to confirm your good will to become a part of such committee and send this information to Mr. Prevorovsky, e-mail zp@it.cas.cz.

The next Academia General Assembly is planned for October 11-12, 2012 in Brescia (Italy). Put this date in your calendar.

The Academia workshop was held on November 15, 2011. The workshop participants were welcomed by Dr. G. Nardoni. It was chaired by Prof. V. Krstelj, Dr. G. Dobmann and Dr. M. Balasko.

The following presentations were done:

- Dr. Luigi Morici, Italia: "The fusion program ITER. The contribution of ENEA"
- Dr. Mike Farley, UK: "Challenges of globalization and the role of ICNDT and the Academia"
- Prof. M. Kazakevich, Ukraine: "Physicochemical aspects of leak-testing".
- Prof. Valeriy Vengrinovich, Belorussia: "New mathematical methods and algorithms for smart signal and image processing for NDE".
- Prof. Z. Prevorovsky , Czech Republic and Prof. Serge Dos Santos , France: "Signal processing for Modern NDT: advanced concepts and techniques to enable 'smart' maintenance"
- Prof. Uwe Ewert, Germany: "Inspection of Plastics and Fibre Composites with X- and THz-Radiation"
- Dr. Michele Carboni, Italy: "An experimental and numerical approach to UT responses and their POD curves.

Presentations were met with interest and discussed enthusiastically. It is planned to publish all presentations on Academia web page. Presentations were from different areas of interests. This workshop made it possible for Academia members to find areas of potential cooperation and this is the most important result of this meeting.

Dr. M. Balasko made a comment at the end of workshop that it would be better to make presentations shorter, not longer than 20 minutes, to have a reasonable number of slides (not too many!) and to present the main ideas to "provoke" interest. He also underlined that most presentation were very interesting and useful.

Dr. G. Nardoni, Academia President, thanked everyone who participated in this meeting and promised to continue the fine tradition of arranging workshops in conjunction with other national and international NDT events.

Special thanks shall be given to Academia's President, Mr. Giuseppe Nardoni and his staff for extremely good organization of the meetings and the superb after-meetings social program. Academia Members appreciate the realization of business cards and the printing of Posters describing the Academia projects.