# EF European Federation for Non-Destructive Testing

## Volume I Issue I

## Meet the President

EFNDT President Professor Vjera Krstelj has been in office nearly ten months now. In the short time since her official appointment at the EFNDT General Assembly in January in Vienna, Professor Krstelj has kept herself busy with EFNDT activities, including presiding over Board of Directors' meetings in Slovakia and more recently in her native Croatia. During a brief break at the latter, EFNDT News editor David Gilbert put a few questions to the EFNDT President...

## Q:As the new President of EFNDT, what do you see as the biggest challenges for the Federation?

A: EFNDT was founded in May 1998 at the 7th European Conference on NDT in Copenhagen when 27 members agreed to set up a powerful organisation at the European level. The Presidents of EFNDT endeavoured greatly throughout the past eleven years to develop relationships between members and societies, underlying persistently the importance of common goals. We all appreciate a lot of energy has gone into the harmonisation of personnel qualification and certification, giving positive results, for example the Multilateral Recognition Agreement.

For further successful NDT technology development, a stronger co-operation within the European NDT sector is essential, the result of which will be improvement of reliability and safety of goods and products of all kinds when their quality is to be NDT approved. It is a fact that when we look at the subjects of features of any NDT conference or journal it is hard to find any item or structure *not* being inspected, monitored or evaluated by NDT. Harmonised cooperative development, relying on shared information, thus including synergy in NDT-related activities and avoiding unnecessary overlap, particularly co-operation in R&D, will certainly increase the overall quality of our technology.

These objectives are indeed the priority objectives of EFNDT and are the biggest challenge for the Federation as a base for the positioning of EFNDT within the European Quality Infrastructure. EFNDT, as representative of the European NDT community, will look after the interests of NDT, the NDT industry and the profession for the cause of safety and benefit of economy.

This reflects the EFNDT reputation worldwide as a strong and proactive safety management and quality assurance partner.

#### Q:What are your priorities as the new President?

A:The priorities of the EFNDT President are evident from the tasks outlined above. The question is where do we start? The answer is to lead parallel activities:

The significance of EFNDT and the powerful capabilities of

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NDT have to be better communicated to the relevant European institutions. This is the starting point for the involvement of EFNDT in the European quality system.

 Ever-improving NDT, condition monitoring and diagnostic technology throughout our European NDT community relying on better co-operation.

In EFNDT we have NDT societies that are strong and very active. Some are small and there are also countries that are still not included. We need better co-ordination to move forward to meet the global demand for safety and sustainability of technology. We should enhance the participation of NDT in that demanding task in order to improve not only the quality of industrial products but also the safety of human life, property and environment protection.

## Q:What are the biggest challenges for Member Societies and how can the EFNDT help Members to meet them?

A: Of prime importance for each Member Society is to establish its position in EFNDT based upon its competence and then to envisage the priorities of both, transferring its own valuable experience and looking for the other members' good exemplars.

To be helpful I plan to offer a questionnaire in which every Society will be asked to describe their main abilities, highlighting the field in which the Society considers it to be outstanding, thus being able not only to participate in European projects but also perhaps to convene a particular one. They will be asked also to specify their needs for specific development, considering EFNDT help for this. In this intermediate co-operation it is very important that integrity is maintained for the sake of ever-increasing positive co-operation within EFNDT.

## Q:What role(s) do you see the organisation playing in the NDT community at large?

A:The answer to this is very easy.

We can see all around examples of successful management and unfortunately we can also see a great deal of incompetence, often leading to ruin. *Continued on page 2* 

## The Official Newsletter of the European Federation for Non-Destructive Testing



## NEWS



Publisher: The European Federation for Non-Destructive Testing (EFNDT). Secretariat: The Croatian Society for Non-Destructive Testing (CrNDT), Ivana Lučića 1, 10000 Zagreb, Croatia. President: Professor Vjera Krstelj, email: vjera.krstelj@fsb.hr General Secretary: Nikša Krnić, email: nkmic@fsb.hr

Editor: David Gilbert, The British Institute of Non-Destructive Testing (BINDT), I Spencer Parade, Northampton NNI 5AA, UK.Tel: +44 (0)1604 630124; Fax: +44 (0)1604 231489; Email: david.gilbert@bindt.org

Production: Corinne Mackle, BINDT.

Editorial contributions are welcomed. Articles should be sent to David Gilbert, BINDT, email: david.gilbert@bindt.org

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## EFNDT Director awarded professorship

Peter Trampus, member of the EFNDT Board of Directors and President of Marovisz, the Hungarian Association for Non-Destructive Testing, has been appointed to the position of Professor at the Technical University of Budapest, Hungary. Professor Trampus had the honour of being awarded his professorship recently by Mr Laszlo Solyom, the President of the Republic of Hungary. Professor Trampus is a founder member of the Hungarian Academy of Engineering.



Laszlo Solyom, President of the Republic of Hungary, awarding the university professor assignment to Peter Trampus. Next to the President is Hungary's Minister of Education

#### Meet the President...Continued from front page

The EFNDT organisation and/or reorganisation will keep abreast of all developments to ensure beneficial memberships of national societies.

#### Q: How do you see the EFNDT developing in the future?

A:We are all influenced by the impact of social, economical and technological change, even political. Globalisation is happening extremely rapidly, bringing us, however, also new choices, opportunities and obligations. NDT must maintain the level of high technology since the main European strategies of high technology and energy resources cannot be fulfilled without reliable NDT. Therefore, the NDT quality system must address each of the links in the NDT quality chain. In this chain there are still weak links. Some are easy to strengthen but the others seek a long-term involvement. In my opinion, the three very important points to start to address are:

- Requirements of lecturers' accreditation.
- Deficiency of accredited NDT laboratories.
- Insufficient higher education possibilities in NDT, condition monitoring and diagnostic technology at universities, colleges, R&D centres and other relevant bodies.

These points arise from the following observations: Firstly, beside the knowledge and experience required concerning NDT methods, lecturers should be asked to encompass up-to-date general knowledge and ability (methodology, ICT, ethics and so on). Secondly, it is an increasing requirement of a QA system that a company/laboratory has to demonstrate knowledge and skill. Proficiency testing is needed in NDT laboratories to verify that all aspects of the laboratory inspection and measurements are sound to provide the required reliability of results. The lists of NDT Accredited Laboratories in Europe are unacceptably low regarding the responsibility of NDT technology.

Thirdly, attention has to be paid towards education, due to the accelerating progress in science and technology. Without highly motivated individuals to educate people up to the very highest level, the future of NDT in the high technology field will be in question. I will start to move in this direction using my experience not only as a university professor but also in management, by introducing NDT and QA at the University of Zagreb.

Finally, the timely launching of the Academia NDT International will be a powerful impulse to NDT people to attain a high level of education. Members of the Academia NDT International will be prime examples of dedication to personal development. The Academia NDT International is the institution where the decisions about education strategy will respond meritoriously to the demands placed upon it.

## Q: How has your experience and professional career helped you prepare for this latest challenge?

A:Well, I feel I have partly answered your question, yet my experience teaches me that in no case can one be prepared enough, so it is important to gain reliable associates. For example, it is good of you, Mr Editor, to spare me from difficult questions! However, let me answer this way; my university experience has taught me endurance, my NDT and QM experiences endow me with foresight, and my life experience enriches me with the sensation that there is always a solution, no matter how difficult it is to acquire. We just need to work for it.

## NEWS

## Professor Uwe Ewert awarded Röntgen Medal

Wilhelm Conrad Röntgen, the recipient of the first Nobel Prize for Physics in 1901 for his discovery of X-rays, was born in Lennep, Prussia, on the 27th March 1845. Today, this town has become a part of Remscheid in North Rhine-Westphalia, Germany. Celebrating his 100th birthday was impeded by the disturbances at the end of World War II. Unfortunately, the same applied to the 50th anniversary of



Professor Uwe Ewert

the famous discovery. Six years later, this gave reason to the town of Remscheid to endow the 'Röntgen-Plakette' commemorating the Nobel Prize fifty years ago. Since then, the mayor of the town awards a personality with the Röntgen medal for the merit of progress in and the dissemination of the X-ray technology. This year, Professor Dr Uwe Ewert, head of the Radiological Methods division of BAM, the Federal Institute for Materials Research and Testing in Berlin. Germany, was awarded with the Röntgen medal for "achievements in the area of industrial digital radiology". On 9th May 2009, the Lord Mayor of Remscheid, Mrs Beate Wilding, presented the 96th recipient of this prize with the 'Röntgen-Plakette' in front of more than 100 guests in the auditorium of the Röntgen-Gymnasium (the school having served as the location of the old film 'Die Feuerzangenbohle'). This adds Professor Ewert's name to a list that includes eight Nobel Prize recipients such as the German physicist Max von Laue. His particular merits, documented not only by publications but also by eleven patents, are related to the role of radiology in non-destructive testing, not prominently visible in the public life, but nevertheless indispensable in the world today dominated by technologies. It is an essential part in the production of the metal working industry around Remscheid.



The Röntgen-Plakette, face and back

The whole ceremony was enframed by classical music performances presented by young musicians who have won the state contest 'Jugend musiziert'. The president of the Society of Friends and Supporters of the German Röntgen-Museum, Professor Ulrich Mödder, emphasised the role of X-ray technology not only in medicine, where everyone is aware of its use, but also in technological fields, which are less well known in the public mind but nevertheless essential.

The speech describing Professor Ewert's achievements was given

by Professor Manfred Hennecke, the president of BAM, the Federal Institute for Materials Research and Testing, First of all, he took pride in the fact that he was at the same place nine years before honouring Professor Manfred Hentschel, another laureate of the Röntgen-Plakette also belonging to BAM. The full quotation of the certificate ("in appreciation of his attainment in the area of industrial digital radiology, particularly in the development of mobile laminographic and tomographic measuring methods and the high contrast sensitivity technology'') was followed by the recipient's biography. Born in the southwest of Berlin, Uwe Ewert studied chemistry at the Humboldt-Universität Berlin with the final degree equivalent to a PhD in 1979, the same year he married. He spent his postdoctoral time in the Academy of Science of the German Democratic Republic (DDR), the same site as Dr Angela Merkel, currently the Chancellor of the Federal Republic of Germany. In 1989/90, he took the opportunity of accepting a fellowship at the Cornell-University in Ithaka, NY, USA. This was made possible within DDR's ambition to advance the international acceptance of scientific achievements. Uwe Ewert was overcome by the German reunification while being far away from home. Returning to Germany, he first made his life self-employed before he joined the laboratory of radiation methods of BAM in 1992. One of his first tasks was the inspection of a bridge in the town Havelberg by means of computed laminography. Upon completing graphic reconstructions manually he said to himself: "never again". As a consequence, carrying computed tomography into the field was one of his primary commitments. In his approach, the X-ray tube and a digital matrix detector are guided mechanically around a tube inspecting seam welds and searching for flaws invisible from the outside. In 1998, a patent was granted for this kind of mechanical radiologic inspection method.

Another area he took a deep interest in was advancing computed radiography with phosphor imaging plates, originally introduced for medical applications in the early 90s. His intention was to transfer this technology also to technical applications such as non-destructive testing, while being well aware that the requirements in these two areas are guite different. Later, the success of adapting this technology for NDT purposes, achieved in cooperation with film manufacturers, was documented in CEN and ASTM standards published in 2005. In his career, Uwe Ewert was appointed as Director and Professor at the BAM, heading the Non-destructive Testing and Characterisation: Radiological Methods division in 2001. Further recognitions followed such as the DGZfP's Berthold Prize along with his colleague Bernhard Redmer, awarded for the portable device 'TomoCAR' for on-site tomographic inspections in 2005. Two years later, his coworkers Dr Uwe Zscherpel and Dr Klaus Bavendiek received the same prize for significant improvements of the contrast sensitivity of digital radiological technologies. It was briefly mentioned that this did and does not cover all of Professor Ewert's interests, he is also involved in the emerging mm-wave and terahertz technologies as well as in advanced security applications of radiological methods. Professor Hennecke concluded his speech quoting a remark from the race driver Stirling Moss: "If everything is under control, you are just not driving fast enough!".

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## NEWS

## Obituary: Xavier Deliege 1935 – 2009

It is with deep regret that we record here the death of our friend and colleague Mr Xavier Deliege.

Xavier Deliege was one of the founders of the Belgian Association for Nondestructive Testing (BANT) in 1985. He was also Treasurer of EFNDT since its inception in 1998 until 2004. At the peak of his career he was Quality Manager at Magotteaux, the world-class group of foundries. He spent his early retirement managing BANT



Xavier Deliege

and devoted his entire time to the certification body, being EFNDT Treasurer, President of Certification Bureau and Representative of Belgium in CEN and ISO. He led his second career to the service of certified personnel and NDT in general. Xavier was a discrete person, though if required he was able to raise his voice when appropriate to protect the NDT certification scheme and 'his' Belgian Association. Xavier was known to be pleasant and friendly. Xavier retired from NDT in 2004 to spend deserved free time with his family and grandchild in Spain.

However, he stayed active in the shadows, giving his advice and opinions about the new standards and certification in general. He leaves a beloved wife, two sons and a grandchild. On the professional side, although being retired for so many years, he leaves a lot of people who learned from him most of their certification knowledge and interest in NDT.

Frederic Carpentier, Secretary of the Certification Bureau at BANT, said: "I owe him most of my contact opportunities in certification and a sense of duty regarding the NDT certification community that he introduced me to.

"This is my opportunity to pay him a tribute."

#### Professor Uwe Ewert...Continued from page 3

Having received the Röntgen-Plakette from the Lord Mayor of Remscheid, Mrs Beate Wilding, it was Professor Uwe Ewert's turn to present his lecture entitled 'The digital revolution in the industrial radiology – from the classical film to the digital presentation of flaws in motion'.

Before closing the ceremony with another classical music performance, Professor Ewert's appreciation for the chess game was disclosed when he received two different chessboards as gifts. The first one had modern figures made of brass, the second one, a wooden one, was made by the workshop for the handicapped of the organisation 'Lebenshilfe' in Remscheid. Professor Ewert acknowledged the gifts by means of two opening moves. Professor Dr Uwe Ewert is congratulated on the prestigious prize honouring his pioneering approach opening new perspectives in industrial radiology.

## Academia NDT International holds first successful scientific meeting

No less than 17 of the 39 full members, from 12 countries, attended the second scientific meeting and first General Assembly of the Academia NDT International that were held on 15 May 2009 in Brescia, Italy, hosted by the Academia President, Giuseppe Nardoni.

Special guest and presenter of the keynote address: 'New frontiers of physics' was Professor Antonino Zichichi, one of the originators of the Large Hadron Collider (LHC) in CERN, Geneva, and founder of the Gran Sasso Laboratory, the vast underground research lab near Rome dedicated to the study of particle physics.

The professor's enlightening talk was followed by interesting and useful presentations made by Academician Professor Vladimir Klyuev from the Research Institute of Introscopy, Russia, who spoke on 'Residual resource diagnostics', and Professor Valery Vengrinovich of the Institute of Applied Physics in the Belarus National Academy of Sciences, who presented: 'Materials evaluation: from forward to inverse problem'. These were followed by 'Basic physics, experimental test, mathematical modelling' by G Nardoni and M Certo.



Members of the Academia NDT International at its second scientific meeting

Earlier in the day the proceedings had been opened by Academia NDT International President Giuseppe Nardoni. He was followed by Professor Vjera Krstelj, President of the European Federation of NDT (EFNDT) who said she was "immensely proud to be part of the Academia" and would do all she could to promote the Academia within EFNDT and Europe as a whole. There were then some presentations of greetings from several local dignitaries and all participants made short presentations of their activities.



Giuseppe Nardoni, President of the Academia NDT International, welcomes all to the scientific meeting



Keynote speaker Professor Antonino Zichichi (right) is presented with an award by Giuseppe Nardoni

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The Russian Society for Non-Destructive Testing and Technical Diagnostics

## **10<sup>th</sup> EUROPEAN CONFERENCE** and EXHIBITION on NDT

7-11 June 2010, Expocentr, Moscow

The on-line registration via web site is provided http://www.ecndt2010.ru/eng/register/

**Deadline:** 

Abstracts submission 1 November 2009 Papers submission 1 January 2010

## www.ecndt2010.ru

Phone: +7 499 2467132, Fax: +7 499 2468888 e-mail: info@ecndt2010.ru, exhibition@ecndt2010.ru

## NDT - basis of Safety!

## Current statistics for the 10th European Conference and Exhibition on Non-Destructive Testing

The 10th European NDT Conference and Exhibition will take place 10-11 June 2010 at the Expocentr, Moscow, Pavilion 8, Halls 1, 2, 3. This venue is 20 minutes from the centre of Moscow.

- Conference and exhibition venue area: 7500 m<sup>2</sup>
- Exhibition booths area: 2835 m<sup>2</sup>
- Area reserved to date: 1286 m<sup>2</sup>
- Outdoor booths area:

Over 50% of the available area is reserved: 64 companies from 14 countries.

360 m<sup>2</sup>

National societies from 35 countries will be provided with a 4  $\ensuremath{m^2}$  booth.

All updated news can be found on the ECNDT 2010 website: www.ecndt2010.ru

#### Conference

- Total number of uploaded abstracts: 486 from 43 countries.
- Total number of authors: 922.
- Plenary session: 7 June 2010: 10h00 13h00.
- Technical Sections and Posters:
   7 June 2010: 14h00 17h30.
   8 10 June 2010: 10h00 13h00 and 14h00 17h30.
- Closing Ceremony: 10 June 2010: 17h00 18h00.
- Reserved day: 11 June 2010.

#### Draft Timetable

It is planned to have five sections as follows:

- I. Technogenic diagnostics (14 sub-sections)
- I.I. Magnetic methods
- I.2. Electromagnetic methods
- I.3. Ultrasonic methods
- I.4. Radiology and radiography methods
- I.5. Optical, infrared and microwave testing
- I.6. Penetrant and leak testing
- I.7. Acoustic emission
- I.8. Vibration analysis
- 1.9. Computed tomography
- 1.10. NDT of transport means
- I.II. NDT of pipelines
- 1.12. NDT in the power industry
- 1.13. NDT in metallurgy and the chemical industry
- 1.14. NDT in civil engineering
- 2. Anti-terrorist diagnostics
- 3. Ecological diagnostics
- Residual resource diagnostics and NDT technologies (5 sub-sections)
- 4.1. Residual life evaluation
- 4.2. Materials characterisation
- 4.3. Nanotechnologies
- 4.4. Transducers and sensors
- 4.5. Modelling and signal processing, image recognition personnel training

- NDT Standardisation, certification and metrology (3 sub-sections)
- 5.1. Personnel training, qualification and certification
- 5.2. Standardisation
- 5.3. NDT Metrology

EFNDT, ICNDT, ISO, ASNT and Academia NDT International meetings, forums and workshops will be held in conjunction with the ECNDT 2010 (details can be found at www.ecndt2010.ru).

#### Exhibition

#### Draft Timetable

- Opening Ceremony: 7 June 2010: 13h15 14h00.
- Working hours: 7-10 June 2010: 10h00 18h00.
- Closing Ceremony: 10 June 2010: 17h00 18h00.
- Set-up: 5-6 June 2010.
- Dismantling: 11 June 2010.

#### Accommodation

Special accommodation prices will be provided for the conference and exhibition participants and guests in the following hotels (reservation can be made via http://www.acase.ru/ecndt2010):

- Crown Plaza 5\*
- Marriott Grand 5\*
- Radisson Slavyanskaya 4+\*
- Holiday Inn Sokolniki 4\*
- Park Inn Sadu 4\*
- Aerostar 4\*
- Marriott Tverskaya 4+\*
- Proton 3\*
  Vega 3\* (Izmailovo)

More hotels will be available and information about them will be placed on the website at a later date.

Visa support will be provided through ECNDT 2010 partner 'Academservice' company: www.acase.ru/ecndt2010.

#### **Social Programme**

The organising committee plans to make the stay of the ECNDT 2010 participants and guests in Moscow very pleasant and offers the following excursions:

Tretyakov Gallery (Russian art), open-air museum 'Kolomenskoe' (architecture of 16-17th Century), Moscow sightseeing tour, walking excursion around the centre of Moscow and Arbat Street, Kremlin (cathedrals and armoury), excursion along Moscow river by boat, cathedrals and monasteries of Moscow, Victory Park and 'Borodino Battle' museum, night-time Moscow excursion, Sergiev Posad city (monastery – the heart of the Russian Orthodox church) – suburbs of Moscow, Fine Arts Museum named after Pushkin (one of the best Impressionists collections, foreign art and artifacts) and 'Izmailovo' open-air museum, souvenirs fair.

The full excursion programme can be found at www.ecndt2010.ru

Terms and methods of payment, cancellation policy and other practical important information you will find on the website: www.ecndt2010.ru



## 10<sup>th</sup> EUROPEAN CONFERENCE (ECNDT) and ASSOCIATED MEETINGS SCHEDULE

DATE	TIME	EVENTS	PLACE
06.06.2010	10:00-13:00	BOD EFNDT	RSNTTD, Bld. 1, Usacheva St. 35
Sunday	14:00-17:00	ICNDT Executive Meeting	RSNTTD, Bld. 1, Usacheva St. 35

## Place of all associated meetings, conference and exhibition on 7-10 June 2010: Expocentre, 14, Krasnopresnenskaya nab.

	8:00-18:00	Participants Registration	Pavilion 8 Hall Reception
07.06.2010 Monday	10:00-13:00	Conference Opening Ceremony Plenary Session	Pavilion 8 Hall 1
	13:15-14:00	Exhibition Opening Ceremony	Pavilion 8
	15:00-17:30	CEC EFNDT	Congress Center Room 301
	14:30-17:30	Technical Sessions	Congress Center Rooms: 101,201,202; Pavilion 8 Rooms: 1,2,3,4,5,6
08.06.2010 Tuesday	10:00-17:30	Posters presentation	Pavilion 8 Posters Hall
	10:00-13:00 14:00-17:30	Technical Sessions	Congress Center Rooms: 101,201,202; Pavilion 8 Rooms: 1,2 (till 14:00),3,4,5,6
	09:00-12:45	Forum on Qualification, Certification and Accreditation (FQCA)	Congress Center Room 301
	13:00-15:00	EFNDT & ASNT meeting	Congress Center Room 301
	14:00-17:00	National Aerospace NDT Boards Forum (ANDTBF)	Pavilion 8 Room 2
09.06.2010 Wednesday	10:00-17:30	Posters presentation	Pavilion 8 Posters Hall
	10:00-13:00 14:00-17:30	Technical Sessions	Congress Center Rooms: 101,201,202; Pavilion 8 Rooms: 1,2(till 14:00),3,4,5,6
	11:00-13:00	Academia NDT International Assembly	Congress Center Room 301
	11:00-13:00	NDE Reliability workshop	Pavilion 8 Room 2
	14:00-17:30	EFNDT General Assembly	Congress Center Room 301
	18:00-23:00	Gala Dinner	Pavilion 8 Hall 1
10.06.2010 Thursday	10:00-13:00	ICNDT General Assembly	Congress Center Room 301
	10:00-13:00 14:00-16:30	Technical Sessions	Congress Center Rooms: 101,201,202; Pavilion 8 Rooms: 1,2,3,4,5,6
	14:00-17:00	ISO/TC 135 meeting	Congress Center Room 301
	17:00-18:00	Closing Ceremony	Pavilion 8 Room 1
11.06.2010 Friday		Reserved day	

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