



The World Organisation for NDT

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Volume 9 Issue No 3

September 2017

CHAIRMAN'S MESSAGE

Embrace technological growth to remain sustainable

Having crossed the first half of 2017, slight recovery is seen by NDT businesses through most of the industries across the globe. A global market outlook for 2017 states: 'While oil has made an impressive comeback since the early-2016 lows, a continued supply glut and modest global growth will probably keep energy range-bound with a slight upward bias in 2017'. Let us keep the positive energy and do our duties with integrity and productivity to sustain our growth.

As ICNDT Chairman, I have participated as an invitee at the annual event of the Association of NDT Services Organisation of India (NANSO), held in Mumbai, India. I was also Guest of Honour at COTEQ 2017, organised by ABENDI, in Rio de Janeiro, Brazil. During the conference a meeting of the Pan-American NDT Board was held. A new logo was introduced and the event brought new technologies and equipment to the market.

The Austrian Society organised a successful conference, Certification 2017, which was held in Vienna. This provided an information exchange platform for the ISO 9712:2012 standard and its subsequent revision. ICNDT Working Group 1 (Qualification and Certification) held its meeting during this conference.

On 25 June 2017, a historic memorandum of understanding was signed between ICNDT and the International Institute of Welding (IIW) in Shanghai during the latter's 70th General Assembly. Key highlights of this MOU include sharing information, knowledge and networks in NDT in welding, enabling both organisations to excel as a result of this exchange; promoting the benefits of this relationship to each other's membership through publications and involvement in IIW and ICNDT technical activities and other means as deemed appropriate from time to time; and promoting education, training, qualification and certification, research and development and technology transfer in NDT and welding. Overall, this MOU will use the best endeavours of each organisation to help one another meet their objectives without any conflict with regards to their respective goals.

Technological improvements such as pulsed eddy current, reverse geometry X-ray imaging and compound S-scan in PAUT, to name but a few, are emerging in the market. I urge you to embrace the new technologies for your technical solutions and provide inspections with better productivity and, of course, with greater integrity, which in turn improves the reliability of performance in manufacturing, infrastructure, transportation, power and utilities, natural resources and all other related industries.

I wish you all the best for the rest of the year and look forward to your participation in the next major NDT event of the year – the 15th Asia Pacific Conference for NDT (APCNDT) in Singapore.

Ir Sajeesh K Babu, Chairman, ICNDT



ICNDT Working Group on NDT Education and Research

ICNDT Working Group 3 is the focal point in ICNDT for activities relating to research, education and links to higher education. At a meeting held during the 19th World Conference on Non-Destructive Testing (19th WCNDT), Dr Manfred Johannes stepped down after four years of service as Chairman and Professor Younho Cho was elected as his successor.

Current members of the ICNDT Working Group on NDT Education and Research are:

- Professor Steve Holland, Iowa State University, USA
- Ekaterina Cheprasova, Russian Society for NDT, Russia
- Professor Vjera Krstelj, Croatian NDT Society, Croatia
- Harold Jansen, SAIW, South Africa
- Professor Marc Kreutzbruck, University of Stuttgart, Germany
- Kevin Smith, ASNT, USA
- Professor Uwe Ewert, BAM, Germany
- Dr Tony Erhard, DGZfP, Germany
- Professors Robert Smith and Keith Newton, BINDT, UK
- Dr Serge Dos Santos, INSA, France
- Mike Farley, ICNDT PGPC Chairman, UK.

Key actions of the ICNDT Working Group on NDT Education and Research for the next two years, as agreed at the ICNDT General Assembly, are as follows:

- Continue to promote a register of research organisations
- Review when to update ICNDT guides on research and education
- Prepare a list of NDT books with commentary on their suitability
- Draw up a list of universities offering courses in NDT, categorising them as in the ICNDT Guide

Continued on page two



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Material for the next ICNDT Journal should be sent to Sharon Bond, email: s.bond@cinde.ca

- 'ICNDT Working Group on NDT Education and Research' continued from front page
- Sponsor International Specialist Groups (ISGs), each hosted by a member society, as follows (to date):
 - Full Matrix Capture – BINDT
 - Terahertz Imaging – BINDT
 - Microwave NDT – ASNT
 - Magnetic Memory Method – RSSNDT
 - NDT of Art and Cultural Heritage – BINDT
 - NDT Reliability – DGZfP
 - Non-Linear UT – DGZfP
 - Guided Wave UT – KSNT.
- ISGs will be open to all members of ICNDT member societies and meetings will be organised on the internet to:
 - More widely promote the *ICNDT Guide on Research and Development in NDT*
 - Link to Academia NDT
 - Maintain the link to the World Federation of NDE Centers (WFNDEC).

Your new *ICNDT Journal* is available to download from www.icndt.org

6th International Conference on NDT of HSNT and 1st International Conference on Welding of the Welding Greek Institute (WGI) (ICWNDT-2018)

Organised by the Hellenic Society for Non-Destructive Testing and the Welding Greek Institute (WGI), the 6th International Conference on NDT of HSNT and 1st International Conference on Welding of the Welding Greek Institute (ICWNDT-2018) will be held 22-24 October 2018 at the Eugenides Foundation Planetarium, Athens, Greece.

The Organising Committee, with its Chairmen Professor Ioannis Prassianakis and Meletios Tzaferis, cordially invites papers and posters in all relevant fields of NDT and welding and also participation in the exhibition of new NDT and welding products, which will take place during the conference.

The aim of the conference is to bring together scientists, researchers and industrial engineers to exchange recent experiences in research and development activities in the fields of NDT and welding, as well as to promote international collaboration in all matters related to NDT and welding.

The conference will cover all thematic areas of current research and industrial use of NDT and welding. Main topics of the conference include:

- Advanced NDT and ultrasonic techniques
- Advanced joining processes
- Aerospace and marine
- Applications and innovations of NDT methods
- Applications for power generation (including nuclear technologies)
- Applications for the shipping and aerospace industries
- Composite materials, welding and adhesion
- Developments in the automation of welding processes

- Developments in dissimilar materials joining
- Developments in pipeline construction
- Developments in welding consumables
- Developments in welding power sources technology
- Digital radiography
- Fundamentals and applications of welding and joining processes
- Industrial manufacturing
- Inspection, training and certification of welding and NDT personnel
- Microstructure and metallurgical behaviours in welds
- Modelling and simulation of welds and welded structures
- NDT applications in the civil structures industry
- NDT for the diagnostics and refurbishment of cultural heritage monuments
- NDT in medical applications
- NDT technology transfer
- Non-contact NDT methods
- Residual stress and distortion in weldments
- Testing and inspection for weld integrity.

Delegates are invited to participate in this event and take the opportunity to create or renew friendships, exchange ideas and to relax in the historical and famous city of Athens.

For conference information, visit <http://hsnt.gr/1st-icwndt-2018/>, or contact Professor Ioannis Prassianakis, Conference President and Chairman of the Organising Committee, fax: +30 21 0 772 3759 / +30 69 7 741 6789 or email: prasian@central.ntua.gr / hsnt@hsnt.gr

EUROPE

12th ECNDT

GOTHENBURG-SWEDEN-2018

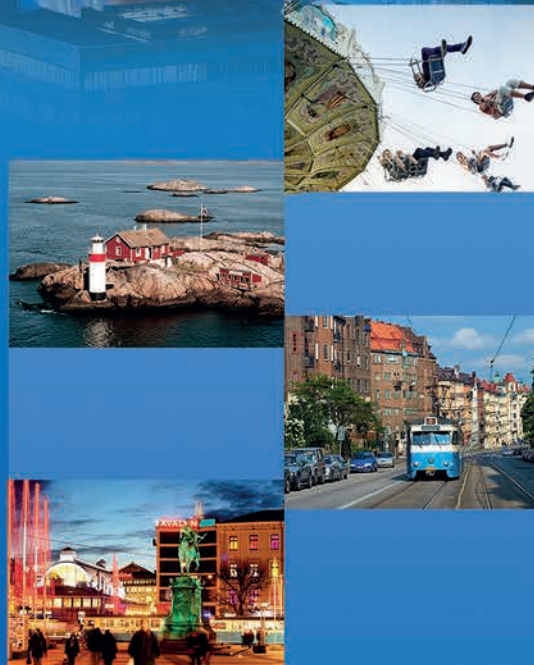


WELCOME TO GOTHENBURG

for the 12th European Conference on Non-Destructive Testing
 Swedish Exhibition & Congress Center Gothenburg, June 11–15, 2018



The conference will be arranged within the cooperation of the Nordic countries. The conference venue will be at the Swedish Exhibition & Congress Center in the city center. In connection to the venue is the Gothia Tower Hotel area. Together they represent the largest combined conference and hotel facility in Europe. Gothenburg, the second largest city in Sweden is situated on the beautiful west coast, right in the heart of Scandinavia.



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Photo: Kristel Espinóte, Dick-Gilberg, Jorma Valkonen, Gothia Towers/Svenska Mässan, Kjell Holmner

go:teborg

8th International Conference on Certification and Standardization in NDT *Five years of EN ISO 9712 – What's next/how to go on?*

Report by Tony Wooldridge, ICNDT ICEC Secretary

A very successful 8th International Conference on Certification and Standardization in NDT was held in Vienna, Austria, from 6-7 June 2017. This conference explored the extent to which the international standard on the certification of personnel (ISO 9712) has worked well and examined aspects that could be improved.

The Austrian Society for NDT (ÖGfZP) organised this important event on behalf of the global NDT certification community in cooperation with the German and Swiss NDT societies (DGZfP and SGZP, respectively) under the umbrella of EFNDT.

The conference was opened by Stefan Haas, the President of the Austrian Society for NDT, ÖGfZP, followed by an address from Franz Resetar, the Federal Minister of Science, Research and Economy, and a welcome from Gerhard Aufricht, Managing Director and Vice President of ÖGfZP and Lead Conference Organiser.



Members of the ICNDT Working Group for Qualification and Certification (WG1), who met in Vienna

During the last five years, since the introduction of ISO 9712 in 2012, it has become clear that the standard has been interpreted and implemented differently around the world. In the interest of harmonisation, it was important to exchange experiences in implementation and explore how best to minimise the differences in implementation.

This certification conference provided the optimal platform to capture the opinions of experts from industry, certification and standardisation. It was also very timely, since the ISO committee (ISO TC 135/SC7), which is considering revisions to ISO 9712, requires formal responses to its consultation by early September 2017. A meeting of the ICNDT Working Group for Qualification and Certification (WG1) was held alongside the conference, primarily to help formulate an ICNDT view on the desirable changes to ISO 9712.

28 speakers from 15 nations all over the world provided their personal views of the necessary or desirable changes to ISO 9712 and the current status of the standard in their countries. 80 delegates from 29 countries participated in discussions on the preferred way forward. Papers and pictures from the conference are available at www.oegfzp.at

Several speakers discussed how the responsibilities for ensuring NDT inspectors are suitably qualified should be shared between the certification body and the employer. The adequacy of training and experience is primarily the responsibility of the employer and it might be preferable to redefine training requirements more in

terms of learning outcomes rather than hours spent training.

Speakers from many countries outlined how training is being specified to meet the requirements of the work and systems are being set up by employers to monitor the completeness of the training.

Currently, ISO 9712 allows renewals to be made after five years by a review of evidence demonstrating continued practice and competence but without examination. There was a majority view (admittedly not unanimous) that renewal without examination should be replaced by recertification, but that the examination could be simplified provided there is adequate evidence of continued competent practice.

Sometimes the implementation of ISO 9712 is adapted to suit the local requirements. For example, in Russia the qualification examination may take place at the employer's premises and in Brazil there are examination centres that rotate around the country according to need. In both cases the requirements for confidentiality and security need to be met.



28 speakers from 15 nations presented at the 8th International Conference on Certification and Standardization in NDT

The final paper of the conference was presented by Sajeesh Babu, Chairman of ICNDT, who outlined his vision for the future. He believes that personnel certification will be heavily based on ISO 9712, with increased emphasis on standardised exam questions and practical examinations. The Multilateral Recognition Agreement (MRA) operated by ICNDT will be important in enabling inspectors certificated by one body to be recertificated by another body in a different country.

In summary, this was a very successful and effective meeting, which has helped develop valuable suggestions to improve the interpretation and implementation of ISO 9712 and the harmonisation of certification more generally. These suggestions will be central to ICNDT's input to the review of ISO 9712.

International Workshop – IXth NDT in Progress 2017

9-11 October 2017
Prague, Czech Republic

ndt2017.it.cas.cz

AFRICA



SAINT

THE CORNERSTONE OF ENGINEERING

**NON DESTRUCTIVE TESTING
CONFERENCE**

SAVE THE DATE

**7TH - 8TH
February 2018**

CELEBRATING

50
Years In NDT

VENUE

**Accolades Conference Centre,
Midrand, Gauteng, South Africa**

Programme To Follow

www.freepik.com/free-vector/crystal-cube/images: www.freeimages.co.uk

The involvement of the IAEA and AFRA in the promotion of advanced NDT techniques in African countries

Report by Professor Farid Herelli (Tunisia), Honorary Member of ICNDT, Past Project Scientific Consultant for IAEA-AFRA (1998-2008) and Former Chairman of AFNDT(2006-2008)

The important role that the International Atomic Energy Agency (IAEA) and the African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA) are playing in promoting the use of non-destructive testing (NDT) in Africa is well known.

The IAEA, under its various programmes, such as individual country technical cooperation (TC) projects and regional projects, has enabled many countries in the region to acquire basic technical expertise, infrastructure and NDT equipment.

The IAEA and AFRA programmes have contributed to the establishment of two regional designated centres (RDCs), which are providing training leading to internationally-accepted qualification and certification of NDT personnel and the technical skills of the adapted training centres.

It is well known that industrial developments must be closely related to the application of quality and safety controls. The development of accepted quality and safety standards in manufacturing and engineering is a long-term process requiring well-qualified manpower.

One of the most important conditions of successful industrial development is the proper practice of NDT.

Knowing the importance of NDT in the promotion of economic growth, many African states have constantly participated since 2012 in the African Regional Cooperative Agreement for Research, Development and Training related to the Nuclear Science and Technology (AFRA) project in non-destructive testing.

Since 2013, the IAEA and AFRA have introduced specific NDT projects and have been involved in other projects related to skills development and human resources in capacity building.

Through the assistance of the IAEA and AFRA, the majority of participating countries have settled basic infrastructure and equipment in order to make the missions easier.

Thanks to IAEA fellowships and group training courses, a number of NDT practitioners have been certificated to Level 1, 2 or 3 in the four basic methods of radiographic testing (RT), ultrasonic testing (UT), magnetic particle testing (MT) and liquid penetrant testing (PT).

To enhance regional self-reliance in NDT training, the first Level 3 examinations were held in Africa under project RAF/8/032.

During 2003 and 2004, three regional training courses followed by examinations for Level 3 were supported by the IAEA at the two AFRA Regional Designated Centres (RDCs) and candidates were screened according to the access conditions laid down by ISO 9712.

By the end of 2007, four anglophone and three francophone training courses leading to examinations were held. NDT practitioners from 14 member states have benefitted from this initiative and over a hundred NDT personnel have obtained Level 3 from the two RDCs. About 50% of the candidates presented for the examinations passed. This is within the range of internationally-observed limits and it can therefore be concluded that the capability to train and certificate NDT personnel to Level 3 has been firmly established within the region.

Previous AFRA projects have made significant achievements as reported above, however, there are outstanding constraints that need to be addressed. These relate to the sustainability

of the NDT facilities to provide services in training and/or inspection.

The present five-year project, AFRA/8/043, 'Promoting Sustainability of Non-Destructive Testing Facilities', seeks to address these constraints. The main issues addressed in this project are:

- Development and implementation of a regional training and certification strategy for Level 1, 2 and 3 NDT personnel
- Enhanced competitiveness of NDT inspection service facilities through good managerial practices, including quality management, financial, marketing and strategic planning
- Strengthened sustainability of NDT facilities through promotion of income generation activities.

To ensure the consolidation of achievements, it is recommended that each beneficiary country:

- Settles the necessary structures for the training and certification of personnel according to the international norms described in ISO 9712 and the recommendations of ICNDT
- Encourages the establishment of technological partnerships and mutual recognition among African countries
- Encourages the teaching of engineering techniques in schools of engineering and technical colleges and prepares them for the concept of third-party certification
- Markets intelligence, scans for technologies offering competitive advantages and keeps up to date with scientific/technological changes
- Establishes clear national policies and regulations
- Uses new management approaches and management skills (TQM – organisational transformation and so on), clear programme plans and business plans with qualified objectives and indicators
- Encourages relationships between research, development and commercial activities
- Encourages African countries to set up scientific societies to promote the use of environmental technologies in the field of safety of goods and people and protection of the environment
- Encourages access to countries and becomes a member of ICNDT through the African Federation of Nondestructive Testing (AFNDT)
- Respects the ethics in all activities
- Maintains and consolidates credibility.

Conclusions:

- The impact of the IAEA and AFRA projects in member states is very significant and positive
- The interaction that takes place in fellowship training, scientific visits and expert missions is invaluable exposure to the standards and capabilities of the region. This makes a substantial contribution to increased regional self-reliance as members of AFRA learn about the resource capabilities and capacities of each country
- The availability in the region of certificated NDT practitioners and equipment has allowed companies in member states to rely on local personnel to carry out non-destructive testing work that would have been carried out by external human resources.

PAN-AMERICA

News from the American Society for NDT

2017 ASNT topical in review

This year's topical conferences were a tremendous success. From in-space inspection to petroleum pipeline analysis, ASNT created atmospheres of knowledge sharing and education for industry stakeholders.

In-Space Inspection Workshop (ISIW)

Dr Bonnie Dunbar, a well-known astronaut and Professor at Texas A&M university, gave a keynote talk on dealing with in-space spacecraft damage over the history of human spaceflight and its importance to NASA's current and future programmes. George Studor, Chairman and organiser of ISIW 2017, said: "I was encouraged that ASNT NDE leader, Jack Duke, was so excited about the success of this workshop that he approached me during the workshop to see if we could arrange for another ISIW in 2019!" This is quite an endorsement for this, the newest of ASNT's topical conferences.



ASNT President Dave Bajula at the 2017 ASNT In-Space Inspection Workshop (ISIW)

NDT of Composites

NDT of Composites presented many opportunities for NDT professionals, students and anyone anticipating working with composites in our ever-changing world to exchange information on existing, new and developing methods of NDT for composite materials and fabrication techniques. The event kicked off with keynote presenter Steve LaRiviere, from Boeing, giving a presentation on NDT/NDI/NDE within the composite build value stream through the service life for commercial aeroplanes.

International Chemical and Petroleum Industry Inspection Technology Conference (ICPIIT)

2017 saw the 15th presentation of the ICPIIT Conference. As an eagerly anticipated industry event, this year's conference did not disappoint. Not only did attendees earn recertification points and have the opportunity to attend post-conference seminars for continuing education units, guests were treated to an entertaining social programme led by event co-host, the ASNT Greater Houston Section.

Digital Imaging

Digital Imaging is ASNT's longest running topical conference. Held immediately before Ultrasonics of NDT, Digital Imaging has become a key link between users and suppliers of radiographic technology. The tone for this year's conference was set by keynote speaker Francisco Miranda, from Pratt & Whitney, who gave a talk on 'Aerospace trends and challenges to NDT'.

Ultrasonics of NDT

Debuting at this year's conference was a short course by Zetec's Daniel Richard, titled: 'Fundamental basis of full matrix capture (FMC) and total focusing method (TFM) technology'. The

Ultrasonics of NDT topical conference is a biennial conference for sharing and gaining knowledge on industry developments and real-world UT applications.

A year of computer-based testing at ASNT

The summer of 2017 welcomed the first anniversary of ASNT's transition to computer-based testing (CBT). ASNT certification candidates have had the benefit of a consistent, controlled testing environment that ensures the integrity and security of the exam and those taking the test.

The worldwide network of test centres meets the diverse needs of ASNT's international membership.

Music city hosts the 2017 ASNT Annual Conference

The 2017 ASNT Annual Conference will be held in Nashville, Tennessee from 30 October to 2 November at the Gaylord Opryland Resort and Convention Center. One of the largest gatherings of NDT professionals and stakeholders, the ASNT Annual Conference provides a rich experience for all attendees. From dynamic speakers to innovative solutions in the exhibition hall, this year's conference will be a memorable event. Registration is currently open. Advance registration discounts end on 27 October (register before 5 October for a special discount rate).

ASNT'S STEM outreach is growing

The ASNT Day of STEM, hosted at the 2017 Research Symposium, was an overwhelming success with greater numbers of students and educators (compared to past events) interested in learning more about or pursuing NDT. Students rotated through several stations that demonstrated NDT principles. A station that is always a favourite is a trip to the exhibition hall. Exhibitors discussed their personal NDT industry stories and their company's products and services.

ASNT also exhibited at the National Science Teachers Association (NSTA) STEM Forum for the first time. What better way to set the stage for science teachers to discover NDT than to meet them at their association's largest gathering?



ASNT exhibiting at the 2017 National Science Teachers Association STEM Forum

ASNT ACCP changes are coming

ASNT's ACCP certification scheme is being revised to better align with ISO 9712 standards. Amy Bereson, ASNT's Executive Director, attended ISO meetings in Vienna this summer to bring ASNT's voice to the conversation regarding industry standards. James Bennett, ASNT's Chief Technical Officer, is leading ASNT's efforts to evaluate ASNT's current programme and identifying aspects to improve upon such as the inclusion of psychometrics in the validation of examination development.

Mission accomplished: COTEQ 2017 achieves its objective

In bringing together almost 900 individuals in Rio de Janeiro, the 14th edition of the Conferência sobre Tecnologia de Equipamentos Equipment Technology Conference – COTEQ 2017 was evidence of resilience in the face of the uncertain period Brazil is experiencing. The combined efforts of the four entities supporting the meeting guaranteed its success: ABENDI, Associação Brasileira de Engenharia e Ciências Mecânicas – ABCM (Brazilian Association of Engineering and Mechanical Sciences), Associação Brasileira de Corrosão – ABRACO (Brazilian Association of Corrosion) and the Instituto Brasileiro de Petróleo, Gás e Biocombustíveis – IBP (Brazilian Institute for Oil, Gas and Biofuels), in addition to the support rendered by technical and executive committees. In the end, the results were positive: the meeting addressed many subjects, with 64 lectures, 20 round tables and panels, 138 technical works, three conferences and 40 exhibitors. Representatives of the following NDT bodies attended the event: the American Society for Nondestructive Testing (ASNT), the World Organisation for NDT (ICNDT), the NDT Mercosur Committee for Standardisation and the NDT Pan-American Federation.

The conference included a useful and interesting session on underwater activities and drones in inspection applications and important new certification developments were announced, including: ‘Certification of personal competences by structured credit in ultrasound and magnetic particles in pipes and sheets’ and ‘Certification of personal competences by structured credit Levels 1 and 2 in forged ultrasound’.

Another important development was the renewal of the ABENDI and ASNT cooperation agreement for the next three years. In general, the partnership foresees cooperation during events, with the participation of both entities’ representatives during congresses, both in Brazil and the USA, as well as the self-promotion of special sessions and delivery of lectures, mutual access to publications and the exchange of experiences. During the meeting, it was also decided that ASNT will present

a special session on the aerospace sector during the Congresso Nacional de Ensaio Não Destrutivos e Inspeção – ConaEnd (National Congress of Non-Destructive Testing and Inspection), scheduled to take place during August 2018. As for ABENDI, it will hold the 2ª Edição do Fórum de Gerenciamento de Integridade de Linhas Flexíveis (2nd Forum on Flexible Risers Integrity Management (FRIM)), during the ASNT Annual Conference in October.



Almost 900 people attended COTEQ 2017

Representing ASNT during the meeting were Kevin Smith, Chairman of the Board of Administration, and Army Berenson, Executive Director. Representing ABENDI were Marcelino Guedes and João Rufino, former Chairmen, and João Conte, Irani Oliveira and Antonio Aulicino, Executive Director, Executive Manager of Associative Activities and Institutional Relations Manager, respectively.

For additional information, visit: www.abendi.org.br

27th ASNT Research Symposium 2018

26-29 March 2018

DoubleTree by Hilton, Universal Orlando, Florida

Theme: Advancing NDE Technologies, Research and Engineering in a Changing World

Presentation sessions include:

- NDE materials characterisation
- NDE engineering
- NDE for additive manufacturing
- NDE for aerospace/composites
- NDE for civil infrastructure
- NDE for railroads
- Advanced/emerging NDE methods
- Automation/robotics in NDE
- Radiography
- NDE reliability
- Thermal NDE methods
- Ultrasonics

www.asnt.org

Bienvenue à Québec!

From 6-8 June 2017, Québec City saw a spike in technology and knowledge, all thanks to the NDT in Canada 2017 Conference. The conference brought professionals from all walks of life together in the beautiful province of Québec to discuss the latest technologies, trends and tools within the non-destructive testing industry.

The conference, now in its 8th year, began on the evening of 6 June with an official opening address during the Mix 'n' Mingle event from Glenn Tubrett (CEO, CINDE), Kevin Woit (Vice President – Central Region, Acuren/Past Chair, CINDE) and Fulvio Mini (President, Expertises UberSpec Inc/National Chair, CINDE). Fulvio Mini let the audience know what was in store for the next two years during his time as National Chair and issued a challenge to members to help grow the society and the industry as a whole by becoming more engaged in the non-destructive testing community: "With your help, CINDE will continue to evolve to meet new challenges, enhance what we can offer to our membership and the NDT community and continue to encourage the next generation of NDT professionals as they make their way into (and through) this fantastic industry."



Fulvio Mini (CINDE National Chair) gives an impassioned welcome speech during Mix 'n' Mingle on 6 June 2017

As his first act as National Chair, Fulvio Mini encouraged CINDE to sign a memorandum of understanding (MOU) to cooperate with Women in Nuclear (WiN) Canada, an organisation that works to emphasise and support the role that women can and do have in addressing the general public's concerns about nuclear energy and the application of radiation and nuclear technology.

The NDT in Canada 2017 technical tracks began after a keynote provided by Philippe Dauphin (Director General, CanmetMATERIALS). He provided an overview of the strategic priorities of the Natural Resources Canada (NRCAN) National NDT Certification Body and key programme updates to certification.

With the end of the first keynote, the technical sessions for the day began. Experts discussing the latest advancements in tools and technologies graced the conference stages and transferred their knowledge to those in attendance. Delegates could schedule talks,

browse exhibitors and engage with others in the industry.

In the evening, delegates were able to attend a dinner at Le Parlementaire (Québec Parliament) in what turned out to be one of the best conference dinners in the history of the event.



Heather Kleb (WiN – Canada) and Glenn Tubrett (CINDE) sign the MOU at the conference

At the end of the evening, CINDE had many awards to provide to deserving individuals in the NDT community. The first award of the evening was the prestigious Havercroft Award. Established in 1977, this award is named after William E Havercroft, who was widely recognised as a pioneer in the field of NDT in Canada. It is given to a member of CINDE who has made an outstanding contribution towards NDT in Canada. This year's recipient was Dr John Baron of Folville Consulting.

Continued on page ten



The beautiful main dining hall at Le Parlementaire

11th Regional Conference on Non-Destructive and Structural Testing

XI CORENDE

**4-6 October 2017
Neuquén, Argentina**

www.aaende.org.ar

The Canadian NDT Research Award was the second award presented the evening and the inaugural award in its category. It is awarded to someone for outstanding and sustained excellence within NDT research and development that has contributed to innovation and/or breakthroughs that have benefitted Canadian society and industry partners. After a quick introduction from Dr Anthony Sinclair, the award was presented to Dr Andreas Mandelis, Director of the University of Toronto's Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT).



Dr Andreas Mandelis (left), recipient of the Canadian NDT Research Award and Kevin Voit, Past Chairman of CINDE

More leading-edge research from Canadian institutions was recognised, with another award aimed towards students to help promote engagement in the industry. This was the NDT in Canada Conference Student Poster Award. Students performing advanced NDT research were invited to provide poster presentations at the conference in Québec City. The presentations were judged by five experts and Maxime Bilodeau of Université de Sherbrooke was awarded the first ever NDT in Canada Conference Student Poster Award.

Multiple bursary recipients from the 2016-2017 academic year were also recognised at the conference banquet. Present at the banquet was Michael Pronovost, student of Cegep De Trois-Rivieres. You can read more about the many 2017 bursary recipients online at: www.cinde.ca/awards.phtml or in an article that will be published in the September/October *CINDE Journal*.

The final day of the conference brought an exciting keynote from Gabriel Filippi, alpinist and professional speaker. During

his keynote, he engaged the NDT in Canada 2017 audience through action-packed stories of preparedness, careful planning and attention to detail – hallmarks of the non-destructive testing industry.



Maxime Bilodeau (left), recipient of NDT in Canada Conference Student Poster Award with Fulvio Mini



Fulvio Mini (left) presenting the Havercroft Award to Dr John Baron

ASNT Annual Conference 2017

30 October-2 November 2017
Nashville, Tennessee, USA

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ASIA-PACIFIC

15th APCNDT 2017 SINGAPORE

Asia Pacific Conference for Non-Destructive Testing

NDT for Enhanced Safety, Quality and Productivity

November 13 - 17, 2017
Marina Bay Sands Convention Centre, Singapore

EVENT SPONSORSHIP LEVELS AND BENEFITS

Technical exhibition showcasing the very latest in NDT technologies, instrumentations and systems will be on display during the conference. The exhibition will also provide an opportunity to the delegates to interact with NDT service providers. We will be expecting about 800 delegates and visitors.



Please scan QR Code below
for sponsorship information

www.apcndt2017.com



CALENDAR OF NDT EVENTS

Month	Date	Venue	Event	Contact
September 2017	3-7	Prague Czech Republic	Joint European Corrosion Congress 2017 and 20th International Corrosion Congress & Process Safety Congress 2017	eurocorr2017@guarant.cz www.eurocorr2017.org
	4-6	Bernardin Slovenia	14th International Conference on the Application of Contemporary NDT in Engineering	janez.grum@fs.uni-lj.si www.fs.uni-lj.si/ndt
	4-7	Madeira Portugal	2nd International Conference on Structural Integrity (ICSI 2017)	icsi@inegi.up.pt www.icsi.pt
	4-8	Potsdam Germany	7th European-American Workshop on Reliability of NDE	tagungen@dgzfp.de www.nde-reliability.de
	5-7	Telford UK	56th Annual British Conference on NDT and Materials Testing Exhibition	conf@bindt.org www.bindt.org
	6-8	Saclay France	XXII International Workshop on Electromagnetic NDE (ENDE 2017)	ende2017@cea.fr www.ende2017.fr
October 2017	4-6	Neuquén Argentina	11th Regional Conference on Non-Destructive and Structural Testing (XI CORENDE)	corende2017@aaende.org.ar http://www.aaende.org.ar/corende2017/
	9-11	Prague Czech Republic	International Workshop – IXth NDT in Progress 2017	ndt2017@it.cas.cz ndt2017.it.cas.cz
	30-2 Nov	Nashville, Tennessee USA	ASNT Annual Conference 2017	conferences@asnt.org www.asnt.org
November 2017	8-10	Xiamen China	9th International Symposium on NDT in Aerospace	c.boller@mx.uni-saarland.de aero.nuaa.edu.cn/NDT2017/Home.html
	13-17	Singapore	15th Asia-Pacific Conference for NDT (APCNDT)	secretariat@apcndt2017.com www.apcndt2017.com
	22-24	Turin Italy	12th International Conference on Non-Destructive Investigations and Microanalysis for the Diagnostics and Conservation of Cultural and Environmental Heritage (Art '17)	art17@aipnd.it www.aipnd.it/art2017/
December 2017	14-16	Chennai India	Indian Society for NDT National Conference and Exhibition 2017	convenor@nde2017.com www.nde2017.com