



The World Organisation for NDT

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CHAIRMAN'S MESSAGE

We continue to promote the importance of NDT

This issue of the *ICNDT Journal* has been published to coincide with the 19th World Conference on Non-Destructive Testing (19th WCNDT) in Munich, Germany, where the 38th and 39th meetings of the full International Committee for NDT will be held.

A look backwards

I have been privileged to attend each ICNDT meeting since the 19th (in the Netherlands) in 1985. Based on past experience, I expect the majority of the ICNDT membership to gather and share their experiences and views on the future activities of ICNDT. Over the past 31 years, ICNDT has grown in both stature and effectiveness and hopes, through planned organisation changes and better integration with the regional federations, to continue this improvement into the future. In retrospect, it seems remarkable to think that in 1985 we had no PCs, no email and no internet, so agendas and minutes were typed on a typewriter and posted out to members!

In 1992, ICNDT set up the Policy and General Purposes Committee (PGPC) with representatives from the regions and in 1998 began to hold a full ICNDT meeting (General Assembly) halfway between world conferences. These changes were embodied in a new constitution adopted at the 27th meeting in Rome and ICNDT also began the process of building a family of operating procedures to organise how we work. ICNDT benefited from the provision of a Secretariat by the Italian Society for NDT (AIPnD) and the enthusiasm of the new Chairman, Giuseppe Nardoni. I was elected General Secretary.

At the 2004 elections in Montreal, coinciding with the 16th WCNDT, Douglas Marshall became Chairman and CINDE took over as Secretariat. The next major step forward came on 1 May 2008, when ICNDT became a not-for-profit legal entity, registered under Austrian law and with a modified constitution to reflect this.

In 2008, at the 17th WCNDT in Shanghai, I was elected Chairman, David Barnett (Australia) elected General Secretary and Gerhard Aufricht (Austria) elected Treasurer. The additional elected members were Wayne Holiday and Matthias Purschke. The British Institute of NDT (BINDT) was elected to provide the Secretariat. A fee structure was agreed. A very notable workshop was also held involving ISO and CEN, which successfully argued the case for a single international standard to combine ISO 9712 and EN 473. The ISO and CEN Committees agreed to work together on this, leading to the unified standard published in 2012.

At the 2012 elections, held at the 18th WCNDT in Durban, Gerhard Aufricht and I were re-elected and Sajeesh Babu (Singapore) became General Secretary. Younho Cho (Korea) and Sharon Bond (Canada) were elected as the additional members.

Nowadays

At the 39th meeting in Munich, a new ICNDT Executive Committee will be elected, including a new Chairman and General Secretary. I am stepping down as ICNDT Chairman and Douglas Marshall completes his term of office as Immediate Past Chairman, as do our additional elected



Continued on page three

CONTENTS

News.....	1, 3
19th WCNDT.....	2
European Regional Group	4-5
Africa Regional Group	6
Asia-Pacific Regional Group.....	7
Pan-American Regional Group...	8-10
Calendar of Events.....	12

ICNDT Awards 2016 – winners announced

At each World Conference, ICNDT presents awards to people and organisations that have made major contributions to NDT.

The winners are chosen by secret ballot of the members of the ICNDT Policy and General Purposes Committee, from nominations submitted by member societies.

It is endeavoured to announce the winners in good time, hopefully allowing them to make arrangements to attend the conference in Munich in order to receive their awards.

There are five awards:

- **Roentgen Award** for major contribution to the science and technology of NDT
- **Pawlowski Award** for major contribution to the promotion of NDT internationally
- **Havercroft Award** for major contribution to NDT education, training or certification
- **Sokolov Award** for major contribution to NDT research
- **ICNDT Young Achiever Award** for achievement of young people in NDT (<35 years).

The 2016 winners are:

- **Roentgen:** Professor Tony Dunhill
- **Pawlowski:** Dr Mike Farley
- **Havercroft:** Roger Lyon
- **Sokolov:** Professor Dr -Ing Hermann Wüestenberg
- **Young Achiever:** Dr Alexander Machikhin.

Congratulations to all winners! Awards will be presented at the opening ceremony of the 19th World Conference on Non-Destructive Testing (19th WCNDT), in Munich, Germany, on Monday 13 June 2016.



ICNDT Journal



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

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

World Conference on Non-Destructive Testing

19th WCNDT 2016

13-17 June 2016
Internationales Congress Center München (ICM), Munich, Germany

Topics include:

- Structural engineering
- Materials characterisation
- Modelling and data processing
- Medical products
- Energy generation
- Standards and training
- New methods

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ICNDT, EFNDT, ISO and other meetings at WCNDT 2016

Day/Date/Time	Event	Venue
Saturday 11 June (13:00-18:00)	ICNDT WG1 Meeting	Saal 21, 2nd floor
Sunday 12 June (08:00-10:00)	ICNDT Executive Committee Meeting	Saal 21, 2nd floor
Sunday 12 June (10:00-13:00)	ICNDT PGP Committee Meeting	Saal 21, 2nd floor
Sunday 12 June (evening)	Reception for DGZfP Members, ICNDT Executive Committee Members, ICNDT PGP Committee Members and WG1 Members	Venue to be confirmed
Monday 13 June (08:00-13:00)	Conference Opening	Saal 1
Monday 13 June (13:00-15:00)	Exhibition Opening	Venue to be confirmed
Monday 13 June (13:00-19:00)	Pan Am Federation	Königsee meeting room, 2nd floor
Monday 13 June (evening)	Exhibition and Poster Evening	Poster and exhibition area
Tuesday 14 June (08:00-13:00)	ICNDT General Assembly 1	Restaurant Seeblick, 1st floor
Tuesday 14 June (13:00-19:00)	EFNDT Board of Directors	Saal 22, 2nd floor
Tuesday 14 June (evening)	EFNDT Certification Executive	Saal 22, 2nd floor
Wednesday 15 June (08:00-13:00)	EFNDT General Assesmbly	Restaurant Seeblick, 1st floor
Wednesday 15 June (14:00-18:00)	Academia NDT	Venue to be confirmed
Wednesday 15 June (14:30-19:00)	EFNDT – ASNT	Saal 21, 2nd floor
Wednesday 15 June (evening)	Social Evening	Allianz Arena
Thursday 16 June (09:00-12:00)	Social Media Workshop	Saal 22, 2nd floor
Thursday 16 June (13:00-19:00)	ICNDT General Assembly 2	Restaurant Seeblick, 1st floor
Thursday 16 June (evening)	Social event – 'Oktoberfest'	Venue to be confirmed
Friday 17 June (09:00-13:00)	Qualification & Certification Workshop	Saal 22, 2nd floor
Friday 17 June (13:00-14:00)	Closing Ceremony	Venue to be confirmed
Friday 17 June (13:30-18:00)	e-Learning Workshop	Saal 22, 2nd floor

Chairman's message continued from front page

members, Sharon Bond and Professor Younho Cho. Patrick Fallouey (ICEC Chairman) and Robin Shipp (ICEC Secretary) are also stepping down. Robin's successor, Tony Wooldridge, has started work and, after his service as Vice Chairman, it is expected that Harold Jansen will be elected as the new ICEC Chairman.

ICNDT has been very well supported over the last four years by a strong Executive Committee, Committee/Working Group Chairmen and the Secretariat. On behalf of the membership, I would like to thank all of them for their hard work, including their attendance at many internet meetings – some late at night and others early in the morning! The availability of internet meetings has greatly enhanced the ability to meet without the expense or time involved in international travel and has opened up new possibilities for international collaboration in specialist areas.

The new Executive Committee will be elected in Munich and I am delighted we have some very strong nominations, which will lead to a strong Executive Committee and Secretariat with a broad geographical background.

Review of structures of ICNDT and regional groups/federations

Also in Munich, there will be a vote on the unanimous recommendations of the Task Group on Review of Structures of ICNDT and Regional Groups/Federations. These recommendations build on the changes approved in principle by the ICNDT General Assembly in Prague in 2014. The integrated organisation and revised fee structure has been developed by a task group with representatives from each regional group/federation and should be endorsed by the PGPC and approved at the General Assembly.

The future

There remains much for the ICNDT to do as it continues to promote the importance of NDT and condition monitoring (CM) in the quest for a safer world. Its actions in the field of training and certification over many years have led to international standardisation, a degree of harmonisation and some mutual recognition. This needs to be pursued further and more attention given to other actions that could improve the quality of NDT and CM. More attention should also be given to communicating its guidance and recommendations to end-users and regulators, including the:

- updated *ICNDT Guide on Qualification and Certification of NDT Personnel*
- new *ICNDT Guide on Qualification and Certification of Condition Monitoring Personnel*
- *ICNDT Guide on Education and Training for NDT* (2015)
- *ICNDT Guide on the Importance of NDT and NDT Research* (2015).

The ICNDT Executive Committee and other committees and working groups have been encouraged to suggest items for inclusion in the next ICNDT Strategic Plan, which will be presented to the members in Munich by the new Chairman. Some of the ideas are given below:

Action Plan 1: Support for NDT societies

- Organise a 'Survey Monkey' questionnaire to seek the views of the membership on how support can best be provided.
- Organise more frequent communication with members. Continue with the *ICNDT Journal*, the Facebook page, news emails and input to NDT.net
- Set up a series of ICNDT International Forums, in conjunction with conferences and ICNDT GA meetings, on sharing best practice. Collaborate with IAEA where appropriate.
- Participate in national NDT conferences to advertise ICNDT activities and foster the participation of each national society.
- Promote recommendations to encourage external operations of larger societies whilst fully recognising/encouraging new, fledgling and smaller societies.

Action Plan 2: Promotion on the importance of NDT

- Produce case studies for journals and promote sessions at world and regional conferences that demonstrate the value of NDT.
- Map multinational external bodies and websites that have interests in NDT and make them aware of ICNDT.
- Continue ISO liaison membership of TC 135: NDT and TC 108: Condition Monitoring.
- Build on progress to date and establish an upgraded website linked to members' websites, in order to provide an intelligent NDT information portal.
- Ensure quality input (in both English and other languages) to *Wikipedia*, including links to 'approved' sites.
- Prepare a report on NDT for managers, using IAEA as a possible collaborator.
- Collaborate with BINDT action to assess total market and employment in NDT, CM and structural health monitoring (SHM).

Action Plan 3: Qualification and certification

- Regular workshops leading to recommendations to ISO, for example on ISO 9712.
- Prepare *ICNDT Guidelines on Human Factors on Reliability of NDT*, executed by certificated personnel.
- Actions related to ISO 9712.
- Review options for ICNDT certificates based on the MRA Schedule II bodies with a fee, following the example of IIW certification.
- Update XLS, which compares the implementation of ISO 9712 by different Personnel Certification Bodies (PCBs).

- Establish a Task Group to discuss if NDT societies/PCBs could assess and approve employers' certification to ICNDT requirements:
 - ISO 9712 Technical Requirements and SNT-TC-1A (for NDT).
 - ISO 18436 Technical Requirements and SNT-TC-1A (for CM).
 - Job-specific needs.
- Set up a Task Group to discuss if NDT societies/PCBs could establish a committee of suitable experts to provide a 'governing body' to oversee inspection qualification.
- ICNDT to set up a register of approved independent Level 3s (for CM category 3s or 4s) with which respective end users could engage to control NDT/CM activities on-site.

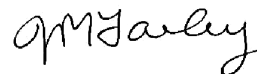
Action Plan 4: Education and research

- Sponsor international specialist groups (ISGs), each hosted by a member society. ISGs will be open to all members of NDT societies in ICNDT:
 - Full matrix capture (BINDT).
 - Terahertz imaging (BINDT).
 - Microwave NDT (ASNT).
 - Magnetic memory method (RSSNDT).
 - NDT of art and heritage (BINDT).
 - NDT reliability (DGZfP)
- Promote more widely the *ICNDT Guide on the Importance of NDT and NDT Research*.

Action Plan 6: Condition monitoring

- Support the ISCM World Conference in 2017 and ensure strong participation of CM at the 20th WCNDT.
- Create a register of research organisations in CM and diagnostic technologies – circulate proforma to collect information and publish on both the ICNDT and ISCM websites.
- Survey members about training and certification in different CM countries.
- Prepare a paper for the two certification committees in ISO recommending that a Level 3 awareness of the other should be included as a topic.
- CM/NDT joint grant application with ICNDT/ISCM involvement as a dissemination partner (for example the EU Project Horizon).

Finally, to those who are present at the 19th WCNDT, please enjoy Munich and the opportunities to network and share your knowledge and experience. If you are reading this but were not able to join us, please keep in touch through the ICNDT website: www.icndt.org



Dr J M Farley,
Chairman, ICNDT

EUROPE

Spanish Society successfully runs blended training course

Last April, the Spanish Society for NDT (AEND) successfully conducted a pilot blended training course on ultrasound Level 2 at its training centre. The course began with the online part, by means of e-learning, and ended with the classroom part, which was highly practical.

Various students with very specific profiles participated in the pilot course. They were carefully chosen to be similar to the students for whom the course was designed. The aim was to evaluate the contents, the suitability of the outlined homework and exercises, the study times and so on, so as improvements could be made before offering the course to the public.

The results obtained were very good, due to the inclusion, in the online part, of explanatory, audiovisual material, as well as the use of an ultrasound simulator, allowing the classroom part to start from a practical knowledge base. This led to great productivity with regard to practices developed successfully during a week of concentrated classroom tuition, which is indispensable in NDT training.

Thus, it was observed that the knowledge and skill levels attained by these students exceeded those reached in traditional classroom courses. This reinforced AEND's conviction to further develop this type of mixed training, which is more adapted to modern times and the new demands of clients.



Students, staff and teacher at the pilot blended training course conducted by the Spanish Society for NDT (AEND)

NDT2016

55th Annual Conference

Monday 12 to Wednesday 14
September 2016

East Midlands Conference Centre and
Orchard Hotel | Nottingham, UK

There will be three parallel technical sessions covering a broad range of NDT technologies and applications. A table-top exhibition of NDT-related products will run alongside the conference.

Topics include:

Rail and axle testing • Aerospace • Power generation
Nuclear • NDT of food • NDT in forensic science • Composites
Inspection qualification • Automated and robotic NDT
Theoretical modelling • Phased arrays • Electromagnetics
Radiography • Monitoring • Adhesives and bonding
Thermography • Ultrasonics • Novel techniques • Research
Digital radiography • Digital signal processing and imaging
Time-of-flight diffraction • Technology transfer in NDT
Medical and related NDT • The needs of NDT end-users

Contact: Conference Services,
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Email: conf@bindt.org

www.bindt.org/events/ndt-2016

"The ICNDT is turning over a new leaf" says Gerhard Aufricht

Gerhard Aufricht is Vice President and Managing Director of the Austrian Society for Non-Destructive Testing (ÖGfZP) in Vienna. Not only is he a founding member of the International Committee for NDT (ICNDT) as an Association established under Austrian law, but as ICNDT Treasurer he is also accountable for its financial management. Being a member of the ICNDT Executive Committee (IEC) and also a member of the EFNDT Board of Directors (BOD), Gerhard is familiar with the problems of the Regional Groups. It is due to this know-how, as well as his experience, that he was included in the latest Task Group on Reorganisation.



Gerhard Aufricht, Vice President and Managing Director of the Austrian Society for Non-Destructive Testing

"The current organisational restructuring of the collaboration between ICNDT, the four Regional Groups and the national NDT societies will be of major importance for the progress of global harmonisation," said Gerhard. "The simultaneous rearrangement of the 'fee structure' will considerably improve ICNDT's capacity to act, with regards to future tasks, and enable more efficient cooperation with the Regional Groups."

"With the 39th ICNDT Meeting (General Assembly) on the occasion of the 19th WCNDT in Munich (<http://www.wcndt2016.com>), ICNDT is turning over a new leaf," concluded Gerhard.

COFREND DAYS

Special 50th Anniversary



1967 - 2017

50 ANS

SAVE THE DATE



As the French Confederation of Non Destructive Testing, COFREND organizes every 3 years, the Appointment of the profession through the COFREND Days. This event includes scientific conferences of around 120 presentations and an exhibition on 3000 m². 2017 will be the opportunity to celebrate in Strasbourg the 50 years of COFREND. In order to receive any upcoming communications and information, contact COFREND at pole.communication@cofrend.com and log on our website:



www.cofrend2017.com

AFRICA

The SAINT Professional Body for NDT

The South African Institute for Non-destructive Testing (SAINT) has many strengths, but one of the most important is looking at the needs of individuals within the NDT industry. The SAINT Professional Body for NDT was created in response to requests from individual members of SAINT to raise the level of professionalism in the NDT industry.

The SAINT Professional Body for NDT is a sub-group of SAINT operating with its own constitution, including directors, a board and members.

The main objectives of the SAINT Professional Body for NDT include reconciling the different needs of members and setting both a direction and priorities for the organisation and its membership, leading to professionalism within the industry. One of the most important issues that emerged was to address the professional status of NDT technicians. Therefore, on 11 April 2013, SAINT's Executive Council unanimously decided to pursue a process through the South African Qualification Authority (SAQA) to register a professional body for NDT.

Following application in 2014, the SAINT Professional Body for NDT was formally recognised by SAQA in September 2015. Government acknowledgement of the importance of NDT will now allow participation in the national and regional conversation. The SAINT Professional Body for NDT is accredited by SAQA to issue designations to NDT Operators (Level 1) and Technicians (Level 2). Technologist (Level 3) designation will be added to the scope during 2016.

Membership of the SAINT Professional Body for NDT is available in the following categories:

- **Affiliate Member**

A non-designated person who has an interest in the South African NDT industry or is engaged in NDT activities. The member must possess knowledge and/or practical experience that qualifies them to cooperate with skills development providers in the advancement of their knowledge and practical experience, allowing him/her through a progression pathway to achieve Individual Member status.

- **Academic Member**

A non-designated person with applicable tertiary degree, either in applied sciences or engineering, and applicable NDT (Level 2 or 3) qualification/s who is engaged in NDT activities, such as research, design, manufacture, implementation and evaluation of appropriate methods, techniques or systems related to inspection, qualification, certification and engineering of NDT.

- **Designated Member**

A professionally-designated person in terms of the NQF Act (Act 67 of 2008).

- **Corporate Member**

Companies and organisations authorised/recognised by the SAINT Professional Body for NDT to provide training, examination/assessment and certification to NDT personnel in accordance with ISO 9712. This includes, but is not restricted to, the following:

- National Certification and Qualification Body.
- Authorised Training Body (third-party qualification scheme in accordance with ISO 9712).

- **Honorary Member**

Individuals, organisations or groups who have made a significant contribution to the NDT industry within South Africa over an extended period of time.

During an interim phase ending in December 2017, provision will be made for inclusion of a Responsible Level 3 Member to ensure continuity of the important services these members provide to industry. These members will become the designated technologists following the addition of this designation through SAQA.

- **Responsible Level 3 Member**

This includes, but is not restricted to, the following:

- Responsible NDT Level 3 (first- and second-party authorisation and end-user assessment in accordance with company written practice).

During this period of application, it was decided that a subject matter NDT expert was needed and Garth Appel was appointed to manage the SAINT Professional Body for NDT and compile a Quality Management System (QMS). The QMS will be compliant with ISO 9001 as the SAINT Professional Body for NDT intends to be accredited to ISO 9001 in the future.

"We believe that the enhancement of the status of the professional body, with the emphasis that has been placed by SAQA on the importance of ethics, recognition of prior learning and continuing professional development, is an extremely important development, leading to ever increasing standards of professionalism to the benefit of the NDT industry and society as a whole. In this regard, the SAINT Professional Body for NDT projects to formulate minimum standards, which will certainly contribute significantly to the standard of professional work carried out in the NDT industry," said Garth Appel.

The SAINT Professional Body for NDT liaises with the Manufacturing, Engineering and Related Services Sector Education and Training Authority (MerSETA) by ensuring it has representation on all relevant committees and structures of the SETA. MerSETA, with assistance from the NDT industry, has started the development of occupational qualifications (NDT Technician) for the NDT industry. This qualification is based around International NDT standard ISO 9712 to ensure that it will be recognised in the international market. The SAINT Professional Body for NDT will ensure that the industry training, assessment/examination and certification process is adhered to and meets international and national standards. These qualifications will eventually form the basic requirement for the application of Professional Designations.

The SAINT Professional Body for NDT is a voluntary organisation working to a quality manual modelled around ISO 9001 to assure consistency with the intention of achieving full ISO 9001 compliance and accreditation. Industries (end users) can elect to make professional body designations a requirement for NDT practitioners working on their plant. Members are also required to adhere to a code of conduct.

www.saint.org.za

7th ACNDT 2016

26-28 November 2016

Oran, Algeria

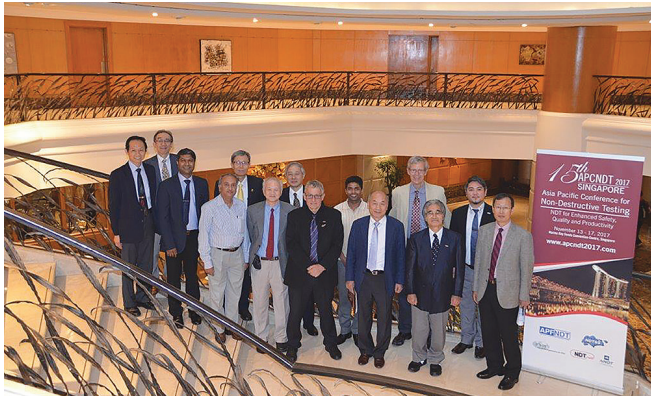
Abstract deadline: 15 July 2016

<http://icwndt.csc.dz/>

ASIA-PACIFIC

News from the Asia-Pacific Federation for Non-Destructive Testing (APFNDDT)

Since formal ratification of the Asia-Pacific Federation for Non-Destructive Testing (APFNDDT) in 2013 in Mumbai, we have been busy formulating structures and policy with regards to the operating procedures for the Federation and also our positions on a number of ICNDT and regional matters.



Members of the APFNDDT Board and GA met in Malaysia in November 2015

The speed with which we may achieve our goals can only be through the uprated meeting schedules we have set ourselves, in that, as and when we can, additional Board meetings are now planned alongside other international events (which a majority of board members attend anyway).

In this manner, we now achieve at least one face-to-face Board meeting every year and a General Assembly every two (albeit a smaller occurrence in the 'off year' of our four-year term).

The formation of Task Groups (TGs), so as to distinguish these from ICNDT WGs, allows us to not duplicate the work of the ICNDT, but rather to leverage off of the great efforts already being done, by the simple selection of existing members of the current WGs and the direct reporting back to the APFNDDT Board. This lessens the actual extra workload, whilst providing direct input (both ways).

In this manner, we have managed to formulate policy much quicker, to react to requests and to provide feedback to ICNDT and regions more readily. The latest of such was with the tight deadlines on feedback in regards ICNDT Structural Changes.

With our last Board and GA meetings scheduled for November 2015 in Malaysia, we were able to fully discuss/debate the 'latest' options currently being provided by ICNDT and then to go out to the Regional Members with a vote on accepting the Board's recommendations. Unfortunately, with the tight timelines, the Regional Members had little time before the General Assembly in November to formulate an earlier response (hence the delayed email vote).

That said, these recommendations were then given to ICNDT, via the Task Group on structural change, in time for its January 2016 meetings.

Obviously, the APFNDDT takes its role within the ICNDT seriously and, given the number of regional societies that we now represent (as well as the growing additions), we will very soon represent approximately one third of all ICNDT voting members.

Therefore, we wish you well and very much look forward to finally getting this new structure off the ground, perhaps with a positive vote in Munich.

Les Dick
APFNDDT General Secretary

Report on the 3rd Iranian International NDT Conference and Exhibition (IRNDDT2016)

The 3rd Iranian International NDT Conference and Exhibition (IRNDDT2016) was successfully held by the Iranian Society for Nondestructive Testing (IRNDDT) in Tehran, from 21-22 February 2016.

In holding this conference and exhibition, IRNDDT enjoyed the close cooperation of the Iranian Society of Technical Inspection and NDT Companies (IRSNT) as well as the support of a host of Iranian universities, scientific societies, organisations and industries. In addition, IRNDDT received the kind support of the International Committee for Non-Destructive Testing (ICNDT) and Academia NDT International. Mr Giuseppe Nardoni, former Chairman of ICNDT and President of Academia NDT International, attended IRNDDT2016 as a special guest and the ICNDT representative. The organisers also appreciated the kind support of the NDT societies of Germany, Italy, Russia, Belarus, South Korea and Malaysia.

Over 600 participants from 11 countries participated in the Conference and Exhibition. 30 companies exhibited their products and services in the 1000 m² exhibition space that was held next to the conference venue. In addition, 65 oral papers and 25 poster papers were presented during the two days of the conference.

IRNDDT2016 included two keynote speeches, eleven technical workshops and three discussion panels. These discussion panels were in the fields of oil & gas, aerospace and the rail industry. A meeting was also arranged for ASNT Level III certificate holders

during the conference.

The Iranian Society for Nondestructive Testing greatly appreciates the support of ICNDT and other parties who helped in making this event a unique and memorable NDT experience for everyone.



The 3rd Iranian International NDT Conference and Exhibition was attended by over 600 participants

PAN-AMERICAN

News from the American Society for NDT

ASNT launches new online 'NDT Library'

The American Society for Nondestructive Testing (ASNT) has unveiled its new NDT Library, a website that provides access to over 1300 papers from ASNT's respected journals, as well as proceedings from its acclaimed conferences and symposia.

The NDT Library, found at <https://ndtlibrary.asnt.org>, offers search capabilities for visitors to access papers and proceedings based on publication type, event, date, author or method, as well as through an advanced search feature to pinpoint specific text.

Access to all papers and proceedings is free to all ASNT members. Non-members may choose to purchase digital versions of any item from the NDT Library site.

ASNT Center for Excellence to open in summer 2016

ASNT is proud to announce the construction of the ASNT Center for Excellence, a multi-purpose facility in Columbus, Ohio, which aims to promote innovative training and best practices for NDT technicians, as well as showcase the newest opportunities in ASNT certifications.

The ASNT Center for Excellence, which will serve as the new location for ASNT's NDT Level III Refresher Courses, will feature numerous state-of-the-art classrooms, as well as cutting-edge technology in NDT practical learning labs. The facility will also have a number of meeting rooms, which will be available for sister societies and partnering organisations to hold meetings, as well as activities for STEM learning opportunities.

The ASNT Center for Excellence is planned to open in the summer of 2016.

Updated standards documents published**ANSI/ASNT CP-105: ASNT Standard Topical Outlines for Qualification of Nondestructive Testing Personnel (2016)**

The newly-approved ANSI Standard, 'ANSI/ASNT CP-105: ASNT Standard Topical Outlines for Qualification of Nondestructive Testing Personnel', replaces the recommended training course outlines that appeared in early editions of Recommended Practice No SNT-TC-1A. The 2016 edition includes updated training references, training outlines for microwave testing and expanded training outlines for thermal/infrared.

ANSI/ASNT CP-189: ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel (2016)

ANSI/ASNT CP-189-2016 is an ANSI standard that establishes the minimum requirements for the qualification and certification of non-destructive testing (NDT) and predictive maintenance (PdM) personnel, including the minimum training, education and experience requirements, as well as criteria for documenting qualifications and certification. This standard also requires the employer to establish a procedure for the certification of NDT personnel and that the employer incorporate any unique or additional requirements in the certification procedure.

Recommended Practice No SNT-TC-1A: Personnel Qualification and Certification in Nondestructive Testing (2016)

Recommended Practice No SNT-TC-1A provides guidelines for employers to establish in-house certification programmes for the qualification and certification of non-destructive testing personnel. Since 1966, employers have used this industry-valued document as the general framework for their NDT certification programmes.

ASNT now accepting certification applications online

In an effort to eliminate paperwork and increase efficiency and turnaround time in the processing of certification applications, ASNT has created a secure online portal for NDT professionals to apply for any of the certifications offered by the Society, including ASNT NDT Level III, Level II, ACCP Level III, Level II, ACCP AWS/CWI and IRRSP certifications. This new application process is currently only available to applicants in the United States, but will be available worldwide in late summer 2016.

ASNT celebrates 75th anniversary with exciting Annual Conference

In celebration of 75 years of success in creating a safer world, ASNT has a very special programme planned for this year's Annual Conference in Long Beach, California. This year's keynote speaker, Leland Melvin, a former NFL player and NASA astronaut, researcher and Senior Executive Service Leader, shares his life story as an athlete, astronaut, scientist, engineer, photographer and musician to help inspire the next generation of explorers to pursue STEM careers. Additional plenary speakers include Lester Lecture Award winner Dr Steven Shepard and Charles 'Chuck' Hellier, III.

In addition to the programme, ASNT will be hosting an Awards Luncheon on Monday, followed by the Annual Business Meeting and Town Hall. On Wednesday night, all attendees are invited to the 75th Anniversary Celebration Party aboard the Queen Mary, a legendary ocean liner constructed in 1930. All attendees will also receive a free, limited edition copy of ASNT's 75-Year History book.

More information about the 75th Anniversary can be found at www.asnt.org/asnt75 and for information about the 2016 ASNT Annual Conference, visit: www.asnt.org/annual

ASNT 2016 Conference Schedule**Nondestructive Evaluation of Aerospace Materials & Structures**

7-8 June 2016

Crowne Plaza Hotel St Louis Airport, St Louis, MO
www.asnt.org/aero2016**Digital Imaging 2016**

25-26 July 2016

Foxwoods Resort and Casino, Mashantucket, CT
www.asnt.org/digital**Ultrasonics for Nondestructive Testing**

27-29 July 2016

Foxwoods Resort and Casino, Mashantucket, CT
www.asnt.org/ut2016**NDE/NDT for Highway and Bridges: Structural Materials Technology**

29-31 August 2016

DoubleTree by Hilton Hotel Portland, Portland, OR
www.asnt.org/smt2016**75th ASNT Annual Conference**

24-27 October 2016

Long Beach Convention & Entertainment Center, Long Beach, CA
www.asnt.org/annualThose interested in participating may submit abstracts online at:
www.asnt.org/abstracts

ASNT brings NDT to over 350,000 at 4th US STEM Festival

ASNT, which served as a partner for the 4th United States Science & Engineering Festival in Washington, DC, on 15-17 April 2016, presented hands-on demonstrations in its show-floor booth, as well as providing career information in the event's career pavilion.

ASNT staff and volunteers demonstrated four NDT methods, including magnetic particle, ultrasonics, infrared thermography and leak detection, with hands-on activities enjoyed by all ages. Thanks go to volunteers Terry Clausing (Drysdale & Associates Inc), Dan Kerr, Erik Lombardo (Siemens), Michael McGloin (NDT Enterprises) and William Via, Jr (Virginia DOT) for dedicating their time and efforts to sharing NDT with the next generation.

The event was well attended and reached audiences well beyond its physical location. Based on estimated numbers from the Convention Center, approximately 365,000 people participated over the four days (including X-STEM). Sneak Peek Friday alone included more than 60,000 students, teachers, military families, government officials and press. Saturday and Sunday brought in roughly 150,000 people each day. The event's hashtag #SciFest had over 125 million impressions during the week of the festival.

This partnership and participation fits into ASNT's larger goals to develop outreach to younger students as well as those making the transition from high school to college or trade school.

ASNT publishes updated edition of *Materials and Processes for NDT Technology*

ASNT has published *Materials and Processes for NDT Technology, Second Edition*, the first update to the volume since 1981. The comprehensive volume, consisting of 406 pages, serves as a reference for personnel involved in designing, using or evaluating non-destructive testing of products and structures.

This publication provides an extensive overview of 16 NDT methods, including more common methods such as ultrasonic testing (UT), electromagnetic testing (ET) and radiographic testing (RT).

Other methods include guided wave (GW), magnetic flux leakage (MFL), infrared/thermal testing (IR), leak testing (LT) and vibration analysis (VA), as well as microwave testing (MW) and spectroscopy.

Materials and Processes for NDT Technology, Second Edition, contains detailed up-to-date information in three sections, including:

- Industrial materials, including polymers, composites, nano-engineered materials, industrial foams and gels, and metallic glasses, in addition to more common metals and alloys
- Color photographs showcasing the latest in industrial machines and technology
- A brand-new section covering NDT technology and applications.

The authors of this new edition are Dr Neda Fabris, Professor of Mechanical Engineering at California State University, Los Angeles, and Richard D Lopez, Deere & Company, Moline Technology Innovation Center. The technical editors are Dr Shant Kenderian, The Aerospace Corporation, and Gerard K Hacker, Teledyne Brown Engineering.

The new edition of *Materials and Processes for NDT Technology, Second Edition*, is available online at: www.asnt.org/store

25th ASNT Research Symposium is productive and engaging

ASNT's 25th Research Symposium was held in New Orleans, Louisiana, at the Crowne Plaza on the corner of Canal Street and Bourbon Street in the French Quarter. There, members of the Society's research, engineering and academic communities could learn from each other about the state-of-the-art in NDT, as well as work on Society business.

More than 300 attended the Research Symposium, coming from around the world to represent their areas of expertise. Topics featured NDT technologies in development alongside well-known techniques being used in new and interesting ways. Symposium attendees also had the opportunity to network, attend committee meetings and take certification tests.

75th ASNT Annual Conference

24-27 October 2016

Long Beach Convention & Entertainment Center, Long Beach, CA, USA

Celebrating its milestone 75th year in 2016, the ASNT Annual Conference is the largest conference for technicians, researchers and other professionals to exchange information and technologies about non-destructive testing.

Papers will be presented in both special invited sessions as well as additional topical areas, including the following:

- Aerospace
- Digital radiography
- Offshore NDT
- Chemical and petroleum
- Codes, standards and regulations
- Nanotechnology
- Ultrasonics
- Technology transfer
- Railroads
- Time-of-flight diffraction

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www.asnt.org/annual

**New price offered for
Aerospace NDT handbook**

ASNT will be offering its latest industry handbook, *Aerospace NDT*, at a new price of \$142 for ASNT members and \$189 for non-members. The comprehensive volume contains detailed information covering current and emerging practices throughout the various realms of the aerospace industry. This handbook includes 450 pages, 383 figures, more than 500 illustrations, 128 tables and 152 equations. *Aerospace NDT* is available online at: www.asnt.org/store

ASNT Research Council Mentoring Programme

ASNT's Research Council (RC) Mentoring Programme is tailored to research students who attend the ASNT Research Symposium. During the Symposium, which is normally held in the spring, a meeting is arranged between the students and their prospective

mentors. During this time, mentor and mentee decide on the terms of their mentoring agreement.

Having a mentor supports a student's advancement in research activity and career development. Students can discuss their research plans with their mentors and obtain outside views with regard to the validity of their research approach, novelty of their experiments, potential applications of their work and alternative methods to consider.

The main role of the RC mentor is to guide the student's career development through interpersonal sharing of expertise, experience, providing networking opportunities, encouraging conference participation and engagement in ASNT activities.

The mentoring programme provides students with support outside their academic comfort zone and builds their confidence. It provides them with opportunities for professional networking, and improves their future career prospects. In many cases, it will become their gateway into the applied world of NDT, ASNT and the international community in general.

For further information, contact Dr Shant Kenderian at: shant.kenderian@aero.org

CINDE announces NDT in Canada 2016 Conference

The Canadian Institute for Non-Destructive Evaluation (CINDE) is proud to announce the NDT in Canada 2016 Conference & 6th International CANDU In-Service Inspection Workshop, which will be held in Burlington, Ontario, from 15-17 November 2016. The event will feature award-winning technical authors, a conference workshop and the latest tools, trends and techniques in non-destructive testing.

Authors are invited to submit abstracts on all topics related to

non-destructive testing, non-destructive evaluation and inspection, as well as the in-service inspection (ISI) of CANDU nuclear power plants. The abstract submission deadline is 30 June 2016.

Exhibitor booths are sold out but interested organisations can apply to join the waiting list. Sponsorship opportunities are also available.

Attendees can look forward to another excellent educational experience at Canada's premiere NDT conference. For further information, visit: <http://events.cinde.ca> or email: events@cinde.ca

**ConaEnd & IEV 2016 will bring together
principle innovations in the field of industrial inspection**

The latest technological innovations and the main research subjects aimed at improving industrial operational routines will be presented at the biggest Brazilian congress on NDT and inspection, ConaEnd & IEV 2016 – National Congress of Non-Destructive Testing and Inspection, which will take place in São

Paulo, Brazil, from 22-25 August 2016. The object of the event is to establish synergy between the technical community and industry, divulging new products and services able to increase productivity, reduce risks and accidents and, consequently, minimise costs.

Generally speaking, the congress will be divided in special sessions, debate forums, presentations of technical papers (oral and poster sessions) and mini-courses on industrial themes. At least 1000 people will be participating in the discussions, among which will be representatives from companies, entities, research centres and universities, such as: Petrobras, Embraer, Eletrosul, ITA, Anac, CTA/IFI, IEC, Abifer, BAM (German Research Institute), Oceaneering, International Marine Contractors Association – IMCA (UK), USP, PUC Rio, Ufrgs, Feagri/Unicamp, UFRJ, UFRN, UPE, UFPE, etc.

Among the main attractions are the NDT Aerospace ASNT/ ABENDI meeting, the 7th National Encounter of Professionals Certified by SNQC END (N3), the 5th Encounter of Management Systems Auditors, the 2nd Annual Meeting on the Certification of Personal Capacities in Explosive Atmospheres, 5th Forum on New NDT Inspection Technologies and Applications, the Portuguese-Brazilian Fabrication and Inspection Technologies Workshop, and the NDT and Inspection Championship (ultrasound and MPI).

Novelties include the FRIM seminar on flexible riser integrity management, aimed at presenting a panorama on these structures, identifying the challenges of managing the integrity of flexible risers and promoting an in-depth discussion among specialists from around the world, as well as an interactive lounge containing simulators and a space in the exhibition area, which will bring together software and simulator companies.

www.conaend.org.br

**Digital Imaging
2016**

**25-26 July 2016
Foxwoods Resort and Casino,
Mashantucket, CT, USA**

The Digital Imaging Conference is ASNT's longest running conference for suppliers and users of digital and radiographic imaging. Now in its 19th year, this event emphasises the important role of, and challenges to, NDT for new construction and in-service inspection.

www.asnt.org/digital



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LONDON
2017

ILEC CONFERENCE CENTRE

13-16 JUNE



Call for Papers

Offers of papers are invited from both academia and industry on the following major subject areas:

- Instrumentation and ITC for CM
- Certification, education and training for CM
- Maintenance
- Asset management
- Structural health monitoring
- NDT methods and technologies
- Damage, fault and failure
- Prognostics for CM
- Design and manufacturing for CM and maintenance
- Root cause analysis of faults/failures
- Sensors and actuators
- Signal and image processing, pattern recognition, finite element modelling and simulation for CM
- CM methods and technologies
- Nano-technologies for CM
- Materials

Other relevant topics are welcome. A more detailed subject breakdown is available on the congress website at www.wc-cm.org

Abstracts of no more than 200 words should be submitted online (<http://mc.manuscriptcentral.com/wccm2017>) by **18 November 2016**. Accepted papers will be published in congress proceedings that will be available at the congress. The congress proceedings will be indexed by Web of Science, Scopus and other appropriate citation databases.



Enquiries

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www.wc-cm.org



CALENDAR OF NDT EVENTS

Month	Date	Venue	Event	Contact
June 2016	13-17	Munich Germany	19th World Conference on NDT (19th WCNDT)	tagungen@dgzfp.de www.wcndt2016.com
July 2016	16-17	Georgia USA	43rd Annual Review of Progress in Quantitative Non-Destructive Evaluation (QNDE)	pkbackst@iastate.edu www.qndepgrams.org
September 2016	5-7	Exeter UK	11th International Conference on Advances in Experimental Mechanics	info@bssm.org www.bssm.org
	7-9	Prague Czech Republic	32nd European Conference on Acoustic Emission Testing (EWGAE 2016)	cndt@cndt.cz www.cndt.cz/ewgae2016
	12-14	Nottingham UK	55th Annual British Conference on Non- Destructive Testing – NDT 2016	conf@bindt.org www.bindt.org
	12-16	City of Oulu Finland	9th EUROSIM Congress on Modelling and Simulation	office@automaatioseura.fi www.eurosim.info
October 2016	4-6	Dubrovnik Croatia	12th International Conference on NDE in Relation to Structural Integrity for Nuclear and Pressurized Components	12thnde@12thnde.com www.12thnde.com
	10-12	Paris France	13th International Conference on Condition Monitoring and Machinery Failure Prevention Technologies – CM2016/MFPT2016	conf@bindt.org www.bindt.org
	24-27	Long Beach, California USA	75th ASNT Annual Conference	conferences@asnt.org www.asnt.org
	25-27	Moscow Russia	16th International Exhibition of Equipment for NDT and Technical Diagnostics	stefag@primexpo.ru www.ndt-russia.ru
November 2016	15-17	Ontario Canada	6th International CANDU In-Service Inspection Workshop and NDT in Canada Conference	events@cinde.ca events.cinde.ca
March 2017	7-9	Sharjah United Arab Emirates	Art '17 – the 12th International Conference on Non-Destructive Investigations and Microanalysis for the Diagnostics and Conservation of Cultural and Environmental Heritage	eventi@aipnd.it www.aipnd.it
September 2017	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
June 2018	11-15	Gothenburg Sweden	12th European Conference on NDT (ECNDT 2018)	info@ecndt2018.com www.ecndt2018.com