



The World Organisation for NDT

CONTENTS

News.....	1-2
ECNDT.....	3
Asia-Pacific Regional Group.....	4
Pan-American Regional Group.....	5-6
ICNDT Guide.....	7
Calendar of Events.....	8

Volume 8 Issue No 14

October 2014

CHAIRMAN'S MESSAGE

Prague presents opportunity to discuss achievements and plans

This issue of the *ICNDT Journal* has been timed to coincide with the 11th European Conference in Prague. It is a pleasure to welcome those of our readers who are present at the conference in this beautiful city, but also to send greetings to our many other readers around the world. We wish those at the conference a successful event in the tradition of our world and regional conferences.

My own involvement in ICNDT and EFNDT began in 1987 with the 4th European Conference in London, when I was responsible for formulating the technical programme. Therefore, I know about the hard work that falls on the host society and its volunteers and I wish to thank our colleagues from the Czech Society, led by Pavel Mazal and Zdenek Prevorsky, for their efforts over several years.



ICNDT meetings in Prague

There will be a number of ICNDT meetings in Prague, including the Policy and General Purposes Committee, the General Assembly, when all the members come together, and the Working Groups – WG1: Qualification and certification and WG2: Education and research. Both of these Working Groups are holding open workshops during the conference on important topics:

- **ICNDT workshop on qualification and certification of NDT personnel**

Friday 10 October, 9.00-12.00

Objective: To address specific issues relating to the future development of the ISO 9712 standard and the present evidence in support of proposals.

- **ICNDT workshop on the importance of NDT and related research needs**

Wednesday 8 October, 14.00-18.00

Objective: To develop an ICNDT publication suitable for wider dissemination to engineering academies.

These meetings mark the halfway point in the mandate of the current Executive, which runs from 2012 to 2016, and we will be discussing our achievements to date and the Strategic Plan for the next two years.

Our achievements to date include:

- Successful launch of the Multilateral Recognition Agreement, Personnel Certification Body Assessment Scheme and Examination Question Bank in October 2013.
 - Benefits of professional Secretariat (John Thompson succeeded by Robin Shipp).
- Successful workshops hosted by ICNDT:
 - 'Qualification and certification of personnel' at both the ASME Conference in Paris, 2013, and Prague, 2014.
 - 'Education in NDT' at both QNDE 2013 and APCNDT 2013, in Mumbai.
 - 'NDT research' in Prague, 2014.

Continued on page two

Help promote the importance of NDT

In its quest to improve and increase the promotion of the importance of NDT, the Executive Committee of ICNDT has formulated Action Plan 2, which covers a wide variety of issues relating to the objective. One of these topics is concerned with the information available on the internet on NDT and its associated disciplines, and NDT technologies and their application. It is obviously in everyone's interest that this information is as comprehensive, accurate and up-to-date as possible.

Websites such as Wikipedia, the encyclopaedia written collaboratively by the people who use it, contain a lot of information about non-destructive testing that can be improved, developed and expanded. Not everyone, however, has the expertise or the time available to do these things.

It is felt that ICNDT can fulfill a useful role by helping to coordinate the efforts of individuals who are willing to contribute a small but valuable amount of time to enhancing the NDT information resources available on the internet. These resources might not be just those available through websites such as Wikipedia, but also many others, including the ICNDT's own at www.icndt.org, with a view to making this a valuable knowledge base for all people with an interest in non-destructive testing.

Whilst initial efforts will be focused on the English-language versions of the resources in question, it is ultimately envisaged that other languages will be covered in the future.

It is hoped to convene a meeting of interested communications representatives from member societies in due course.

To register your interest in joining a small task group and offering assistance with this project, please send an email to david.gilbert@bindt.org, detailing any specific areas of interest and expertise.



ICNDT Journal



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Editorial contributions are welcomed.

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ICNDT Member Societies are authorised to distribute this newsletter and/or its contents, however permission should be obtained for reproduction of individual articles and extracts.

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

*Chairman's message continued from
front page*

- Update to the ICNDT guide to 'Qualification and Certification of Personnel for NDT'.
 - Recommendations to NDT societies and certification bodies strengthened.
 - Appendix on MRA, PCBA and EQB.
 - Appendix on ASME updated.
 - Appendix listing PCBs offering ISO 9712 certification and their status (accreditation and ICNDT registration).
- Review of the implementation of ISO 9712.

We will be discussing the following:

- Linking developing countries/fledgling societies and PCBs to larger bodies that operate internationally.
- Improving the awareness of regulators to the best practice in personnel qualification and certification.
- Extending ICNDT activities in the field of condition monitoring, in conjunction with the International Society for Condition Monitoring, including certification in non-traditional areas (see below).
- Improving the interaction of ICNDT with regional groups (including EFNDT, APCNDT, etc) and how to increase the resources available in order to improve the scope and pace of our activities.

Certification activities by national societies
In the previous issue of the *ICNDT Journal*, it

was interesting to see reports by the regions on growth in the categories of certification being provided by NDT societies and their associated certification bodies, including:

- Home Energy Raters – ASNT and RESNET are developing a Level 2 certification for infrared thermography for building diagnostics.
- Planning and implementation of rigging – ABENDI and Sobratema at Levels 1, 2 and 3.
- Explosive Atmospheres Testing – ABENDI and ABPEX.

In addition, BINDT is involved in the certification of people and companies who assess the air-tightness of buildings. Perhaps ICNDT should find an opportunity (at the next WCNDT, maybe?) for NDT societies to share experiences in these non-traditional areas?

Dr J M Farley
Chairman, ICNDT

**Your new ICNDT
Journal is available
for downloading from
www.icndt.org**

World Conference on Non-Destructive Testing

19th WCNDT 2016

13-17 June 2016
**The International Conference
Centre (ICM), Munich, Germany**

Topics include:

- Monitoring
- Cultural heritage
- Modelling and data processing
- Semi-finished products
- Medical products
- Reliability and statistic procedures
- Materials characterisation
- Energy generation
- Structural engineering

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www.wcndt2016.com

New research register

ICNDT is establishing on its website (www.icndt.org) a new register of institutions and other organisations that carry out research into NDT and associated disciplines.

The register may be found under the 'Resources' tab on the home page.

Authorised representatives of organisations involved in research activities are invited to add their details free-of-charge, at: www.icndt.org/Resources/RegisterEntry.aspx

The register is compiled from information supplied by research organisations. Whilst every effort is made to ensure that the details are correct and as up-to-date as possible, ICNDT cannot accept any responsibility for errors or omissions.

8th National NDT Conference of HSNT

8-9 May 2015

National Hellenic Research Foundation, Athens, Greece

Entitled: 'The contribution of non-destructive testing for the
safety of small and large works and constructions'

www.hsnt.gr

WELCOME TO PRAGUE

- CAPITAL OF THE CZECH REPUBLIC

11th ECNDT
PRAGUE 2014
October 6 - 10, 2014

Czech Republic

EF European Federation for
Non-Destructive Testing
NDT



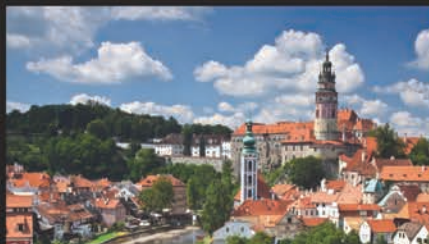
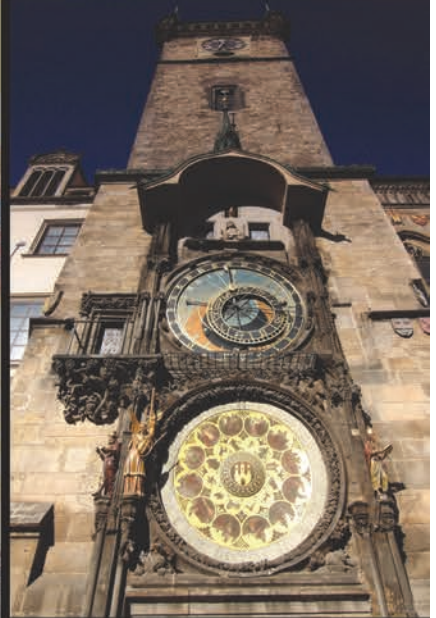
Czech Society
for NDT



Prague - the right place to host
the 11th ECNDT in 2014

11th European Conference on Non-Destructive Testing

www.ecndt2014.com



ASIA-PACIFIC

AINDT doing things differently with 2014 conference

Looking to break away from the traditional conference experience, AINDT is introducing new elements to create a unique event. The 2014 AINDT Conference and Trade Exhibition, being held in Brisbane, Queensland, from 23-26 November, will include a series of training, networking and exhibition event-firsts, making the three days valuable for all levels of industry professionals.

Confirmed educational seminar sessions include basic and intermediate introductions to NDT methods, aimed at any non-technical persons responsible for NDT in the workplace. Other workshop sessions include two full days of ultrasonic inspection techniques suitable for ultrasonic NDT technicians looking to broaden and improve their knowledge base. These sessions are eligible to contribute towards prerequisite training hours for AINDT ultrasonic certification.



Nearby Moretone Island offers pristine water for snorkelling and swimming



The vibrant city of Brisbane will play host to the 2014 AINDT Conference and Trade Exhibition

A variety of social functions are organised for attendees to network and socialise with industry professionals. The exhibition cocktail event is an exciting new addition to the usual functions, linking conference delegates, seminar attendees and exhibitors for

two hours of dedicated networking time.

Conference delegates can expect a full three-day programme presented by local and international experts from a wide range of industry, research and academic backgrounds.

A newly-introduced interactive area will adjoin the trade exhibition to showcase the latest industry equipment and technology on offer from exhibiting companies. Free trade exhibition passes for industry attendees will be available, including on-the-day registration, making it more convenient for busy professionals to access the exhibition.

More information can be found at: www.aindt.com.au/2014-conference-and-trade-exhibition

For further information, please contact: Juvenna Paulger, Marketing & Membership Coordinator, AINDT – Australian Institute for Non-Destructive Testing, PO Box 52, Parkville, Victoria 3052, Australia. Tel: +61 03 9328 8831; Email: marketing@aindt.com.au; Web: <http://aindt.com.au/>

News from the Asia-Pacific Federation for NDT

APFNDT Executive Committee Meeting, Tokyo

The first Asia-Pacific Federation for Non-Destructive Testing Executive Committee (AEC) meeting was held for two days, from 5 to 6 April 2014, at The Japanese Society for Non-Destructive Inspection (JSNDI) in Tokyo, Japan. Both the report and the minutes from the AEC meeting will be available on the APFNDT website: www.apfndt.org



APFNDT Executive Committee members (from left to right): Mr Sze (APCNDT President), Dr Venkataraman (Past President), Dr Lee (Vice-President), Dr Ooka (APFNDT President), Mr Babu (Treasurer) and Mr Dick (General Secretary)

The JSNDI and APFNDT Secretariat

On 9 June 2014, the Secretariat of the Japanese Society for Non-Destructive Inspection (JSNDI) moved location due to the need for expansion.

The Secretariat of the Asia-Pacific Federation for Non-Destructive Testing (APFNDT) will remain at the following address: APFNDT Secretariat c/o JSNDI, 10F Tachibana Annex Building, 2-25-14 Kameido, Koto-ku, Tokyo, 136-0071, Japan. Email: secretariat@apfndt.org; Web: www.apfndt.org

Annual Conference of the Indian Society for Non-Destructive Testing (ISNT)

NDE-2014

4-6 December 2014
Hotel VITS, Pune, India

The conference provides an effective platform for NDE professionals from all over the world to meet and exchange ideas and information of interest to the NDE community, including specialists from industry, research institutions and academia.

This year's theme will be: 'Enhancing competence through NDE'.

www.nde2014.com

PAN-AMERICA

News from the Brazilian Society for NDT and Inspection

First Brazilian Inspection Olympics

The 32nd edition of ConaEnd & IEV, held in São Paulo in August, included a very special attraction: the first Inspection Olympics GE – ABENDI.

The event, counting on the master sponsorship of GE, was a practical knowledge competition aimed at putting Brazil's best and most competent inspector in the limelight.

Participants were subjected to theoretical and specific subject tests in order to qualify as one of the best 20 participants.

Finalists were then invited to participate in an optional training course in order to familiarise themselves with the equipment to be used in the final exams.

The next stage was made up of practical classification tests to find the best six inspectors to take part in the final stage of the Olympics.

The final tests comprised three exercises, each with its own specific problem to be solved in 10 minutes, after which one of the contestants became 'the best N2 ultrasonography inspector in Brazil'.

ABENDI creates NDT technicians' commission

Conapro (National Commission of Non-Destructive Testing Technicians) was established in March 2014 in commemoration of the NDT Technicians' Day. The group has grown considerably in three months. Technicians from various regions of the country have shown their interest in adhering to the commission, helping to divulge it and to extend an invitation to new participants.

The commission is active on a national scale and acts through meetings held at the ABENDI headquarters in São Paulo. Those who are unable to attend may participate in the meetings through a real-time video conference.

The major objective continues to be bringing technicians together to better promote permanent discussions on the issues that most affect the sector.

The certification of local content increases at ABENDI

Accredited by the ANP (National Oil Agency) as an entity qualified to accredit Local Content since October of last year, ABENDI revealed just how promising the activity is, with over 500 certificates issued up to the end of June.

The term 'Local Content' was created to represent the proportion of national investments applied in determined goods and services. It is a contractual demand that provides substantial incentive to the Brazilian industrial sector, as it obliges agents to invest a minimum

percentage in the acquisition of national products and labour throughout the exploratory and development phases of production.

Hélio Rodrigues, Technical Consultant at ABENDI, said: "Local Content is a great opportunity to develop the national goods and service industry for the sector."

Since 1999, the ANP has established minimum requirements for Local Content in its concession contracts. However, it was only in 2007 that the agency regulated the certification system for Local Content aimed at establishing the legal conditions in which to measure the amount of Local Content being used. The system establishes the methodology for this certification and dictates the rules for the accreditation of ANP certification entities.

ABENDI is one of these certification entities able to measure and inform the ANP of the percentage of Local Content of goods and services (NCM 84 upwards) contracted by agent companies working with the exploitation of petroleum and natural gas.

ABENDI certifies officials in the Brazilian armed forces

The thirteen students who made up the first class of Abore Officials (Brazilian Association of Reserve Officials) took their last exam in April and all of them were approved for training for ultrasonography N3 and penetration fluids N3.

The agreement between ABENDI and Abore was signed in January 2013, with the objective of offering courses to young engineers in the Armed Forces and, at the same time, providing for the shortage in the market for Level 3 technicians.

Besides their association with Abore, ABENDI has undertaken other activities aimed at training new N3 specialists. A good example of this is their partnership with ABEMI (the Brazilian Association of Industrial Engineers) to provide courses in industrial ultrasonography and radiology, in cities such as Porto Alegre, São Paulo, Salvador, Recife and Rio de Janeiro.

ABENDI gets ready to be recognised by ASME

ABENDI is about to be recognised by ASME (the American Society of Mechanical Engineering), an extremely important international institution focused on NDT activities. ABENDI has strengthened its relationship with ASME over the last few years and is now involved in a process to be recognised and become an ASME Authorised Training Provider Licensed Agent. The first training programmes to be recognised are: risk-informed in-service testing; inspection, repairs and alterations of pressure vessels; and inspection & fitness-for-service, flaw evaluation of pressure equipment.

Successful conference for CINDE

The Canadian Institute for NDE (CINDE) was proud to host NDT professionals from across Canada and around the world for yet another excellent, enlightening and engaging conference experience. The 5th International CANDU In-Service Inspection Workshop, in conjunction with the NDT in Canada 2014 Conference, was held 16-18 June at the Eaton Chelsea hotel in Toronto, Ontario. The event brought a flood of NDT and inspection professionals, service companies, manufacturers and other related organisations to one of the most bustling and energetic cities in Canada. This conference was the third time that CANDU Owners Group Inc (COG) and CINDE cooperated to bring high-quality technical programming to the NDT industry.

Over 200 attendees and 50 technical papers made for an exciting and diverse programme for NDT professionals to stay updated on the latest developments in non-destructive testing and in-service inspection. On behalf of David Craig, CINDE National Chair and Conference Co-Chair, CINDE would like to thank all who participated in the event and made it a success.

The next conference event is NDT in Canada 2015, which will be held in Edmonton, Alberta, during the month of June. For further information, visit <http://events.cinde.ca>



Exhibitors and attendees connect at the Mix 'n' Mingle event

News from the American Society for NDT

The Spirit of Innovation fills 23rd Research Symposium

ASNT held its 23rd Research Symposium from 24-27 March 2014 at the Minneapolis Hilton in Minneapolis, Minnesota. This yearly gathering of NDT researchers, engineers and students provides ASNT members the opportunity to discuss and learn about new NDT research and technology. Over 280 attendees came to the 'Land of 10,000 Lakes' from around the world for session discussions and exhibits from an impressive span of methods and techniques; 53 papers were presented in 18 sessions over three days, and the exhibit hall was filled with 32 exhibiting companies. The intimate meeting spaces featured NDT technologies in development alongside well-known techniques being used in new and interesting ways. Symposium attendees also had the opportunity to network, participate in research programmes, take certification tests and attend committee meetings.

Addresses and awards

Innovation was a theme of the plenary addresses at this year's Research Symposium, beginning with an introduction on Tuesday from Research Council Chair Robert Shannon, of Siemens Energy, Inc, who encouraged attendees to think about how they can contribute to the ASNT research community to benefit ASNT and the broader NDT society.

Tuesday's keynote presentation was by Michael K O'Connor, Professor of radiologic physics at the Mayo Clinic in Rochester, Minnesota. His presentation, 'Innovations in breast imaging and why we need them,' was unusual as a medical topic in a field of NDT engineers, but attendees could relate to the technologies being used and the challenges faced by new developments and getting them into regular use. For imaging to detect breast cancer, the issue is that 30% of women have dense breast tissue that might not reveal tumors in a traditional mammogram. New technology has to have not only the capability to detect through this tissue, but also take into consideration patient comfort and safety, as well as cost. As such, technology takes 5 to 10 years to go from development on a workbench to acceptance for clinical use.

On Wednesday, B Boro Djordjevic, of Materials and Sensors Technologies, Inc, received the Research Award for Sustained Excellence and spoke on 'Sustained innovation: how it makes a difference.' Djordjevic had a retrospective of his own illustrious career and the developments in ultrasonic testing (UT) he experienced. He also looked at challenges facing the science of UT now, including remote scanning of large parts and new composite materials. Development continues, and researchers and engineers need to encourage creativity and innovation to ensure they can go from the initial ideas to putting new technology into regular use.

On Thursday morning, Steven M Shepard, of Thermal Wave Imaging, Inc, received the Research Award for Innovation and presented an address, entitled: "Thermographic signal reconstruction: from images to signals." He first discussed the introduction of the infrared camera in the 1960s and its early use to identify anomalous hot or cold spots in a subject or sequence of images. In 1998, the computing technology advanced allowing a true physics-based approach to interpret and analyze active thermography data, moving the technique from a subjective approach to one based on quantifiable information. This process of thermographic signal reconstruction is used today as part of the NDT processes in several industries.

Looking ahead

Next year's symposium will be held 16-19 March 2015 in Anaheim, California.

Charleston to host the ASNT Annual Conference 2014

On 27-30 October 2014, the ASNT Annual Conference will take place at the Charleston Convention Center in Charleston, South Carolina, USA. An outstanding professional programme, exhibit hall, and special activities are prepared for all attendees.

Keynote and plenary speakers

Tuesday morning marks the beginning of the oral presentations. First off is a keynote address by Daniel P Mooney, the Vice-President of the Engineering Design Center for Boeing in South Carolina. Daniel will address topics from his area of expertise, being responsible for guiding the growth and the capability of a newly-established design centre, as well as overseeing all matters pertaining to staffing, people development, functional excellence and management of the engineering statement of work for BSC.

Wednesday morning offers the chance to hear a plenary address by Michael P Serabian, President of PQNDT, Inc, on the important topic of the '2014 NDT industry salary survey.'

Finally, Thursday morning marks the end of the addresses with an inspiring plenary address by 2013 Lester Honor Award Lecture winner, Nat Faransso of KBR in Houston, Texas, who will lead attendees on 'The journey of non-destructive testing.'

Those interested in attending the ASNT Annual Conference may register online, read the programme and find out more information at www.asnt.org/annual

ASNT Membership surpasses 15,000 members

In the last fiscal year, ASNT welcomed over 5000 new members to its ranks, pushing membership totals to more than 15,000 members worldwide. Over 500 of those new members were recruited by existing members as part of the 'Powered By You' membership campaign. The Powered by You campaign will conclude at the end of October 2014.

ASNT NDT Level III certifications at an all-time high

ASNT is proud to report that, as of June 2014, there has been a record number of 20,474 ASNT NDT Level III certifications issued to 7,108 individuals worldwide. This equates to roughly 2.9 certifications per person. ASNT looks forward to further increases in certifications throughout the next year.

ASNT 24th Annual Research Symposium

16-19 March 2015

Hyatt Regency Orange County
Anaheim California, USA

Contact: The American Society for Nondestructive Testing,
1711 Arlingate Lane, PO Box 28518, Columbus,
OH 43228-0518, USA. Tel: +1 614 274 6003;
Fax: +1 614 274 6899; Email: conferences@asnt.org

www.asnt.org/rs



REVISED

Visit <http://www.icndt.org>

The World Organisation for NDT

Highlights

- Recommendations on qualification and certification
- Responsibilities of the employer
- Requirements for NDT personnel certification bodies
- Qualification and certification of NDT personnel in accordance with ISO 9712: 2012
- ICNDT membership directory
- ASME position on recognition and acceptance of central certification programmes
- Non-destructive testing under the European Pressure Equipment Directive (97/23/EC)
- Certification Schemes compliant with ISO 9712
- ICNDT Multilateral Recognition Agreement, PCB assessment scheme and Examination Question Bank
- Qualification of NDT personnel in accordance with ISO 20807 and ISO TS 11774
- Guidance for developing countries seeking to establish national certification schemes
- Code of practice for personnel certification bodies
- ICNDT tabulation of PCB's implementation of ISO 9712:201237

Qualification and Certification of Personnel for NDT

CALENDAR OF NDT EVENTS

Month	Date	Venue	Event	Contact
October 2014	6-10	Prague Czech Republic	11th European Conference on NDT (ECNDT 2014)	ecndt2014@guarant.cz www.ecndt2014.com
	27-30	Charleston, South Carolina USA	ASNT Annual Conference 2014	conferences@asnt.org www.asnt.org
November 2014	23-26	Queensland Australia	2014 AINDT Conference & Trade Exhibition	www.aindt.com.au
December 2014	1-5	Vienna Austria	International Conference on Occupational Radiation Protection: Enhancing the Protection of Workers	m.khaelss@iaea.org http://www-pub.iaea.org/iaea meetings/46139/orpconf2014
	4-6	Pune India	Annual Conference of the Indian Society for Non-Destructive Testing (ISNT), NDE-2014	confsec@nde2014.com www.nde2014.com
February 2015	17-19	Moscow	NDT Russia – the 14th International Exhibition for Non-Destructive Testing and Technical Diagnostics	ndt@primexpo.ru www.ndt-russia.primexpo.ru
March 2015	8-12	San Diego, California USA	Smart Structures/NDE 2015	customerservice@spie.org www.spie.org
	16-19	Garden Grove, California USA	24th ASNT Spring Research Symposium	conferences@asnt.org www.asnt.org
May 2015	8-9	Athens Greece	8th National Conference of the Hellenic Society of NDT	hsnt@hsnt.gr / prasian@central.ntua.gr / i.prasianakis@gmail.com www.hsnt.gr
	10-15	Metz France	International Congress on Ultrasonics	2015-icu-metz@me.gatech.edu http://2015-icu-metz.gatech.edu
	11-13	Salzburg Austria	DACH Conference 2015	tagungen@dgzfp.de http://jahrestagung.dgzfp.de
	12-14	Huntsville, Alabama USA	MFPT 2015	chris@mfpt.org www.mfpt.org/mfpt2015/
September 2015	13-16	Bahrain	7th Middle East NDT Conference and Exhibition	bseng@batelco.com.bh www.mendt.net
June 2016	13-17	Munich Germany	19th World Conference on NDT (19th WCNDT)	www.wcndt2016.com