



The World Organisation for NDT

Volume 9 Issue No 7

June 2020

CHAIR'S MESSAGE

COVID-19 – disruption and global threat to business

I hope that all members of ICNDT and their families are safe and in good health. I would like to thank you all for your continuous patronage for the growth of non-destructive testing (NDT) worldwide.

Remarkable achievements were made in 2019, both in terms of finance and delivering objectives. ICNDT met with various NDT societies at different events through national or regional conferences, such as the 7th Pan-American Conference for NDT in Mexico City in October, to promote NDT.

However, 2020 has so far been a very challenging year. In Asia, a few cases of COVID-19 were reported in early January before our annual meeting, but within a couple of months there was huge global disruption. Factories were shut, as were airlines, airports and new construction projects (infrastructure, oil platforms, etc) and many people began working from home. Global oil demand has decreased and crude oil prices have hit their lowest. COVID-19 has become the most serious challenge of the century. As I write, over 150,000 people have been lost to this pandemic.

Separately, ICNDT has faced a major challenge, as this year it was supposed to host the 20th World Conference on Non-Destructive Testing (20th WCNDT) in Seoul. ICNDT held meetings on a weekly basis with the organising committee to advise and review the situation both in Korea and the rest of the world. After several weeks of discussion, the decision was made to postpone the conference to mid-2021. The decision was based on several factors, such as the safety of participants, the venue, global movements, air traffic and sponsor support.

Most members have cancelled their national events for this year. Humans are born to fight and the light at the end of the tunnel is visible; we will need time to return to normal and to work with developments and growth.

Excellent growth was seen regarding ICNDT MRA Schedule 1 signatories and Schedule 2 registrations last year and an updated list can be downloaded from the ICNDT website. I would like to thank Harold Jansen, Chair of the ICNDT Certification Executive Committee (ICEC), as well as Tony Wooldridge, who put tremendous effort into closely liaising with certification bodies to manage the registration process. Currently, Colin Bird is appointed as ICEC Secretary and I would like to wish a happy retirement for Tony; his contributions are his legacy. The ICEC is working on extensions for the renewal of the MRA and postponing physical audits for ICNDT Personnel Certification Body Conformity Assessment (PCBA) services to 2021.

Finally, both David Gilbert, ICNDT General Secretary, and Mike Farley, Immediate Past Chair, have been very supportive in every step that ICNDT has made, either in addressing the concerns of members or the technical challenges faced in NDT. Also, Gerhard Aufricht, ICNDT Treasurer, has kept the numbers under control. We would like to serve you for the rest of the year; please contact us if you require any help or support. I would highly encourage sister NDT societies to look after each other in their region, especially during this challenging period.

I wish you all good health; stay safe.

Ir Sajeesh K Babu, Chair, ICNDT



ICNDT WG1 workshop – response to COVID-19

A successful online workshop was held on 25 May 2020 to discuss and present ways in which the ICNDT certification and training organisations are addressing the issues associated with the restrictions imposed by the COVID-19 pandemic.

In addition to the presentations, many representatives of Personnel Certification Bodies (PCBs) and ICNDT committee members participated in the discussions that were held after the presentations. In total, more than 20 delegates took part in the workshop.

Presentations were given by:

- A Mullin (WG1 Chair), Russian Society for NDT;
- Keith Arcus, Australian Institute for NDT;
- Gerhard Aufricht, Austrian society for NDT;
- João Rufino Teles Filho, Brazilian Society for NDT;
- P K Yuen, Canadian Institute for NDE;
- Jingyuan Ji, Chinese Society for NDT;
- Améla Elezovic, French Confederation for NDT;
- Ralf Holstein, German Society for NDT;
- Shohei Ooka, Japanese Society for NDT;
- Diwakar D Joshi, Indian Society for NDT;
- Claudia Amelia, RELACRE, Portugal;
- Sajeesh Kumar Babu, NDT Society (Singapore);
- Harold Jansen, South African Institute of Welding;
- Kyung-Cho Kim, Korean Society for NDT;
- Rodolfo Rodríguez, Spanish Society for NDT;
- Prathiba Wimalasiri, Society for NDT – Sri Lanka;
- Jennifer Cook, British Institute of NDT;
- Dave Bajula, American Society for NDT;
- Colin Bird, ICEC Secretary; and
- Fermín Gómez Fraile, EFNDT President.

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ICNDT Journal



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Material for the next ICNDT Journal should be sent to David Gilbert, email: david.gilbert@bindt.org

The following summarises the general approach by many PCBs:

- All PCBs that took part in the workshop have extended the period of validity of certificates and addressed how this extension is to be controlled; and
- All of the PCBs are considering both the short- and long-term issues, including acceptance of distance learning and ways to conduct online examinations while still preserving compliance with ISO/IEC 17024 requirements in regard to integrity, independence and impartiality.

From this workshop, WG1 will organise and consider how to help with the short- and long-term measures associated with the COVID-19 pandemic. The considerations will include interpretation of the governing standards and how these standards can be addressed with respect to distance learning and examination processes.

For further information, contact Colin Bird at: icec-secretary@icndt.org

The presentations are available for download at: <https://bit.ly/3dFfRi6>

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

All systems go for 20th WCNDT after false start

The 20th World Conference on Non-Destructive Testing (20th WCNDT), originally scheduled to take place at around the time of writing but postponed due to the COVID-19 pandemic, is now planned for 31 May-4 June 2021 at the Songdo Convensia, Incheon, South Korea.

The venue is close to the international airport and within an hour of Seoul. Visitors will be given the opportunity to experience a mix of diverse cultures and world-class urban life.

The Organising Committee is to provide a dynamic technical programme that will be highly informative for every participant. The conference will be the place to network and exchange ideas and experiences with professional colleagues from all around the world with an interest in the field of non-destructive testing and associated disciplines.

Interested participants are invited to submit abstracts for oral and poster presentations, through which the most recent research results and interesting cases around the world can be shared.

Abstract submissions should be made through the online abstract submission system on the 20th WCNDT website.

There will also be a series of special sessions and a number of ICNDT and regional group meetings running concurrently. Social events will include a welcome reception, a gala dinner and a special Korean night, where South Korean culture and tradition as well as food and drink will be experienced.

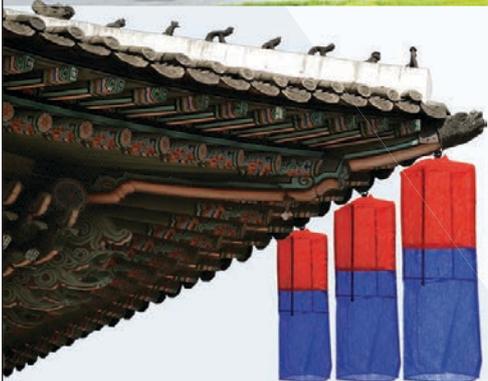
South Korea has been seen as providing one of the best examples of how to deal with the COVID-19 pandemic and, as a consequence, last month the government began to lift restrictions. It is hoped that the recovery will continue globally and South Korea can fulfil its goal to welcome the world NDT community to its hospitable, rich and vibrant culture.

We look forward to seeing you there.

For further information, visit the conference website at: www.wcndt2020.com, email the WCNDT 2020 secretariat at: secretariat@wcndt2020.com or telephone: +82 2 6257 7568.

Important dates

Abstract submission	31 August 2020
Notification of abstract acceptance	30 September 2020
Submission of camera-ready abstract (mandatory)	31 December 2020
Submission of extended abstract or paper* (optional) <i>*For the conference proceedings (NOT for the SCIE journal submission)</i>	31 December 2020
Registration and payment of presenting authors	31 December 2020
Preliminary programme	28 February 2021



The 20th WCNDT 2020 postponed due to global impact of the COVID-19 outbreak

The Organizing Committee of the 20th WCNDT 2020 has decided to postpone the Conference to the new dates, **May 31(Mon.) to June 4(Fri.), 2021** at a new venue, **Songdo Convensia, Incheon, Korea**.

•Background of the Decision on Postponement

Since last February, the Organizing Committee has made concerted efforts to decide the best possible new dates and venue for the 20th WCNDT 2020 through very close consultation with ICNDT Executive Committee as well as several emergency meetings of the Organizing Committee. In response to the declaration of pandemic by WHO and current development related to the global widespread of COVID-19, the decision on postponement of the Conference has been made, which is a very difficult but necessary measures in consideration of safety and health of all prospective participants as the highest priority.

•Songdo Convensia, the New Venue

Located in Songdo International Business District of Incheon, Songdo Convensia can be easily reached from the Incheon International Airport (IATA: ICN) and has a great accessibility to a number of excellent five-star hotels within walking distance. Since the full renovation and extension in 2018, Songdo Convensia has equipped with state-of-the-art MICE technology systems and eco-friendly facilities in the interest of convenience for conference organizers, participants and exhibitors. Above all, the 20th WCNDT 2020 shall be able to take the great advantage of being in sole occupancy of the site, making it a much better atmosphere than COEX in Seoul originally planned to be held.

•Related Logistics Issues

All conference registrations, submitted abstracts, contracts for exhibition and sponsorship that have been made to date shall be maintained and rolled over to the rescheduled conference. Whilst it has been postponed to be held in 2021, the Conference name "20th WCNDT 2020" as well as the official website at www.wcndt2020.com will be unchanged in conjunction with the brand identity and to

avoid any further confusion for all prospective participants. Updated timeline including any possibility of the additional submission of abstracts and the rearranged registration deadlines in accordance with the new conference dates will be announced at the official website by the end of May, 2020.

Although we are in a period of great challenge, we will try to make the postponement as another opportunity to have a very safe and much more fruitful Conference which will definitely provide the unforgettable experience for all of participants. In this regard, your continued interest and active participation is essential for the successful 20th WCNDT 2020.

Please contact us if you have any question or concern, as follows:

For general inquiry, please e-mail to secretariat@wcndt2020.com

For scientific program inquiry, please e-mail to conference@wcndt2020.com

For exhibition, please e-mail to exhibition@wcndt2020.com

For registration, please e-mail to registration@wcndt2020.com



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THE KOREAN SOCIETY FOR NONDESTRUCTIVE TESTING

EUROPE

News from the French Confederation for Non-Destructive Testing

NDT in Aerospace 2019: a success!

The 11th International Symposium on NDT in Aerospace, which brings together academics and industrialists each year to explore the theme of NDT in the aerospace industry, was held from 13-15 November 2019 in Paris-Saclay, France. The event achieved a very positive record, with 280 participants representing nearly 25 countries, including major players such as Japan, China, Russia, the USA, Israel and Germany.

Co-organised by the French Confederation for Non-Destructive Testing (COFREND) and the Laboratory for Integration of Systems and Technology (CEA-LIST) and with the support of seven sponsors, including Airbus, Safran and Gifas, this meeting confirmed France's position in terms of innovation in non-destructive testing in aerospace.

The 11th symposium focused on automation, digitisation and connectivity, with two major themes highlighted: numerical simulation and structural health monitoring (SHM).

Airbus opened the event with a plenary lecture on the challenges of inspecting its structures. Alvaro Espada Tejedor, Head of Non-Destructive Testing at Airbus, Spain, stated: "Automation, digitisation and connectivity: when combined, these factors provide a new set of tools that will form the next chapter of NDT."

SHM is another theme of interest and industrial solutions are emerging in this field. Seth Kessler, CEO of Metis Design Corporation and specialist in SHM, highlighted the emergence of the first industrially exploitable solutions and discussed the challenges of the qualification of SHM systems in order to demonstrate their reliability and performance.



The 11th International Symposium on NDT in Aerospace focused on automation, digitisation and connectivity

Many other innovative methods and techniques were evoked through a plenary of international experts, including Elliott Cramer, former CND Manager in the research department of NASA Langley, Krishnan Balasubramaniam, Head of the Centre for Non-Destructive Evaluation of the Indian Institute of Technology in Madras, and John Aldrin, specialist in numerical simulation. It confirmed the development of algorithms, automated diagnostics and learning topics. Composite materials and additive manufacturing seemed to be among the flagship applications of interest to the NDT community in the aerospace field.

The 11th symposium also featured an exhibition, with 26 exhibitors, including equipment manufacturers and distributors, as well as technical engineering companies.

The programme offered participants the opportunity to visit several strategic sites. On the first day, CEA-LIST opened the doors of its laboratories. The visit was followed by a cocktail reception. On the last afternoon, four sites welcomed the participants: Safran

Aircraft Engines, Air France Part Repair Centre, ArianeGroup and Synchrotron SOLEIL.

In addition, the 2019 edition introduced a competition for students, sponsored by Brussels Airlines and Cotesa Composites, in which eight teams from different universities of the world had to work on the same application case and demonstrate how they assessed a fairly complex carbon fibre-reinforced polymer (CFRP) component and how to test for implicit damage by monitoring the condition of the structure. The jury, made up of industrial and academic experts, awarded the COFREND Prize to Team 7 from Ghent University in Belgium

All abstracts are available online at: www.ndt-aerospace2019.com/programme

Proceedings are also available online at: www.NDT.net, media partner of the 11th International Symposium on NDT in Aerospace.

The 12th International Symposium on NDT in Aerospace will be held from 6-8 October in Williamsburg, Virginia, USA. Details can be found at: www.ndt2020.utcd Dayton.com/index.html

COFREND Days 2020 cancelled

The National COFREND Days event, which was to be held from 8-10 December 2020 in Marseille, France, will ultimately not take place as planned.

The current health and economic context has a strong impact on event activities in France.

Taking this into account, the COFREND Board of Directors considered that it was impossible to organise the COFREND Days in good conditions on the planned date in December 2020.

Faced with uncertainty regarding the duration of the economic crisis and its impact beyond 2020, the Board of Directors cannot commit and take the risk to postpone the event to 2021. Therefore, it has been decided to organise the next COFREND Days Congress for 2023.

Despite the 2020 edition not taking place, it has been decided to keep and to maintain spaces for discussion with the NDT profession, in particular by organising several COFREND scientific events over the period of 2020-2023. More information will follow.

COFREND deeply regrets this postponement but will be able to adapt to this new situation so as to maintain the link with its members and all NDT stakeholders.

The COFREND Communication and Events team remains at your disposal for any questions.

8th Workshop on Civil Structural Health Monitoring (CSHM-8)

31 March-2 April 2021
Naples, Italy

With the theme: Ageing structures and infrastructures in hazardous environments

cshm8.unimol.it



The 12th International Symposium on
NDT in Aerospace 2020

October 6-8, 2020 - Williamsburg, Virginia, USA

Hosted at the Williamsburg Lodge

www.NDT2020.utcd Dayton.com

Non-Destructive Testing and Evaluation (NDT&E) is one of the major requirements in aerospace structural design. Appropriate use of NDT guarantees safety in aerospace and is thus a subject of highest attention. To communicate latest R&D achievements to industrial applicants on the one hand and to discuss advanced and improved methods both with scientists as well as industrial researchers and applicants on the other, the Symposium on NDT in Aerospace has been established in 2008 and organised on an annual basis since 2010. The symposium always takes place at a location where aerospace has a home.

The 12th edition of the conference series will take place in Williamsburg, Virginia, USA at Colonial Williamsburg Lodge from October 6th to 8th, 2020.

Scope

- NDT methods like ultrasound, x-ray, eddy current, thermal imaging, laser based and optical surface inspection etc.
- Aerospace Component inspection
- Aerospace Material characterisation including additive manufacturing
- Data evaluation and image processing with a scope on big data management
- NDT system design
- Production integrated NDT&E
- Mobile NDT&E for maintenance, repair and overhaul including robotics
- Damage tolerance
- Aging Aircraft and Reusable Launch and Space Vehicles
- Structural Health Monitoring
- Prognostics and Health Management
- Numerical simulation
- Student challenge in damage monitoring analysis.

Presentations addressing the topics mentioned above and considering any NDT methods proposed such as thermal imaging, eddy current, ultrasonics, optics, x-ray testing and many others will be most welcome. Opportunities for exhibition of technology and posters will be provided, as well as technical visits to relevant aerospace related activities. More Information is available online on the conference website **www.NDT2020.utcd Dayton.com**.

New research project on structural health monitoring of safety-relevant structures

For the next four years, the Bundesanstalt für Materialforschung und -prüfung (BAM) will coordinate a new European Union (EU) project aimed at safer and more reliable operation of chemical plants, pipelines, transport systems and aeronautical structures. Dr Jens Prager will coordinate the project. The Guided Waves for Structural Health Monitoring (GW4SHM) project, together with 20 partners from academia and industry across Europe, aims to train a new generation of researchers in all aspects of structural health monitoring (SHM). The project was initiated by the German Society for Non-Destructive Testing (DGZfP) Subcommittee on Guided Waves in the technical committee condition and is funded by the European Union's Horizon 2020 programme with €3.9 million. The goal of the project is to transform research into practical application and the outcome of the project will pave the way for integrating SHM into real-world engineering structures.

SHM will be a key enabler to exploit emerging technologies such as remaining useful lifetime prognosis, condition-based

maintenance and digital twins. In particular, SHM using ultrasonic guided waves is a promising approach for monitoring chemical plants, pipelines, transport systems and aeronautical structures.

The GW4SHM project combines efficient simulation and signal processing tools for SHM for the first time, with the aim of assessing the reliability of the monitoring systems. Focusing on aeronautics, petrochemistry and the automotive sector as initial pilot cases, the project team will develop a concept to assess the integrity of structures and create ready-to-use tools for industry.

The project will fund 15 PhD students within the Marie Skłodowska-Curie Actions Innovative Training Networks, who will be able to acquire multidisciplinary scientific expertise, complementary skills and experience working in academia and industry.

For more information about the project and participating organisations, visit: <https://cordis.europa.eu/project/id/860104>

News from the Czech Society for Non-Destructive Testing

10th NDT in Progress

The 10th NDT in Progress workshop, organised by the Czech Society for Non-Destructive Testing (ČNDT), together with the Institute of Thermomechanics of the Czech Academy of Sciences, was held in Prague from 7-9 October 2019. The event was held under the auspices of the European Federation for Non-Destructive Testing (EFNDT) and NDT.net, as well as Academia NDT International. This workshop has been held every two years since 2001, when the German NDT Society for Non-Destructive Testing (DGZfP) initiated its first organisation. The scope of the event is not large and its charm lies in the 'family' atmosphere, where participants do not need to follow strict time limits during discussions after presentations or during the poster session. The maximum number of participants is limited (40-50) and the presentations therefore take place in a single hall. One half of this NDT workshop comprises students, who can broaden their knowledge of NDT. Students are given the opportunity to participate in the contest for the best presentation. The committee responsible for the evaluation of the presentations decided that Tomáš Grabec from Prague and Tristan Julien from the Cadarache Atomic Centre in France would receive metal plaques for the best presentations of young scientists at the workshop, which were presented by the President of the the Romanian Association for Non-Destructive Testing (ARoEND).

NDE for Safety 2019/Defektoskopie 2019

The 49th International Conference and Exhibition of NDT equipment (NDE for Safety 2019/Defektoskopie 2019) was held in České Budějovice from 5-7 November 2019. The international conference and exhibition focused on the issue of NDT and condition monitoring (CM) of structures in all technical fields. The number of participants was similar to previous years, ie around 120 paying participants. The presentations were thematically divided into two halls. The exhibition of NDT equipment was held in a different hall and, as is tradition, was also open to the public. A great response from the public was evident among students from high schools, who were accompanied by their teachers and were able to see the latest products of the exhibitors.

The conference also included an election congress of ČNDT, which resulted in a small change in the management of the society. Libor Topolár, Associate Professor at the Faculty of Civil

Engineering, Brno University of Technology, was elected as the new President and Pavel Mazal, Associate Professor from the Faculty of Mechanical Engineering, Brno University of Technology, was elected as the new Vice President.

3rd International Conference on Diagnostics of Structures and Components using Metal Magnetic Memory Method

The 3rd International Conference on Diagnostics of Structures and Components using Metal Magnetic Memory Method was held in Prague from 22-23 May 2019. The conference was organised by ČNDT and Preditest Ltd. The conference was held in accordance with the work plan of the Specialist International Group on the metal magnetic memory method of ICNDT for the period of 2019-2020. The conference was attended by experts from Brazil, the Czech Republic, Hungary, Germany, Lithuania, Malaysia, Poland, Russia, Slovakia and the United Arab Emirates.

More details can be found in Vol 9, No 6, of the the ICNDT Journal, published September 2019.

NDE for Safety 2020/Defektoskopie 2020

The 50th International Conference and Exhibition of NDT Equipment (NDE for Safety/Defektoskopie) will be held from 10-12 November 2020 in Prerov, Czech Republic. The conference and exhibition will focus on the issues of NDT, NDE, SHM and CM of structures in all technical fields. All are cordially invited to this conference.

2nd European NDT and CM Days

The 2nd European NDT and CM Days will be held from 4-8 October 2021 in Prague. These 'days' will consist of: the 11th NDT in Progress workshop, the NDE and CM International Safety Conference, the 51st annual ČNDT conference Defektoskopie 2021 and the NDT and CM Expo. During these days, participants will be able to visit four different events at the Cubex Centre, Prague. It will be an exceptional opportunity to meet people interested in research and development, as well as in the practice, standardisation and the application of all NDT/NDE, CM and SHM methods, with an emphasis on the areas of modern industry.



EUROPEAN
NDT&CM2021
 PRAGUE, CZECH REPUBLIC
 OCTOBER 4-8, 2021

**BETTER CM & NDT – WARRANTY OF QUALITY,
 RELIABILITY AND SAFETY**

**FOUR NDT, CM AND SHM
 EVENTS IN ONE WEEK
 IN THE MIDDLE
 OF EUROPE**

Following the 1st ENDT Days in 2007 and the highly successful 11th European Conference on NDT 2014 (ECNDT 2014) in Prague, the Czech society for NDT in cooperation with other NDT and CM Societies is preparing another important meeting of experts and users from the NDT, including Condition Monitoring and Structural Health Monitoring areas for the year 2021.

The 2nd European NDT & CM Days in Prague (October 2021) will consist of – 11th workshop NDT in Progress, International conference NDE & CM for Safety, 51st annual CNDT conference Defectoscopy 2021 and NDT&CM Expo. During these days you can visit four different events at the Cubex centre Prague. It will be an exceptional opportunity to meet people interested in research & development, as well as in practice, standardization and the application of all NDT/NDE, CM and SHM methods with an emphasis on areas of modern Industry.

These 'Days' will be one of the most important NDT, CM, SHM and related branches European events in 2021. We hope that the 2nd European NDT&CM Days 2021 will not only be an opportune time for exchanging research findings

but also an occasion for strengthening existing contacts and establishing new ones for all participants. Naturally, seminars, workshops, excursions and other social events will be organized.

This event represents a great opportunity for a select group of interested parties to be actively included in sponsoring and promoting the event and their business.

This will be the event of the decade; we hope to see you there!

Pavel Mazal
 CNDT president

Libor Topolář
 member of CNDT presidium

ORGANISER'S



PARTNER'S



www.endtcm21.com

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Events of the Scottish Branch of the British Institute of Non-Destructive Testing

The Scottish Branch of the British Institute of Non-Destructive Testing (BINDT) is pleased to report on several successful events, held on Friday 24 January 2020 at the Watermill Hotel, Paisley, Scotland. The events, which included an NDT equipment exhibition, a seminar on NDT for the nuclear industry, an industry session and a research session, complemented each other, leading up to the Annual Burns Supper in the evening. The day's events were co-organised with the Advanced Nuclear Research Centre (ANRC).

NDT equipment exhibition

15 companies (Agility NDE, Ashtead, Chemetall, Druck, Eddyfi, ETHER NDE, GB Inspection Systems, High Technology Sources, JR Technologies, Novosound, Oceanscan, Olympus, Peak NDT, Sonatest and Zetec), plus BINDT and the Advanced Nuclear Research Centre, exhibited this year, filling the room. The event ran from 10h00 until 15h30, with the attendance boosted during a morning coffee break and then an extended lunch by 70 attendees at the seminar. Feedback from the exhibitors was positive.

Seminar: NDT for the Nuclear Industry

30 years after the landmark NDE in the Nuclear Industry Conference held in Glasgow in 1990, this seminar reviewed the evolution of nuclear NDT, lessons to be learned in the nuclear and other industries and future research directions.

The morning 'industry session' was organised by the Scottish Branch and the afternoon 'research session' by the Advanced Nuclear Research Centre.

Industry session

Co-Chairs John Whittle and Mike Farley, Past Presidents of BINDT, introduced each of the speakers as shown in the programme and kept proceedings on time, while Francis Hancock managed the computer projector with customary efficiency.

The presentations can be accessed on the BINDT website at: www.bindt.org/events/PastEvents/ndt-for-the-nuclear-industry-seminar

Research session

The research session included several presentations from speakers such as:

- Mark Gayfer, CEO, ANRC, who gave a broad introduction to the objective of ANRC to be a leading international centre of excellence, focused on accelerating the development and deployment of new technology, delivered with the aim of reducing through-life costs and timescales in the nuclear sector.
- Dave Lines, University of Strathclyde, who outlined recent developments for in-process weld inspection, aimed at greatly reducing the cost of manufacture of high-integrity parts.
- Marcus Perry, ANRC, who spoke on 'Smart cement sensors – distributed self-sensing cement coatings for concrete assets'.
- Matt Warden, the Fraunhofer Centre for Applied Photonics, who presented on 'Hydrogen detection on nuclear waste environments'.
- Graeme West, Electronic and Electrical Engineering, University of Strathclyde, who gave a presentation on a project supporting EDF on the visual inspection of the graphite cores of the advanced gas-cooled reactors.
- Charles MacLeod, ANRC, who presented a paper, titled: 'Research horizons in NDT', co-authored by Professor Tony Gachagan and his colleagues at the Centre for Ultrasonic Engineering (CUE).

Other meetings

BINDT hosted the online Annual Meeting of ICNDT on Thursday 23 January 2020. ICNDT Chair Sajeesh Babu, Past Chair Mike Farley and General Secretary David Gilbert were present in person and joined by Professor Younho Cho (President of the 20th WCNDT), Professor I K Park (newly elected President of the Korean NDT Society and Chair of the 20th WCNDT) and Professor Pavel Mazal (Vice President of the Czech Society for NDT). More than 20 representatives from NDT societies around the world joined the meeting online. The meeting approved the Annual Report for 2019, accounts for 2019 and the budget and fees for 2020. At the meeting a minute's silence was held to remember Professor Hajime Hatano, Roger Lyon and Professor Ioannis Prassiokanis.

Annual Burns Supper

Robert Burns, Scotland's national poet of world renown, was born on 25 January 1759 and every year there are thousands of events held to celebrate his birth and life. The Scottish Branch has held its event almost every year since the early 1970s, more than 45 in all. In recent years, the event has become more popular and once again it was close to a sell-out, with 115 people booked to attend, the same as in 2018, but this time this number was achieved without the benefit of many overseas visitors. 18 companies were present and most donated prizes for the raffle.

John Hansen, BINDT President, Iain Baillie, BINDT President Elect, the entertainers and Mike Farley, the Chair for the event (standing in for Professor Tony Gachagan who was indisposed) were piped in by Colin Johnston.

Mike welcomed the guests, including the BINDT President, President Elect, Vice President, Honorary Secretary, three Past Presidents of BINDT, a former Treasurer and David Gilbert, BINDT CEO.

The haggis was piped in and the Address to the Haggis was delivered, word perfect, by Jimmy Fraser. After a powerful delivery of the Selkirk Grace by Fraser Hardie, an excellent meal of cock-a-leekie soup, haggis, neeps and tatties, steak pie and seasonal vegetables followed by raspberry cranachan with coffee/tea was duly served.



115 people booked to attend this year's Burns Supper event

Raffle tickets were sold during the break and the entertainment started with Jan Cranston singing the Burns classic 'Oh Whistle and I'll come tae ye, my lad'. Peter McAlister, also back for a third year by popular acclaim, sang 'There was a lad born in Kyle' and proposed a brief toast to the Immortal Memory of Robert Burns. This was followed by a gathered standing for the playing of The Lament by Colin Johnston.

Scottish Branch member Charles Macleod of the University of Strathclyde proposed a humorous Toast to the Lassies and Caroline Bull replied, remarking that Robert Burns might well have been impressed by the number of lassies now working in the field of NDT.

Once more, the highlight of the night was Peter McAlister's superb rendition of Burns' epic 'Tam o'Shanter'. While perhaps not everyone in the audience followed every word of the old Scots dialect, everyone appreciated the energy of the performance and Peter's interpretation. Colin Johnston entertained with a Scottish medley on the bagpipes and invited those brave enough in the audience to have a go in a competition. Four volunteers gave their best and based on audience acclaim the joint winners were Megan Donnelly and Stephen Docherty, both guests of Axiom Inspection Solutions.

Jan Cranstoun entertained with 'Ca' the yowes tae the knowes' and Peter McAlister came back to recite 'Scotch drink', a poem in which Robert Burns demonstrates his personal knowledge of Scotch whisky! Jan, in duet with David Gilbert, sang 'Ae fond kiss (and then we sever)' beautifully to close the entertainment.

The prize raffle was drawn and many prizes (mostly Scotch drink), kindly donated by the companies present, were widely distributed. As a result, there was a donation of £640 to the BINDT Benevolent Fund. Thanks to all.

The 2020 Bob Service Award was presented by President John Hansen. The award is given each year to a person (under the age of 35) who has made a significant contribution to NDT in Scotland. The BINDT Scottish Branch was delighted to receive Bilfinger's nomination of Steven Gunn, who clearly fitted the criteria for this prestigious award. His positive attitude, self-motivation and



The 2020 Bob Service Award was presented by John Hansen to Steven Gunn

excellent performance are exactly what the Branch looks for when considering nominations. BINDT is pleased to see that he is progressing at Bilfinger and that he is continually striving for improvement. A well-deserved winner and we wish him good luck in his NDT career.

Two innovations completed the entertainment: a Burns sing-along and an enthusiastic set of 'Strip the willow' taking up the limited space available for dancing.

The evening closed with a very funny vote of thanks by Craig Donnelly and everyone joining hands to sing Auld Lang Syne.

The Scottish Branch Committee of BINDT, and Mike Farley in particular, acknowledge the assistance given by BINDT in the preparation for the three events.

The Annual British Conference on Non-Destructive Testing (NDT) is a prestigious event where experts in NDT and related technologies meet to share experiences, ideas and the very latest developments that will help shape the future of NDT.

There will be three parallel technical sessions covering a broad range of NDT technologies and applications, including:

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

Abstracts (of no more than 200 words) must be submitted online at: <http://mc.manuscriptcentral.com/ndt2020> or via the link on www.bindt.org.

Full written papers that are submitted may be refereed with a view to publication in *Insight*. Conference proceedings will be published in the form of extended abstracts and one copy will be provided for each delegate.

Call for Papers
(Still accepting abstracts subject to availability)

  
#NDT2020

 **NDT2020**
59th Annual Conference

15-17 September 2020
Park Inn by Radisson Hotel,
Northampton, UK

A table-top exhibition of NDT-related products will run alongside the conference.

For further information, contact:
Conferences and Events Department, BINDT, Midsummer House,
Riverside Way, Bedford Road, Northampton NN1 5NX, UK.
Tel: +44 (0)1604 438300;
Email: conf@bindt.org; Web: www.bindt.org

PAN-AMERICA

Impact of the IAEA-ARCAL technical cooperation project RLA/1/014 in the region: a perspective from Argentina

Latin America and the Caribbean are obtaining many benefits from the International Atomic Energy Agency (IAEA) project, titled: Advancing Non-Destructive Testing Technologies for the Inspection of Civil and Industrial Structures.

The participating countries, including Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, the Dominican Republic, Ecuador, Mexico, Peru, Uruguay and Venezuela, have obtained advances during the development of this four-year project, which started in 2018.

The main objectives of the project are:

- To provide support to establish accredited ISO 9712 certification systems in new countries, with the aim of at least four more Member States with established systems by the end of the project in 2021;
- To increase the certification methods in those countries that already have ISO 9712 certification systems available (Argentina, Brazil and Mexico), including ultrasonic testing (UT), time-of-flight diffraction (TOFD), phased array (PA) and digital radiography (DR);
- To establish subregional centres on NDT for civil infrastructure to perform diagnostics in emergencies (such as earthquakes, floods, etc), as well as to train and certify specialists from the region in NDT methods and techniques for civil infrastructure;
- To strengthen the neutronic NDT techniques in those countries that already have that technology in place; and
- To consolidate an NDT network among the participating countries in order to collaborate not only in training and certification, but also to share experience (with the support of the Pan-American Federation for Nondestructive Testing (PANNDT)).

Up to the present time, Argentina has developed the following activities:

- An AAENDE-CEND (Committee on Civil Structures created within the Asociación Argentina Ensayos No Destructivos y Estructurales (AAENDE)) expert collaborated in the first coordination meeting of the project, which was held in Mexico. He presented lectures and participated in a special team, which supported the Mexican authorities in the NDT inspections after an earthquake (November 2017).



Consequences of an earthquake

- Two Argentinian NDT specialists have participated in the civil NDT training course, held in Ecuador (May 2018).
- AAENDE Comisión Nacional de Energía Atómica (CNEA) collaborated with Chile in the development of its national certification system (September 2018).

- Digital radiography Level 2 training and certification: the course was given in English by two German experts and recognised by the Argentinian certification authority, Instituto Argentino de Normalización y Certificación (IRAM). Personnel from Argentina, Brazil, Costa Rica and Mexico have been trained and certificated (November 2018).



Participants of the digital radiography Level 2 course

- Translation to Spanish: AAENDE translated phased array ultrasonic testing (PAUT) questions, kindly donated by the Australian Institute for Non-Destructive Testing (AINDT), into Spanish. They were afterwards adopted by IRAM and have been used to perform examinations in Argentina.
- Three Argentinian NDT specialists have participated in the UT-TOFD Level 1 course developed by the Associação Brasileira de Ensaio Não Destrutivos e Inspeção (ABENDI) in Brazil (April 2019).
- AAENDE developed an ISO 9712 Level 3 online basic course financed by the IAEA. Participants from Chile, Costa Rica, Ecuador and Mexico had approved the course, performing an examination in Argentina. Some of them, who had also approved an ISO Level 2 penetrant testing examination, have succeeded in the Level 3 qualification examination (October 2019).
- An AAENDE-CEND expert is currently collaborating in the development of the IAEA syllabus for NDT in civil structures in the following activities: 'IAEA/RCA regional workshop on the application of NDT for civil engineering structures' (October 2019, New Zealand) and 'Expert team mission on the development of syllabus for NDT in civil structures' (February 2020, Russia).

7th US-Japan NDT Symposium

5-9 July 2021

Hawaii, USA

www.asnt.org

News from the American Society for Nondestructive Testing

The American Society for Nondestructive Testing (ASNT), along with rest of the world, has been weathering the COVID-19 pandemic. Beginning in early March 2020, ASNT International Service Center (ISC) staff began working from home. Apart from being unable to fulfil physical book and merchandise orders due its state's stay-at-home order for non-essential businesses, ASNT ISC operations have remained at full capacity. However, the pandemic has created an environment that has required ASNT to think of novel ways to connect with its members:

- To limit exposure, observe social distancing and ensure safe conditions, ASNT's computer-based service provider Pearson VUE closed many of its testing centres around the world. ASNT has extended the examination approval window for those affected.
- The ASNT Research Symposium was postponed and will be co-located with the Digital Imaging and Ultrasonics for NDT conference in New Orleans from 28-30 July 2020.
- ASNT held its first virtual conference, Nondestructive Evaluation of Aerospace Materials and Structures 2020, on 3 June. Going forward, ASNT is aware that transportation restrictions and traveller concerns may limit on-site attendance, so it is making sure not to limit access to the content. Sessions will be streamed live direct to computers or mobile devices and remote networking through chat rooms, access to slides and the ability to both listen and see sessions is all part of the experience.
- Individual members experiencing hardships due to unemployment or temporary disability may qualify to have their membership dues waived for up to six months.
- ASNT sections from around the world have reported successfully conducting virtual section meetings.

ASNT events

While events in the first half of the year were impacted by the pandemic, ASNT is optimistic that the remaining 2020 events will take place as planned, including the following:

- Digital Imaging and Ultrasonics in New Orleans, 28-30 July 2020 (*now virtual*).
- ASNT Annual Conference in Orlando, Florida (Disney), 10-13 November 2020.
- International Chemical and Petroleum Industry Inspection Technology Conference (ICPIIT) in Sugar Land, Texas, 3-5 February 2021 (*NOTE: date change*).

For the latest updates, visit: www.asnt.org/events

ASNT's email subscription categories have changed

ASNT is excited to offer its members and the NDT community more control over the type of information they receive. While required communications related to membership, event registration and transactions will still be sent, the new subscription options will make sure people stay connected with the content that matters most to them.

ASNT launched a new email tool that delivers a sleek new platform to deliver these messages. Let us know your thoughts on the new emails.

ASNT certification and accreditation updates

In conjunction with oil & gas industry leaders, ASNT developed the Industry Sector Qualification – Oil & Gas, better known as ISQ – Oil & Gas. This programme is an advanced practical qualification

exam and has been developed to improve NDT reliability through a rigorous performance demonstration qualification process by an accredited certification body.

ASNT continues its path in reshaping the ASNT Central Certification Program (ACCP) to fully adopt ISO/IEC 9712. This also includes the implementation of a revised Authorized Examination Center (AEC) process to administer ACCP examinations and the Industry Sector Qualification (ISQ) programme. ASNT has been actively soliciting new AECs to conduct ACCP examinations and ISQ assessments.

The Employer-Based Certification (EBC) audit programme is still on track to launch this summer. ASNT knows the importance of client confidence. As companies resume normal business operations, this attestation that their in-house certification programme meets or exceeds the standards outlined in ASNT's recommended practice No SNT-TC-1A can assist business development for success in a highly competitive environment.

ASNT Learn has launched

ASNT Learn is live and active. The Innovation in NDT webinar series is underway, with a line-up of reasonably priced monthly webinars. ASNT is excited to have industry veteran Marybeth Miceli as the host of this series. Each of these webinars offers one contact hour for recertification. Whether at home, on the train or on a lunch break, these hour-long sessions are accessible learning opportunities for anyone interested in staying connected to the latest information on industry technologies and innovations.

A new leadership development programme was launched in April, called ASNT Rise. This programme is targeted for new professionals in the first ten years of their careers. Programme participants will gain leadership and professional development skills, learn ASNT history and ISC functions, among other great opportunities. The ASNT Rise programme can be found on the website at: www.asnt.org/learn

ASNT advocates

ASNT will be unveiling a new industry advocacy programme, called ASNT Advocates. This new initiative will be a thoughtfully designed engagement opportunity for ASNT stakeholders to share industry topics of interest or concern. ASNT will host position papers by thought leaders and industry updates, in addition to tools for stakeholders to share information and advocate for themselves on different levels.

Digital Imaging and Ultrasonics for NDT 2020

28-30 July 2020

New Orleans, Louisiana, USA

Live streaming is available for this conference

www.asnt.org

CALENDAR OF NDT EVENTS

Month	Date	Venue	Event	Contact
July 2020	26-30	Minnesota USA	47th Annual Review of Progress in Quantitative Nondestructive Evaluation (QNDE)	barnesj@asme.org https://event.asme.org/QNDE
August 2020	19	California USA	NDE/NDT Structural Materials Technology for Highways and Bridges 2020 – <i>Live streaming is available for this conference</i>	conferences@asnt.org www.asnt.org
September 2020	15-17	Northampton UK	59th Annual British Conference on NDT (NDT 2020)	conf@bindt.org www.bindt.org
October 2020	6-8	Virginia USA	12th International Symposium on NDT in Aerospace 2020	jjennewine@utcd Dayton.com www.ndt2020.utcd Dayton.com
	21-22	Paris France	FCTM-ESOPÉ Symposium	www.fctm-esope.com/en
November 2020	10-13	Florida USA	ASNT Annual Conference 2020 – <i>Live streaming is available for this conference</i>	conferences@asnt.org www.asnt.org
December 2020	7-8	Selangor Malaysia	Malaysia International NDT Conference and Exhibition 2020 (MINDTCE'20)	secretariat@mindtce20.com www.msnt.org.my www.mindtce20.com
February 2021	28-3 March	Manama Kingdom of Bahrain	8th Middle East NDT Conference and Exhibition	conference.manager@bse.bh www.mendt.co
May 2021	31-4 June	Incheon Korea	20th World Conference on Non-Destructive Testing (20th WCNDT) – <i>Rescheduled from 8-12 June 2020</i>	secretariat@wcndt2020.com www.wcndt2020.com
June 2021	21-24	Palermo Italy	10th European Workshop on Structural Health Monitoring (10th EWSHM)	contact@ewshm2020.com www.ewshm2020.com