APFNDT Regional News

Newsletter Vol. 7, Issue 2. December, 2025

Asia Pacific Federation for Non-Destructive Testing (APFNDT)

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Advertisements

APFNDT Secretariat

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I. Message from the President of APFNDT

The Evolution of Perspectives on NDT Development and Collaboration with SPRINT Robotics

It is extremely important for those of us involved in NDT to set goals for the future direction of development, or the desired state we wish to achieve. While the development of NDT can be discussed from various perspectives, this time I will discuss the concept of NDE 4.0 as an evolution in the application of NDT and our collaboration with SPRINT Robotics.

Figure 1 represents the evolution of the concept of what NDT is used for. At first, NDT was used for testing and analysis, but later, more importance was placed on evaluation and assessment, and from the 1990s, a wide range of uses were discovered, including monitoring and sensing, and now, as in NDE4.0, there has been an evolution in thinking about whether new value can be created.

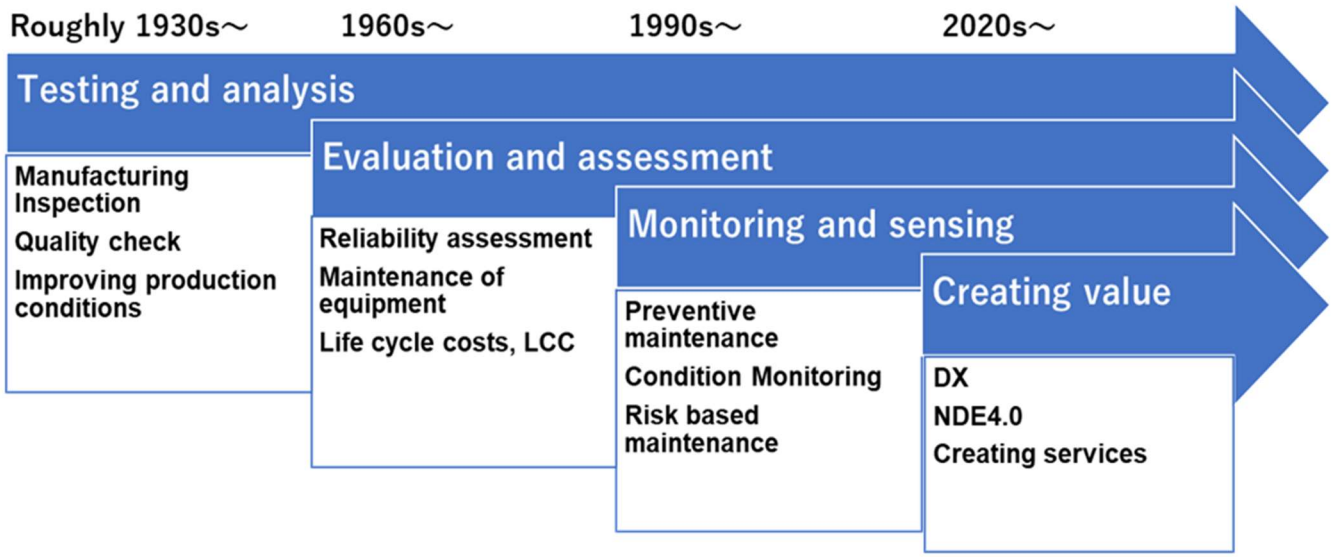

Figure 1　Transition of the use concept of NDT

Recently, there has been a lot of buzz around NDE4.0, which is all about robots, AI, and DX. NDE4.0 is part of what's called Industry 4.0, which is more about how companies think about their activities than R&D. As you can see Figure 2, companies are focusing on improving productivity in factories, plants, and offices, as well as maintenance and extending the life of equipment. In the future, our field will also evolve toward the application of DX and the design of new businesses. In B 2 B cases, manufacturers, user companies, and inspection companies will work together to improve efficiency and add value. In that sense, SPRINT Robotics has been taking a pioneering approach for the past 10 years. The development of society depends on the cooperation between growth industries, innovative technologies, and the broader NDT community. Given this background, we are pleased to announce that we signed a Professional Cooperation Agreement with Sprint Robotics in June 2025. We have high hopes for this collaboration.

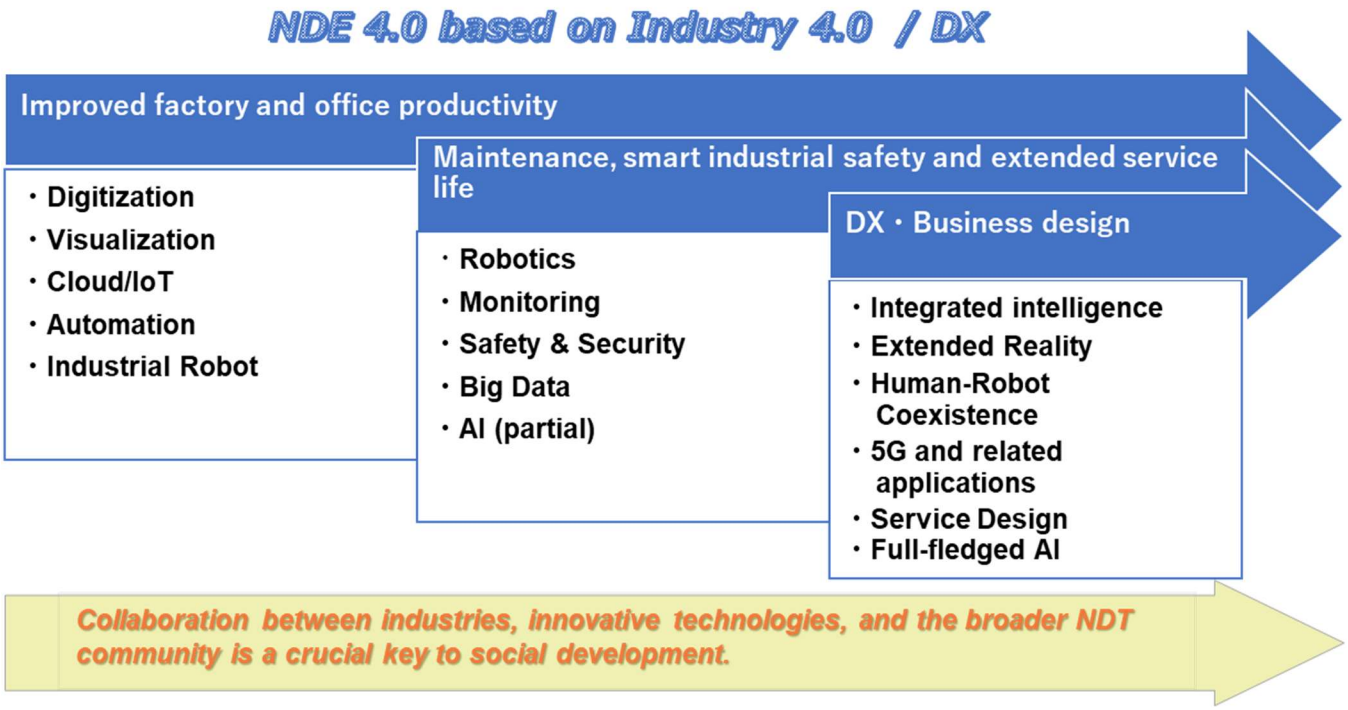

Figure 2　Industrial development trends

Dr. Takamasa Ogata, APFNDT President

II. Current APFNDT Board of Directors

APFNDT Executive Committee (AEC) Members 2023-2026

	**President** **Dr. Takamasa Ogata,** *The Japanese Society for Non-Destructive* Inspection *(JSNDI)*		**Vice President** **Dr. Krishnan Balasubramanian,** *The Indian Society for Non-Destructive Testing (ISNT)*
	**Immediate Past President** **Dr. Norikazu Ooka,** *The Japanese Society for Non-Destructive* Inspection *(JSNDI)*		**General Secretary** **Mr. Paulchamy Pugalendhi,** *Non-Destructive Testing Society Singapore (NDTSS)*
	**Treasurer** **Mr. Kevin Smith,** *The American Society for Nondestructive Testing (ASNT)*		**APCNDT 2026 President** **Mr. Danny Keck,** *The American Society for Nondestructive Testing (ASNT)*
	**Auditor** **Dr. S. K. Babu,** *Non-Destructive Testing Society Singapore (NDTSS)*		**Secretariat Representative** **Mr. Shohei Ooka,** *The Japanese Society for Non-Destructive* Inspection *(JSNDI)*

APFNDT Board Members 2023-2026

	**Mr. Diwakar D. Joshi,** *The Indian Society for Non-Destructive Testing (ISNT)*		**Mr. Alexander Mullin,** *The Russian Society for Non-Destructive Testing and Technical Diagnostics (RSNTTD)*
	**Mr. Ji Jingyuan,** *The Chinese Society for Non-destructive Testing (ChSNDT)*		**Prof. Ik-Keun Park,** *The Korean Society for Nondestructive Testing (KSNT)*
	**Dr. Ilham Mukriz Zainal Abidin,** *The Malaysian Society for Non-Destructive Testing (MSNT)*		**Prof. Chih-Hung Chiang,** *The Society for Nondestructive Testing and Certification of Taiwan (SNTCT)*
	**Mr. Pranay Wadyalkar,** *The Australian Institute for Non-Destructive Testing (AINDT)*		**Mr. Neal Couture,** *The American Society for Nondestructive Testing (ASNT)*

III. SPRINT Robotics Asset Integrity Management Seminar

Collaboration with JSNDI

Following the success of last year's event, SPRINT Robotics and the Japanese Society for Non-Destructive Inspection (JSNDI) once again collaborated to host the Asset Integrity Management Seminar in Tokyo, Japan, from June 18 to 20, 2025. This three-day seminar offered attendees unparalleled access to international expertise, insightful presentations, and valuable networking opportunities for professionals in the inspection and maintenance (I&M) sector.

The program brought together leading I&M solution providers and robotics Original Equipment Manufacturers (OEMs), providing a dynamic platform to explore the latest technological advancements in the field. Keynote speeches, panel discussions, and exhibitor showcases offered a comprehensive overview of cutting-edge technologies and best practices.

Introducing APFNDT at the seminar

Visiting the exhibit

AGREEMENT BETWEEN APFNDT AND SPRINT Robotics

Presentations on June 19 and 20 were delivered in Japanese, with simultaneous interpretation services available. The event played a significant role in accelerating the adoption and development of advanced robotic solutions for asset integrity management across the region.

Prior to the opening of the seminar, a Memorandum of Understanding (MoU) was signed between Dr. Takamasa Ogata, President of the Asia-Pacific Federation for Non-Destructive Testing (APFNDT), and Mr. Mauricio Calva, Chairman of SPRINT Robotics. This agreement aims to strengthen mutual cooperation and foster closer collaboration between the two organizations in the field of inspection and maintenance. The signing of the MoU marks a significant step forward in promoting the adoption of advanced robotic solutions and knowledge exchange within the Asia-Pacific region.

A Memorandum of Understanding (MoU) was signed between Dr. Takamasa Ogata, President of APFNDT, and Mr. Mauricio Calva, Chairman of SPRINT Robotics, marking the beginning of an active and collaborative partnership between the two organizations.

IV. The 8th Pan-American Conference for Non-Destructive Testing

The Power of Partnership: A Call for Collaboration, Cooperation, and Convergence to Attract the Next Generation of NDT Talent

Introduction

The Non-Destructive Testing (NDT) industry stands at a pivotal moment. As infrastructure ages, technologies evolve, and industrial demands increase, the need for a highly skilled NDT workforce has never been more urgent. Let's be clear: this is not an indictment of the current system. Canada and our international partners provide a training and certification framework that is world-class. The message here is not one of crisis—but of opportunity.

Our countries, and the national and international organizations we support, can lead the way by embracing robotics, AI, and machine learning. We have a role to play in boosting manufacturing competitiveness and supporting critical infrastructure and energy initiatives. The importance of NDT is only increasing as the world grapples with trade and geopolitical challenges.

With the global spotlight on trade efficiency, nuclear development, strategic energy transmission, and rare-earth extraction, our ability to respond effectively hinges on preparing the next generation of NDT practitioners. Canada has a legacy of bringing the world together to solve global issues—and PANNDT 2025 provided a vital forum to discuss these shared opportunities.

PANNDT 2025: A Showcase of Innovation, Community, and Cross-Disciplinary Reach

Held June 9–12, 2025, at the Fallsview Casino Resort in Niagara Falls, Ontario, the 8th Pan-American Conference for Non-Destructive Testing **(PANNDT 2025)** brought together nearly **700 professionals from over 20 countries**, featured **120 technical papers, 91 exhibitors, 4 short courses**, student posters, and the high-energy **"Ultrasonic Ace"** competition.

In her opening remarks, **Laura Obrutsky** (CINDE past Chair) emphasized our collective responsibility to attract new practitioners—including young people unfamiliar with NDT—and to implement digital and AI-driven inspection tools at a time when nationalism and isolationism are on the rise globally. Her call for unity and collaboration set the tone for a conference focused on shared purpose.

PANNDT also highlighted remarkable cross-disciplinary innovations—such as the use of **XRF and infrared thermography in cultural heritage conservation**, including **AI-assisted radiography of ancient artifacts** like the Herculaneum Scrolls. These sessions demonstrated how NDT not only supports industrial safety but also contributes to the **preservation of human history and cultural legacy**.

A standout moment was the **Power Station Fun Night**, hosted at a historic Niagara Parks hydroelectric facility. Attendees toured century-old infrastructure and witnessed a powerful fusion of industrial heritage and modern inspection science—underscoring NDT's deep roots and its evolving role in society.

Opening Remarks

PANNDT 2025 reinforced the central themes of this article:

- **Collaboration** across sectors—industry, academia, government, and cultural institutions
- **Cooperation** through mentorship, knowledge exchange, and global engagement
- **Convergence** of traditional NDT with digital transformation—AI, robotics, and automation

A Future-Ready Workforce

To seize these opportunities, we must build a **future-ready workforce**. This demands blended skillsets, expanded training capacity, and unified goals across sectors. The alignment between PANNDT and this vision was clear—strategic investment in talent, supported by collaborative education, industry partnerships, and government backing, is more important than ever. But the challenge is greater than any single organization or country can address alone. The opportunity lies in pooling our resources, sharing best practices, and maintaining international momentum through joint action.

Collaboration: Bridging Industry and Education

PANNDT demonstrated how powerful industry–education collaboration can be. The student poster session and "Ultrasonic Ace" competition were dynamic examples of how to engage and inspire emerging talent. Presentations underscored the need for curricula that emphasize **digital literacy**, **AI awareness**, and **modern inspection techniques**. Whether through co-op placements, case-study projects, or early STEM outreach, collaboration is essential to developing programs that reflect real-world NDT demands and spark long-term interest among young professionals.

Cooperation: Building National and Regional Capacity

The scale of PANNDT showcased Canada's ability to convene global experts and catalyze professional development—but translating these ideas into **national and regional action** remains a challenge. Not all stakeholders can attend every international forum. Time, cost, and geography limit access. As leaders of national, regional, and international NDT organizations, we must ensure that the **spirit of cooperation experienced at global events** is reflected in the training programs and tools we develop at home.
This also means **elevating end-user feedback** to inform international standards and initiatives. Cooperation is not just about connecting institutions—it's about closing the loop between global vision and grassroots implementation.

Convergence: Embracing NDT's Technological Evolution

PANNDT's sessions on **AI, autonomous robotics, ultrasonic imaging**, and other advanced methods clearly reflected the convergence of technology and NDT.

Case studies ranged from:

- **Eddy current testing of EV battery welds**
- **Guided-wave inspection of tank floors**
- **Terahertz characterization for subsurface imaging**

These examples illustrate how next-gen tools are **redefining the capabilities and expectations** of NDT. Training and certification must evolve in parallel to ensure that practitioners are equipped for this increasingly digital and data-driven future.

The Role of Industry Leadership

Speakers at PANNDT acknowledged the looming tsunami of technological change—and pointed out that when the market sees value, adoption happens fast. **AI, robotics, and machine learning** are already being used daily in our industry, often without fanfare.

This reality underscores the need for **industry leadership at every stage** of the talent development process:

- Defining the future skillsets needed in employees
- Helping shape training content and applied research
- Hiring and mentoring students and graduates
- Advocating for government investment in NDT workforce development

Perhaps most importantly, industry leaders must help **communicate the value of NDT**—not just within the sector but to **governments, communities, and students**. NDT is foundational to safe, sustainable, and competitive economies, and we must share that message widely.

Conclusion: A Call to Action

PANNDT 2025 showed us what is possible through shared effort: a globally connected, technologically advanced, and socially relevant NDT community. The alignment between the conference's themes — Collaboration, Cooperation, Convergence— and the needs of our sector is undeniable.

Now is the time to act. By fostering cross-sector partnerships, embedding new technologies into training, and positioning NDT as a dynamic and purpose-driven career, we can attract the next generation of innovators—whether they are passionate about building resilient infrastructure or preserving our cultural heritage.

Let us turn this opportunity into enduring impact—a legacy built on connection, vision, and the next generation of NDT talent.

Presentation of a Commemorative Gift from APFNDT

PANNDT 2025 Group Photo

CINDE
CANADIAN INSTITUTE FOR NON-DESTRUCTIVE EVALUATION

V. KSNT - JSNDI Joint Workshop

The 5th joint workshop between the Korean Society for Non-Destructive Testing (KSNT) and the Japanese Society for Non-Destructive Inspection (JSNDI) was held in Busan, South Korea, from May 28th to 29th, 2025. The history of previous workshops is briefly reviewed and the 5th joint workshop held in Busan this time is reported here.

The joint workshop was based on a collaboration agreement concluded between JSNDI and KSNT in October, 2014, and has been held alternatively and regularly since 2015 in either Japan or Korea. The purpose of this workshop is mainly to promote the field of non-destructive testing in Korea and Japan. The workshop aims not only to deepen friendship and strengthen the cooperative relationship between KSNT and JSNDI, but also to foster and encourage young engineers and researchers who will play a key role in the future development of the NDT/NDE fields. The workshop, held in conjunction with the respective KSNT and JSNDI Spring or Fall conferences, features a variety of research presentations, information exchanges, and technical tours, all in English. In particular, the participation of young engineers and researchers aiming to engage in NDT/NDE is strongly encouraged.

The joint workshop began in Sapporo, Japan in 2015, then took place in Daegu, South Korea in 2017 and Kobe, Japan in 2018. After a several-year hiatus due to the COVID-19 pandemic, it resumed in Tokushima, Japan in 2023 and the 5th joint workshop this time was held at the Busan Port International Exhibition and Convention Center, in conjunction with the KSNT Annual Spring Conference 2025.

Group photo of participants at the workshop venue

This workshop featured research presentations and information exchanges on two topics: “NDT for Infrastructure DX” and “Advanced Ultrasonics”. Professor Kazuyuki Nakahata (Ehime University, Japan) gave a keynote speech entitled "Numerical Modeling of Ultrasonic Waves and Flaw Characterization for NDE of Concrete Structures" providing insightful information on non-destructive testing of civil engineering infrastructure. Two sessions were held for each of the above topics, where cutting-edge researches were presented by up-and-coming young researchers, leading to lively discussions. Each session featured invited talks by researchers from Japan or Korea, who served as lead speakers for their respective sessions: “Latest advancements in non-destructive evaluation of 3D printed

concrete” by Dr. Wenxu Sun (Kyoto University, Japan), “Beyond Automation: Toward Intelligent Agents in NDE” by Dr. Hogeon Seo (Korea Atomic Energy Research Institute, Korea), “Recent Advances in Standing Wave-Based Structural Defect Detection” by Prof. Gyuhae Park (Chonnam National University, Korea), and “Ultrasonic monitoring of bond strength evaluation or resin curing” by Prof. Naoki Mori (Osaka University, Japan). Furthermore, Korea Association for Non-destructive Testing（KANDT）gave a brief introduction to their activities to encourage future collaboration with JSNDI. The day after the workshop, an industrial tour was held to visit the Doosan Energy Factory in Changwon.

Scene from the lecture.

During the event, KSNT-JSNDI joint meeting was held to discuss future activity plans for both societies, resulting in a successful conclusion of the workshop. The next workshop is scheduled to be held during the JSNDI Autumn Conference to be held in Japan in 2026.

Commemorative photo taken at Doosan Energy Factory

VI. ASNT Update

ASNT Introduces New, Flexible Membership Model

ASNT has launched a new membership model offering greater flexibility and value for NDT professionals. Members can now choose from Professional Membership, the premium Pro Plus Membership with exclusive tools, or a FREE Associate Membership offering select benefits. Existing members will transition to the new options upon renewal, reflecting ASNT's commitment to a more accessible and personalized member experience.

Starting in 2025, ASNT is transitioning to a digital-first membership model to expand access, reduce environmental impact, and avoid increasing dues. As part of this change, the final monthly print edition of Materials Evaluation will be August 2025.

Members will continue to enjoy full digital access including offline downloads, search tools, and archived issues. Prefer print? Professional and Pro Plus members can now add a print subscription for $49 (US) or $89 (international).

ASNT Launches Authorized Training Organization (ATO) Accreditation Program

ASNT Certification Services LLC has introduced the Authorized Training Organization (ATO) Accreditation Program to recognize NDT training providers that meet the highest industry standards. The program includes both administrative and operational assessments, ensuring accredited organizations deliver high-quality training. Becoming an ASNT ATO offers providers enhanced credibility, access to valuable resources, and opportunities to help shape NDT standards, reinforcing ASNT's commitment to excellence in professional development.

ASNT and AWS Expand Training and Certification Collaboration

ASNT and the American Welding Society (AWS) have formalized a partnership to expand welding and NDT training and certification activities in India and the Middle East. By sharing authorized training facilities and combining expertise, both organizations will significantly increase accessibility for professionals in the region. With ASNT India's presence in Chennai and a new joint center planned for Gujarat, this collaboration strengthens workforce development and supports industry growth across Asia-Pacific.

New ASNT Partnership Advances NDT Globally

ASNT has partnered with the Inspection Technology and Quality Assurance National Institute (ITQAN) in Saudi Arabia to expand access to ASNT training and certification. This collaboration advances nondestructive testing (NDT) worldwide while empowering Saudi talent with globally recognized skills.

ASNT Highlights NDT's Future Role in Jobs of Tomorrow Docuseries

ASNT is featured in the latest season of Jobs of Tomorrow, a docuseries showcasing how nondestructive testing (NDT) drives innovation and creates career opportunities across industries. Through six episodes, the series spotlights NDT's critical role in transportation, energy, infrastructure, and more. By highlighting the professionals and technology behind the work, ASNT is helping to raise awareness of NDT's vital contributions and inspire the next generation of NDT leaders.

New AI/ML Standard Open for Public Comment

ASNT has created a new standard for Artificial Intelligence (AI)/Machine Learning (ML) in NDT. The standard is called Use of AI/ML for NDT/E Applications. This standard provides a systematic and principled AI/ML utilization strategy within the NDT/E field.

It outlines minimum requirements for the development, implementation, and use of AI/ML.

NDT ProTracker: Empowering Professional Development in NDT

ASNT has introduced the NDT ProTracker, a web app designed to help NDT professionals log, track, and manage their certifications and activities seamlessly from their smartphone, tablet, or computer — even offline. Whether you're a seasoned expert, a Level II technician, or transitioning from a military NDI role to a civilian career, NDT ProTracker supports your development and helps you manage your professional journey with ease. The NDT ProTracker is available as a premium benefit for ASNT Pro Plus Members or through a standalone subscription.

ANITA: ASNT's AI-Powered Knowledge Assistant for NDT Professionals

ASNT's cutting-edge AI assistant, ANITA, was developed to deliver quick, reliable information to NDT professionals. Trained exclusively on ASNT's extensive library—including books, research papers, conference proceedings, industry standards, and official website content—ANITA provides expert-level answers backed by trusted resources. Whether you need technical guidance, references to standards, or best practice insights, ANITA is ready to help. It even cites sources for deeper research and continuously improves with user feedback. Unlike general AI platforms, ANITA is tailored specifically to the NDT field, offering access to proprietary information not publicly available elsewhere. ANITA is available as a premium benefit for ASNT Pro Plus Members or through a standalone subscription.

ASNT Advances NDT Awareness with Inaugural Day on the Hill

In March, ASNT hosted its first-ever Day on the Hill in Washington, DC, where over 40 members and staff held more than 100 meetings with lawmakers to highlight the critical role of nondestructive testing (NDT) in public safety, infrastructure reliability, and technological innovation. While focused on building U.S. legislative awareness, these efforts to advocate for greater investment in NDT research and workforce development have global implications, strengthening the industry worldwide. The success of this event marks a major step in ASNT's long-term advocacy efforts to secure recognition and support for NDT at the national level.

17th Asia Pacific Conference on Nondestructive Testing (APCNDT)

11-15 May 2026, Honolulu, HI

www.apcndt2026.com

We're excited to announce that registration is now open for the 17th Asia Pacific Conference on Nondestructive Testing (APCNDT), taking place 11–15 May 2026 in Honolulu, Hawaii. Under the theme Breaking Barriers: NDT Solutions for a Changing World, APCNDT 2026 will bring together nondestructive testing (NDT) professionals, researchers, and innovators from across the globe to share breakthroughs, explore practical applications, and shape the future of NDT. If you plan to travel internationally, we encourage you to begin the visa application process as early as possible.

What will you share with the global NDT community in 2026? **The 17th Asia Pacific Conference on Nondestructive Testing (APCNDT 2026)** in Honolulu brings together experts from across the Pacific region at the Hilton Hawaiian Village Waikiki Beach Resort.

Join us in Hawaii to learn, innovate, and collaborate. Then, unwind just steps from Waikiki's widest stretch of beach with ocean views, island culture, and memorable evenings by the water.

www.apcndt2026.com

Conferences & Events

2025-2026 Schedule

35th Annual conference & Exhibition on Non-Destructive Evaluation &Enabling Technologies (ISNT)
11-13 December 2025
Mumbai, India
https://isnt.in/home/index.php

AINDT SUMMIT 2026 (AINDT)
20-22 April 2026
Newcastle, Australia
https://aindtevents.eventsair.com/aindt-summit-2025/

The 17th Asia Pacific Conference for Non-Destructive Testing (ASNT)
11-14 May 2026
Honolulu, Hawaii, USA
https://www.apcndt2026.com/

The International Conference on NDT for the Next Generation (JSNDI)
30 August-3 September 2027
Kobe, Japan
New website coming soon

If your Society/Organization has an event or conference you would like to promote, especially in the Asia-Pacific Region, please contact the APFNDT Secretariat at secretariat@jsndi.or.jp