POSTER SESSION

from Tuesday, June 16th to Friday, June 19th, 2026
Poster Area

ID123, *Ultrasonic Monitoring of the Large-scale Threaded Connections during In-service Maintenance in the Oil and Gas Industry*, Oleh Karpash, Giuseppe Nardoni, Ihor Rybitskyi, Valentyn Uchanin

ID124, *30 Years of Diagnosis and Monitoring of Diocletian's Palace in Split – Croatia*, Dario Almesberger, Vesna Bulić Baketić, R. Bužančić, D. Bartulović, A. Lalić

ID130, *Large Bandwidth and High Sensitivity Ultrasonic Transducers based on High Temperature 1-3 Piezoelectric Composite*, Rui Zhang, Bo Ma, Yihua Kang, Shiyuan Liu, Bo Feng

ID131, *Backing Design for Coil-only EMAT using Nickel-powder Epoxy Composite*, Yini Song, Kai Wang, Yiru Xiao, Jun Tu, Bo Feng, Yihua Kang

ID164, *Non-Destructive Testing of Titanium-Aluminium Alloy Samples using Multi-Technique Evaluation*, Angelo Tatì

ID185, *Application of the Full Matrix Capture - Total Focusing Method for defect detection in additively manufactured aluminum-based materials*, Dariusz Ulbrich, Olivier Fromentin, Konrad Gruber, Jacek Urbańczyk

ID186, *Issues Related to Ultrasonic Testing of Adhesive Joints*, Jakub Kowalczyk, Jaroslaw Selech, Dariusz Ulbrich, Piotr Banas

ID187, *Advanced Techniques for Corrosion Under Insulation (CUI) Inspection Using AC Magnetic Flux Leakage Testing*, Nikolaos Poulakis, Vyron Drosos, Apostolos Kotouzas, Maria Poulaki

ID195, *Comparative Study of 17-4 Ph Stainless Steel Welded Joints Produced by Additive Manufacturing and Conventional Tube Forming*, Elisa Ferrari, Silvia Gaiani, Riccardo Banin, Massimo Capriolo

ID198, *Super-resolution Ultrasonic Array Imaging of Multilayer Structures,* Binwen Li, Jiaxin Li, Xinqi Tian, Bo Zhao, Jiubin Tan

ID219, *Fast Non-Destructive Inspection of Curved Components using Laser Ultrasonic Testing*, William Kramer, Benjamin van Elburg, H. Patrick Jansen

ID227, *Process Analytical Technology by Ultrasounds for Industrial Product Control*, Jaime Santos, João Ferreira, Mario Santos, João Henriques, Vera Moura

ID241, *Low-Velocity Impact Damage Detection of Composite Materials based on Cross-Modulated Vibrational Acoustics,* Binwen Li, Xiang Li, Jiaxin Li, Bo Zhao

ID247, *Research on the Detection and Imaging Technology of Nuclear Fuel Assemblies Based on High-Energy X-ray*, Xiangyang Zhang, Eryan Sun, Siying Zhang

ID250, *Towards Smarter Non-Destructive Testing: CAD-Referenced Infrared Thermography for Aerospace Technologies*, Amalia Salinas, Marta Herrera, Celia Vilches, Carlos Galleguillos

Poster session

ID257, *Potential of Contact-Free Air-Coupled Ultrasonic Testing on Ceramic Materials*, Andreas Bodi, Emma Black, Ralf Steinhausen, Yury Golitsyn

ID259, *Oblique CT Design for Non-Destructive Testing*, Takumi Akatsuka, Koichi Ogawa

ID264, *AI-Based Safety Evaluation System for Real-Time Bridge Deflection Profile Measurement*, Dong-Woo Seo, Sangki Park, Jaehwan Kim, Hojin Kim, Min-Jun Gong

ID265, *Field Application of a Digital Sensing System for Long-Term Displacement Monitoring of Aging Bridges*, Ki-Tae Park, Dong-Woo Seo, Hojin Kim, Min-Jun Gong

ID267, *A Novel Macro-Level Model for Evaluating Health and Safety Training in Non-Destructive Testing Using Virtual Reality*, Antonella Pireddu, Luca Maurizio Lusuardi, Claudia Giliberti, Canio Mennuti

ID276, *Enhanced Eddy Current Array Inspections for Complex Aerospace Structures*, Arnoud Bosch, Jacco Platenkamp

ID282, *Flexibility Enables Sensitivity: A Multi-sensor Architecture for Structural Monitoring*, Matteo Zauli, Federica Zonzini, Luca De Marchi

ID286, *NDT-CE Applications for Post-Earthquake Structural Assessment: Lessons from the IAEA Mission in Ecuador*, Hernán Xargay, Mario Barrera, Abel Domato Jayo

ID292, *Enhancing Resilience Beyond Borders: IAEA Capacity-Building Missions on NDT-CE in Türkiye and Syria*, Hernán Xargay, Hannah Affum, Abel Domato Jayo

ID311, *Research on Remote Magnetostrictive Ultrasonic Guided Wave Testing for STPG370 Pipes Under Insulation*, Kenta Uesugi, Hiromu Awano, Yoshimi Hatsukade

ID312, *Resolution Enhancement by Sparse Deconvolution for Composite Panels with Embedded Wiring*, Lisanne Kanis, Patrick Jansen, Arno Volker

ID315, *Monitoring the Technical Condition of the Fuel Storage Facility at the Ukrainian Antarctic Akademik Vernadsky Station*, Yurii Posypaiko, Anatoliy Andreev

ID346, *Non-Contact Ultrasonic Evaluation of Alignment Accuracy in Automotive Lamp Testing*, Bonggyu Ji, Min Heo, Ho Kyoung Kim, Seong Yeon Kim, Seongdong Shin, Wonjae Choi

ID347, *Manufacturing and Characterisation of Artificially Induced Defects in Fibre Metal Laminates for Modal Analysis*, Lars Eisele, Daniel Esse, Wilfried Liebig

ID352, *Robotic CT for Quality Assurance of Arbitrary Test Objects in an NDE 4.0 Smart Factory Environment*, Frank Herold, Jonas Kühne

ID362, *Non-destructive Battery Testing at the EZRT – From Fast Screening to High-precision 3D Analysis*, Stefan Koppenhofer, Michael Salamon, Sven Kilian, Nils Reims, Michael Böhnel, Dimitri Prjamkov

ID363, *Coverage Analysis of Automated Robotic Inspection of Large Aircraft Parts*, Daniela Kirchberger, Christian Eitzinger, Wolfram Walenta, Markus Leitner

Poster session

ID366, *Monitoring System for the Manufacturing Process of CFRP Structures*, Antonio Grande, José Alba, Montserrat Acebes, Darío Sánchez-Jimenez, Iñaki Gauna, José Anaya, Maria T. Aguado, Sofía Aparicio

ID369, *Real-Time Defect Detection Using Artificial Intelligence Models in Ultrasonic Inspections*, Iñaki Gauna, Montserrat Parrilla, Montserrat Acebes, Sofía Aparicio, Antonio Grande, Margarita González, M. Teresa Aguado

ID370, *Artificial Intelligence and Computer Vision for Automated Aircraft Defect Detection*, Montserrat Acebes, Marcos Alvarez, Antonio Grande, Iñaki Gauna, Carlos Benito, M. Teresa Aguado

ID373, *A Tool to Evaluate Simultaneously the Phase and Group Velocities of the Asymmetric Lamb Wave Mode Using Two Adjacent Signals*, Lina Draudvilienė, Olgirdas Tumšys, Paulius Lapienis

ID382, *Analytical-Numerical Signal Modeling for Eddy Current Probe in Subsurface Defect Detection Tasks*, Iuliia Lysenko, Yuriy Kuts, Valentyn Uchanin, Yordan Mirchev

ID443, *High-speed X-ray CT for Inline Battery Inspection*, Kristin Müller, Frank Herold

ID456, *Automated Robot Path Planning for Camera-Based Magnetic Particle Inspection*, Benedict Gürtl

ID470, *Advances in Drone-Deployed Magnetic Probe for Transmission Line Cables and Material Characterization*, Sophie-Anne Rheault, Jonathan Bellemare, Alexandre Buist, David Ménard, Nicolas Pouliot, Frédéric Sirois

ID472, *A Study on Anomaly Detection in Operating Bearing using Acoustic Emission and Deep Learning*, Jaewon Jang, Yongtag Kim, Hoyseong Lee, Ki-Bok Kim

ID495, *Material Characterization of Additively Manufactured Aluminum Alloy using Ultrasonic Nondestructive Approach*, Xinyan Wang, Chao Zhang, Xin Fu, Jingzhao Wang, Peiwen Guo, Zhiwei Zhang, Liyang Yao

ID511, *Detection of Microstructural Changes Resulting from Temperature Surges in Hp Steel Tubes from Steam Reforming Furnaces*, Iane de A. Soares, Ana C. P. S. Brandão, Thiago M. Neves, Laudemiro N. Júnior, Carlos B. Eckstein, Luiz H. de Almeida, Gabriela R. Pereira

ID521, *Machine Learning-Based Non-Destructive Evaluation of HDPE Lining Integrity from Ultrasonic Signal Features*, Thiago T. M. Neves, Marcella Grosso Lima, Natalie C. Siqueira, Heloisa Althoff, Daniel Braga, João Pedro M. Casacão, Cesar G. Camerini, Gabriela R. Pereira

ID527, *Integrated UAV-Based Surface Curvature Analysis and Intelligent Compaction Monitoring for Nondestructive Evaluation of Road Embankment Quality*, Jinyoung Kim, Jaemo Kang, Sungyeol Lee, Myungsik Kong, Woncheol Jeong

ID537, *Magnetic Testing of Coated Components with High Dry Film Thickness (> 50 µm) using AC and DC Electromagnetic Yokes*, Erik Del Forno, Nicola Marasco, Stefano Verdino, Riccardo D'Amico, Dario Tonali, Enrico Vignati

ID546, *AIQuAM3D – Embedded Artificial Intelligence for Quality Assurance in Additive Manufacturing and for Advanced 3D Material Characterisation*, Awen Autret, Duy Nguyen, Paul Helmerking, Jussi-Petteri Suuronen, Bernhard Hesse, Shyam Pulickan, Renan Giacomelli, Gustavo Reis de Ascenção

ID557, *Development of Automated CT Performance Testing System and Algorithm Reliability Optimization*, LUO Jiawei, XIAO Yongshun

Poster session

ID570, *AI-Assisted Predictive NDT for Identifying High-Risk Zones in District Heating Pipelines*, Sungyeol Lee, Jaemo Kang, Jinyoung Kim, Myeongsik Kong

ID571, *AI-Assisted Attribute-Based Screening Framework for Ground-Subsidence Risk Using Underground Utility Information*, Sungyeol Lee, Jaemo Kang, Jinyoung Kim, Myeongsik Kong

ID577, *Handheld Ultrasound Inspection System for Position-Resolved 3D Imaging on Arbitrary Surfaces*, Florian Römer, Ute Rabe, Lukas Werft, Barbara Pahl, Christine Kallmayer, Alex Friebel, Sylvia Gebhardt, Holger Neubert

ID594, *Pose-Informed X-ray Image Deblurring for Drone-Based Wind Turbine Inspection*, Bas Meere, Rainier Heijne, Egor Bondarev, Elena Torta, Paula Chanfreut, Duarte Antunes

ID601, *Towards an Immersive Digital Twin Based Robotic Inspection Framework for Confined Spaces*, Yonas Tefera, Mohamad Shaaban, Penggang Gao, Mennuti Canio, Darwin Caldwell, Nikhil Deshpande, Jesus Ortiz

ID606, *Comparative Evaluation of Ultrasonic Techniques for the Inspection of Aeronautical Sandwich Composites*, Alessia Barbieri, Franco Monti, Simona De Angelis, Mario Turconi

ID627, *Selection of Optimal Projection Angles for the Measurement of Wall Thicknesses in Turbine Blades by Few-View X-Rays*, Julian Betancur, Cedric Fragnaud, Stephane Roux

ID633, *Evaluation of Defect Measurement Uncertainty in Welds of Polyethylene Pipes using ToFD*, Serhii Hlabets, Volodymyr Eremenko, Yordan Mirchev

ID638, *Non-destructive Fault Detection in Surface Hardening Technology for Concrete Floors*, Mateusz Moj, Lucyna Chmurzyńska

ID680, *Study of Training Strategies to Improve Performance for Defect Detection in Aeronautical Castings X-Ray Images*, Pascual Tornero Martín, Alberto García Pérez, Arturo de la Escalera Hueso, David Montoya Rodriguez, Aimar Nicuesa Usandizaga

ID696, *Stress Detection System Based on Magnetic Coupling Self-Resonant Frequency Sensing*, Geng Yang, Yi Liu, Bin Gao, Dong Liu

ID730, *Measurement of the Thermal Resistance of Vertical Cracks. A Simple Method based on Laser Spot Instrumentation*, Thomas Lahens, Jean-Christophe Batsale, Alain Sommier

ID761, *Position - and direction- Dependent 3D Spatial Resolution Evaluation for Computed Tomography using Extended Modulation Transfer Function Analysis*, Anahita Movahedi, Lorenz Butzhammer, Tino Hausotte

ID790, *The Decoupling Mechanism of ECT-EMAT Coupled Signals Governed by Coil Coupling Configuration*, Daokun Jiao, Qin Tang, Bin Gao

ID795, *Design of a New Ultrasonic Rotary Probe Inspection of a Drive Axle Starting from Its Design*, Luigi Aruta, Simone Solazzi, Marco Bonchi, Stefano Biagioni, Claudio Cuppi

ID811, *Comparison Between an Ultrasonic and an Electromagnetic Metrology for The Study of Hydrogen Embrittlement in Steels*, Benjamin Ducharne, Nicolas Mary, Hossep Achdjian, Julien Bustillo, Guy Feuillard, Jules Toupin, Yves Armand Tene Deffo, Tetsuya Uchimoto

Poster session

ID850, *Application of Pulsed Electric Fields and Ohmic Heating on Hop Pellets: Insights via Near-Infrared Spectroscopy*, Claudia Siclari, Rohini Dhenge, Margherita Rodolfi, Tina Lino, Tommaso Ganino, Massimiliano Rinaldi

ID868, *Modeling of Ultrasonic Evaluation of Adhesive Bond Degradation*, Ryszard Mańczak

ID881, *Suppressing Spreading in CCS Data of Complex-Shaped Defects via Estimated-PSF Regularized Deconvolution*, Martin Mwelango, Xiaokang Yin, Marco Ricci, Xiao Li, Xin'an Yuan, Wei Li

ID883, *Multisensor Airborne Survey and AI Driven Crack Detection and Mapping on Hydropower Dams*, Virginie Sibert, Roberto Giudici, Guillaume Bossennec

ID926, *Estimation of the Helium Leak Rate in Extremely Low Volume Sealed-off components using Helium Bombing Technique in the NDT- Leak Testing Method*, Venkat N. Ramani, Akash V. Kaila, Milan V. Kaila

ID931, *Acoustic Emission–Based Evaluation of Wear Evolution in Zinc Phosphate/Stearate Coatings for Cold Forging*, Sangwoo Kim, Ji Hoon Kim, Keuntae Park

ID939, *Remote Impact Acoustic Inspection of Tiled Surfaces Using Water Droplets*, Sadaaki Kunimatsu, Saeko Tokuomi, Isshin Kawachi, Kazuya Mori

ID944, *Tomographic Reconstruction and Microstructural Observations of 3D Printed Heat Exchangers*, Anselmo Cecere, Angelo Tatì, Daniele Mirabile Gattia

ID949, *An Integrated European Training Ecosystem for Advanced Inspection and Welding Skills: XR Scenarios, Digital Platforms and Specialisation Pathways*, Ana Luísa Marques, Ana Q. Barbosa, Adelaide Almeida

ID959, *Optimizing Non-Destructive Testing through Automation, Robotics, and AI-Driven Data Analysis*, Esmeralda Cuevas Aguado, Eneko Ugalde