

**SPECIAL EVENT - Academia NDT International Research Session: 'Critical and Emerging Technologies at the forefront of NDE'**

**ID129**, *Detectability of Cracks from Notches Using Digital Radiography*, Shant Kenderian, Joseph T. Case, Paul M. Adams, Anita Gregorian

**ID149**, *Breaking Barriers in NDE: AI-Enhanced Solutions for Future Smart NDE*, Roman Gr. Maev

**ID498**, *DICONDE for Dent Digital Twins: Data Standardization for Aircraft Structural Inspections*, Geo Jacob, Aditi Mhatre, Salvatore Merola, Evgeny Grischenko, Ann-Kathrin Koschlik, Florian Raddatz, Gerko Wende

**ID583**, *Feature-Based Machine Learning Approach for Adhesive Joint Integrity Assessment*, Elena Jasiūnienė, Vykintas Samaitis

**ID616**, *The Evolution and Intelligence of Imaging in NDT: From Visual Inspection to AI-Driven Diagnostics*, Silvano Vergura

**ID823**, *Advancing a Research Agenda on the Ethical and Human Factors that will be Shaping the Evolution of AI/ML/DL Enhanced NDE Processes to Task-Oriented, Domain-Specialized Foundation Models in a Context of Exponentially Accelerated Maturing of Critical and Emerging Technologies (CETs)*, Ramon Fernandez Orozco, Serge Dos Santos

**ID831**, *Master-level teaching strategies supplemented by short courses: AI-based initiatives for Intelligent Inspection*, Serge Dos Santos, Joseph Moysan, Philippe Duvauchelle

**ID925**, *Recent Trends in Digital Industrial Radiography and CT*, Uwe Ewert

**SPECIAL EVENT\_ICNDT, NDT Frontiers**

**ID149**, *Breaking Barriers in NDE: AI-Enhanced Solutions for Future Smart NDE*, Roman Maev

**ID172**, *Laser Ultrasound for Dynamic Rail Base Inspections*, Shant Kenderian, Anish Poudel

**ID273**, *Supporting Sustainable Manufacture and Through-Life Maintenance of Structures Through NDT Value Considerations*, Gareth Pierce

**ID477**, *Toward NDT Digitalization: Challenge to Correlating Inspection Locations with NDT Data*, Makoto Ochiai, Setsu Yamamoto

**ID504**, *AI in NDT: Hype, History, and the Case for Reluctant Adoption*, Glenn Tubrett

**ID751**, *Advancing NDE Qualification Requirements in the Era of Intelligent Inspection*, David Gilbert

**ID872**, *Defect Initiation and Propagation in GFRP Ring through Multi-Physics Simulation and Acoustic Emission Monitoring*, Oludare Amos Solademi, Judith Abolle-Okoyeagu, James Njuguna

**ID900**, *CWT-Informed Deep Learning Framework for Intelligent Interpretation of Guided Wave Scattering in Hybrid Laminated Structures toward NDE 5.0*, Saurabh Gupta, Sujoy Mondol, Lalita Udpa, Mahmood Haq

## SE INAIL

**ID296**, *Structural Integrity of GFRP (Glass Fiber Reinforced Polymer) Non-Pressurized Reactor – Main Aspects and Case Study Analysis*, Domenico Di Fonzo, Giuseppe Augugliaro, Fausta Delli Quadri, Romualdo Marrazzo, Fabrizio Vazzana, Vincenzo Bartolozzi

**ID302**, *Non-Destructive Testing for the Safety of an Elevated Work Platform*, Luigi Monica, Sara Anastasi

**ID303**, *Non-Destructive Testing and Service Life Analysis on GRP or PRFV Equipment*, Alessandro Russo, Alberto Blanco, Roberto Nicosia, Armando Falla, Nicola Altamura, Roberto Acerboni, Francesco Boella, Angelo De Palma, Gianluca Saputi

**ID306**, *From Compliance to Prognostics: A Proposal for a New Regulatory Framework Based on NDE 4.0 and Historical Failure Data*, Francesco Santoro, Salvatore Spinoso, Paolo Infortuna

**ID336**, *Confirmation of Design and Construction Parameters Based on Operational Experience*, Riccardo Balistreri, Francesco Giacobbe

**ID430**, *Life Assessment of Martensitic Steels — Experimental Validation Activity of XRD by Testing Martensitic Steels Samples from Interrupted Uniaxial Creep Tests*, Andrea Tonti, Pietro De Blasi, Susanna Matera, Oriana Tassa

**ID448**, *Target 3D for Visual Testing with Drones*, Emanuele Artenio, Giuseppe Augugliaro, Riccardo Balistreri, Davide Gattamelata, Francesco Giacobbe, Omero Spanu

**ID471**, *Analysis of Corrosive Phenomena in Epichlorohydrin Storage Containers. Integrity Testing Procedures*, Carmine Piccolo, Giovanbattista Vaccaro, Gianluca Vena, Orazio Amati

**ID542**, *Advanced Diagnostic Inspection Techniques Supporting Engineering Assessments*, Stefano Sandon, Matteo Ballestra, Giovanni Federico Ramella, Valentina Zanni, Romano Ciancio

**ID543**, *From Compliance to Prognostics: A Proposal for a New Regulatory Framework Based on NDE 4.0 and Historical Failure Data*, Francesco Santoro, Salvatore Spinoso, Paolo Infortuna

**ID590**, *Use of Acoustic Cameras to Improve the Efficiency and Safety of Industrial Plants*, Danilo Sallustio

**ID620**, *Integrity Inspection of a Thermoelectric Power Plant and Elimination of Dissimilar Metal Welds*, Raffaele Iovene, Roberta Vasile, Marcello Di Giacomo, Marino Chendi

**ID683**, *Piping Systems with Innovative Materials: Damage Mechanisms, Design Criteria and Assessment Challenges*, Elisa Pichini Maini, Antonello Alvino, Alessandra Antonini, Daniela Lega

**ID722**, *Visual Testing of External Surfaces of Equipment Using a Drone*, Emanuele Artenio, Giuseppe Augugliaro, Riccardo Balistreri, Francesco Giacobbe

**ID756**, *Application of the Metallographic Replica Investigation Technique for the Evaluation of the Microstructural Condition of Industrial Components - Case Histories*, Carlo Dellabiancia, Mattia Dellabiancia, Romano Ciancio

**ID774**, *Non-Destructive Testing of Lifting Equipment: Assessing Residual Capacity and Ensuring Operational Safety*, Roberto Longo, Raffaele Fabiano, Raffaele Donato, Fabio Badolato, Anthony Cosentini, Maurizio Diano

**ID793**, *Ultrasonic Phased Array In lieu of Radiography for the Periodical in Service Inspection of an Austenitic Steel Pressure Vessel – A Case Study*, Antonino Andolina, Matteo Bartesaghi, Rosario Molica Nardo

**ID846**, *AI Creep Life-Prediction Assisted by Creep Damage Evaluation*, Arsalan Nazim, Andrea Tonti, Elisabetta Gariboldi

**ID901**, *Non-Destructive Testing for HDPE Pipes*, Giuseppe Augugliaro, Fabio Brini, Luca Bruzzo, Alessandro Demma, Canio Mennuti, Paolo Quaresima