

NDT-CE2025 - SESSIONS		
September 24, 2025		
A		
A1: Impact Echo		
Session Chairs: John Popovics, Ralf Arndt		
11:00-11:20	5835	Inspection drone for civil engineering structures: field testing and data acquisition workflow <i>Claudia Thurnherr, Daniel Algernon</i>
11:20-11:40	4576	Monitoring Asphalt Concrete Properties through Impact and Ultrasound Wave Propagation Based on Aging Degree: Experimental and Numerical Analysis <i>Nabil Maifia, Mohamed Belmokhtar, Géraldine Villain, Alexis Cothnet, Denis Vautrin, Frédéric Taillade</i>
11:40-12:00	6592	Development and Evaluation of an Automated Impactor for Impact-Echo Testing in Concrete Structures <i>Markus Rueegger, Aurélie Muller, Claudia Thurnherr, Daniel Algernon</i>
12:00-12:20	6750	Evaluating Cold Joint Damage in Concrete Using Surface Wave Dispersion Velocity Profiles: A Field Study <i>Chia-Chi Cheng, Yung-Chiang Lin, Ting-Yu Lin, Hong-Yao TSAI</i>
12:20-12:40	8231	Interpretation of Impact Echo time signals to avoid bias through geometry effects <i>Fabian Dethof, Sylvia Keßler</i>
A2: Ultrasonics 1		
Session Chairs: Odile Abraham, Roberto Felicetti		
11:00-11:20	1567	Predictive Probability of Detection Curves for Scaling Monitoring in Geothermal Pipelines using Ultrasonic Testing <i>Ana E. Menendez Orellana, Isabelle Stüwe, Alexander Mendler, Christian U. Grosse</i>
11:20-11:40	3608	Impact of Moisture Gradients on Ultrasonic Evaluation of Concrete and Mortar Blocks Subjected to Thermal Exposures <i>Massina Fengal, Pierric Mora, Parisa Shokouhi, Olivier Durand, Xavier Derobert, Sérgio Palma Lopes, LEHUEUR Maximilien, Géraldine Villain, Eric Genesseeux, Odile Abraham</i>
11:40-12:00	4021	Direct and indirect ultrasonic measurements on plastered and unplastered concrete columns: a case study of an inhabited building in Italy <i>Vincenza A.M. Luprano, Valerio Pfister, Antonio Palermo, Tommaso Marcianò, Saverio Mazzarelli, Angelo Tati, Alessandro Marzani</i>
12:00-12:20	4466	Application of Elastic Reverse Time Migration to Ultrasonic Echo Data from Concrete Structures <i>Maria Grohmann, Ernst Niederleithinger</i>
A3: Special Session 11.1		
Session Chairs: Tetsuya Suzuki, Yohei Asada		
11:00-11:20	1485	Development of Quantitative Evaluation Methods for Surface Roughness and Abrasion Depth in Agricultural Open Channels <i>Takuya Kanamori, Mitsuhiro Mori, Shohei Kawabe, Yusei Kimura</i>
11:20-11:40	1731	Detecting pressure waves caused by earthquakes in an in-service pipeline system using numerical analysis <i>Taiki Hagiwara, Takashi Ohkubo, Kaori Hoshino</i>
11:40-12:00	8491	Practical feasibility of AI image analysis and digital twins for remote management of drainage pump stations and agricultural canal gates <i>Toru Nakada, Hiroto Kichise, Hirohide Kiri</i>
12:00-12:20	3904	Water use estimation and leak detection using transient pressure data in field pipeline systems <i>Yohei Asada, Taiki Hagiwara, Tetsuya Suzuki</i>
B		
B1: Digitalization & AI		
Session Chairs: Burcu Güldür Erkal, Daniel Algernon		
14:30-14:50	3127	Post-Earthquake Structural Reconnaissance Using UAV Imagery and Deep Learning: A Case Study of the Kahramanmaraş Earthquake <i>Merve Bayraktar, Burcu Güldür Erkal, Berna Unutmaz</i>
14:50-15:10	6346	Digitalization and Monitoring of Steel and Composite Bridges in Aging Infrastructure <i>Christoph Heinze, Tina Ambrosat, Kira Peper, Moritz Schäferhoff, Daniel Matuszczyk, Michael Geist, Bettina Brune, Frank Weichert</i>
15:10-15:30	7227	Extending the Capabilities of Muography as an NDT-CE Tool using Machine Learning <i>William O'Donnell, David Mahon, Guangliang Yang, Simon Gardner</i>
15:30-15:50	9988	Unsupervised Learning for Anomaly Detection in Ultrasonic and Impact Echo Testing <i>Daniel Algernon</i>
15:50-16:10	5617	Advancing Concrete Strength Estimation: A Review of Machine Learning Applications in SonReb Testing <i>Seyed Alireza Alavi, Martin Noel, Mohammadhossein Afsharipour, Richard Malantic, Farid Moradi Marani, Hamed Layssi</i>
B2: Special Session 1		
Session Chair: Christian Grosse		
14:30-14:50	3344	Imaging and image fusion applied to cultural heritage structures: Case studies from the Pyramids of Giza <i>Thomas Schumacher, Polina Pugacheva, Hussien Allam, Alejandro Ramirez-Pinero, Benedikt Maier, Johannes Ruppfe, Khalid Helal, Olga Popovych, Amr G. Hamza, Mohamed Sholqamy, Mohamed Fath-Elbab, Menna Ali,</i>
14:50-15:10	6936	Detection of Hidden Voids in the Giza Pyramids <i>Hany Helal, Mohamed Elkarmoty, Thomas Schumacher, Olga Popovych, Sébastien Procureur, Kunihiro Morishima, Mehdi Tayoubi, Christian Grosse</i>
15:10-15:30	6971	Non-invasive techniques in consolidation study of dolomitic lime plasters: application to wall paintings <i>Zala Zarkovič, Andreja Pondelak, Ajda Mladenovič, Sabina Dolenec</i>
B3: Modelling & Reliability		
Session Chairs: Ute Rabe, Nenad Gucunski		
14:30-14:50	6251	Non-Destructive Evaluation of concrete's ITZ characteristics by linear ultrasonic parameters inversion based on a numerical model <i>Manda RAMANIRAKA, Vincent GARNIER</i>

14:50-15:10	2575	Signal Response-Based POD for Reliability of Damage Detection in Reinforced Concrete Structures <i>Mamady Cisse, Sena Tayfur, Ninel Alver</i>
15:10-15:30	2860	Backfill grout control in segmental tunnel linings by Ultrasonic Pulse-Echo <i>Roberto Felicetti</i>
15:30-15:50	4273	Performance Assessment of Concrete Bridge Deck Overlays Using Accelerated Structural Testing and Nondestructive Evaluation <i>Nenad Gucunski, Sharef Farrag, Seong-Hoon Kee, Robert Zobel, John Bralley</i>
15:50-16:10	1237	Evaluation of Backscatter Radiography for Inspection of Reinforced Cementitious Systems <i>Timothy K. Mueller, Travis R. Barker, Ashish Patel, James E. Baciak, Christopher C. Ferraro</i>
C		
C1: Special Session 4.1		
Session Chairs: Ernst Niederleithinger, Thomas Schumacher		
16:35-16:55	3537	Assessing Early-Stage Concrete Damage Using Thermal Modulation and Coda Wave Interferometry: Influence of Water-to-Cement Ratio <i>Camila Andrea Sanchez Trujillo, Ernst Niederleithinger, Parisa Shokouhi</i>
16:55-17:15	6792	Structural Monitoring in an Urban Underground Metro Station Using Coda Wave Interferometry: Insights, Challenges, and Practical Applications <i>Niklas Epple, Camila Andrea Sanchez Trujillo, Julia Hau, Ernst Niederleithinger, Fabian Malm</i>
17:15-17:35	7165	Active-passive monitoring of concrete under uniaxial pressure: connecting acoustic emission event distribution to the evolution of ultrasonic wave speed <i>Anna Maria Skłodowska, Parisa Shokouhi, Ernst Niederleithinger</i>
17:35-17:55	7365	Diffuse Ultrasound on the Evaluation of Surface Crack Repair in Concrete Structures <i>Roberto C A Pinto, Diana M P Caires</i>
C2: Special Session 11.2		
Session Chairs: Tetsuya Suzuki, Yohei Asada		
16:35-16:55	5725	Use of 3D Image Data for Leak Detection of in-Service Deteriorated Water Pipeline <i>Toma Tsubota, Yuto Takahashi, Taiki Hagiwara, Yohei Asada, Tetsuya Suzuki</i>
16:55-17:15	2997	Evaluation of Subsurface Damage for in-service Concrete Dam <i>Kazuma Shibano, Taiki Hagiwara, Tetsuya Suzuki, Kentaro Ohno, Masaomi Kimura, Ninel Alver</i>
C3: Corrosion		
Session Chairs: Sylvia Kessler, Christopher Ferraro		
16:35-16:55	1232	Effect of Exposure Condition on Corroded Concrete using Impact Echo and Resistivity Method <i>Ahmad Zaki, Nur Fajrina, Sri Atmaja P Rosyidi</i>
16:55-17:15	2892	Practical nondestructive monitoring for corrosion in coated bars in concrete <i>John Popovics, Shayan Khan, Kevin Danner</i>
17:15-17:35	3229	Machine Learning-Based Prediction of Concrete Deck Deterioration Using Spatial Features of Electrical Resistivity Data in Full-Scale Bridge Testing <i>Seong-Hoon Kee, Nenad Gucunski</i>
17:35-17:55	2852	Beyond Corrosion: Autonomous Real-Time Detection of Structural Cracks and Degradation Using Robotic Sensing and Digital Twins <i>Ghezal Ahmad Jan Zia, Cemal Hekim, Sabine Kruschwitz</i>
17:55-18:15	7631	Long-term non-destructive assessment of reinforced concrete corrosion induced by chloride ingress and carbonation <i>Elisabeth Marie-Victoire, Myriam Bouichou, Jean Ducasse-Lapeyrosse, Véronique Bouteiller, Amandine Bonnet, Victor Da Silva, Benoît Thauvin, Ronan Queguiner, Géraldine Villain</i>
September 25, 2025		
D		
D1: Special Session 4.2 & Special Session 9		
Session Chairs: Ernst Niederleithinger, Thomas Schumacher		
09:35-09:55	8091	Damage progression mapping on an UHPFRC beam during laboratory load testing using combined passive and active ultrasonic stress wave monitoring <i>Thomas Schumacher, Numa Bertola, Ernst Niederleithinger, Eugen Brühwiler</i>
09:55-10:15	8861	Application of Fourier Sensing strategies for Monitoring Velocity Changes in Coda Waves <i>Jasmien Hassanin, Shilan Shaabani, Pierric Mora, Eduardo Pérez, Florian Römer, Odile Abraham</i>
10:15-10:35	1455	Investigation of AI-Guided Bridge Deck Inspection Using Infrared Imaging and Ultrasonic Tomography <i>Inad Alqurashi, Furkan Luleci, Marwan Debees, Masato Matsumoto, Necati Catbas</i>
10:35-10:55	4354	An investigation of pump-induced conditioning in Nonlinear Coda Wave Interferometry of concrete <i>Shilan Shaabani, Pierric Mora, Parisa Shokouhi, Olivier Durand, Odile Abraham</i>
D2: Sensors / Instrumentation / Software & Systems		
Session Chair: Herbert Wiggerhauser		
09:35-09:55	1262	Non-Destructive Testing of Timber Structures Using Combined Microwave and Ultrasonic Techniques: A Novel Approach to Quality Assessment <i>Frank Bonitz, Thorben Niemann, Martin Schickert, Ralf W. Arndt, Antje Simon, Wolfram Scheiding</i>
09:55-10:15	1610	ML-based tool for rail neutral temperature monitoring using vibration measurements <i>John Popovics, Xuan Zhu</i>
10:15-10:35	6177	Muon tomography - ready for practical application? <i>Ernst Niederleithinger</i>
10:35-10:55	1740	Revolutionizing Concrete Analysis and Maintenance with Laser-Induced Breakdown Spectroscopy <i>Dirk Dalichow, Jil Blaschke, Gerd Wilsch, Tobias Völker</i>
D3: Quality Control and Assurance		

Session Chair: Engin Aktas		
09:35-09:55	6151	Measurement of the rebar diameter – methods and accuracy <i>Alexander Taffe, Schulze Sebastian, Sebastian Schulze, Maik Glaser</i>
09:55-10:15	9367	A framework for characterising the reflection intensity of a 3D-CP mortar <i>Eric Schönsee, Christoph Strangfeld, Amarteja Kocherla, Götz Hüsken</i>
10:15-10:35	9710	UAV-supported inspection of concrete structures. <i>Andrei Walther, Andrei Walther, Pär Ljustell</i>
10:35-10:55	9736	Proposal of Non-destructive Quality Assessment for Recycled Aggregate with Evaluation of Vibrational Behavior at ITZ <i>Endo Teppei, Hashimoto Katsufumi, Daisuke Ibaraki, Ryosuke Saito</i>
E		
E1: Special Session 3.1		
Session Chair: Thomas Schumacher		
11:25-11:45	2821	Imaging of internal post-tensioning tendons in a large-scale mock-up specimen <i>Philipp Keller, Thomas Schumacher, Andreas Schwarz</i>
11:45-12:05	2994	Evaluation on Expansion of Concrete due to DEF and ASR by using Sonic-IR method <i>Katsufumi Hashimoto, Shunsuke Kumagai, Takafumi Sugiyama</i>
12:05-12:25	3652	Survey of Concrete Blocks Submitted to Artificial Sea Water Tide During One Year by Electrical Resistivity Tomography <i>Géraldine Villain, Marie-Ange Eid, Sérgio Palma Lopes, Stéphanie Bonnet</i>
12:25-12:45	3978	Condition Assessment of Post-Tensioned Ducts Using A Multi-Modal Nondestructive Testing and Evaluation Methodology <i>Arezoo Imani, Marisol Tsui Chang, Shane Boone, Annette Adams, Nathaniel Dubbs</i>
12:45-13:05	5684	Post-tensioned concrete inspection and imaging using 2D and 3D Dry Point Contact ultrasound array <i>Nzeeh Roumia, Claudio Mazzotti, Ernst Niederleithinger</i>
E2: Special Session 2 & Special Session 10		
Session Chairs: Christian Grosse, Olga Popovych		
11:25-11:45	2057	Applications of Muon Flux Tomography in assessment of civil engineering structures <i>Sander Sein, Madis Kiisk, Märt Mägi, Kaarel Tark</i>
11:45-12:05	3279	SHM-Driven Digital Twins for Civil Engineering <i>Sylvia Keßler, Martin Köhncke</i>
12:05-12:25	5307	A digital twin concept for subways based on NDT and SHM <i>Christian U. Grosse, Otto Wurzer</i>
12:25-12:45	7392	Non-Destructive Testing for Mitigation of war impacts in Ukraine <i>Olga Popovych, Benedikt Maier, Vasyl Popovych, Christian U. Grosse</i>
E3: Special Session 5		
Session Chair: Martin Schickert		
11:25-11:45	1301	Development of distributed sensor electronics for energy-efficient and proactive maintenance of buildings <i>Ute Rabe, Julia Emge, Samuel Klein, Jan Oswald, Nina Shpakova, Philipp Stopp, Christoph Weingard, Dirk Koster, Eric Schönsee, Frank Hille, Ernst Niederleithinger</i>
11:45-12:05	4255	The BIM Use Case “Structural Diagnostics” <i>Chris Voigt, Yannic Stark, Kristin Kottmeier, Martin Schickert, Eric Ewert</i>
12:05-12:25	5643	Innovative technologies for the digital transformation in bridge inspection <i>Stefan Kraus</i>
12:25-12:45	7691	Investigation of the Use of NDT Methods and BIM Technology Together in Performance Analysis Studies in Earthquake-Affected Reinforced Concrete Structures <i>Mehmet Esen Eren, Cenk Fenerli</i>
12:45-13:05	8952	BIM-based Quality Assurance and As-Built-Documentation using NDT methods <i>Martin Schickert, Nasim Didehvar, Susanne Wienholz, Andreas Bach, Marat Khairtdinov, Martin Friese</i>
F		
F1: Special Session 3.2		
Session Chair: Thomas Schumacher		
14:05-14:25	6471	Vertical crack imaging in a nuclear structure using Ultrasonic Pulse Velocity and Ultrasonic Tomography Techniques <i>Sokratis Iliopoulos, Bart Roggeman, Laura Diaz Caselles</i>
14:25-14:45	6756	Imaging and image fusion using GPR and ultrasonic echo array data to inform structural evaluation of a prestressed concrete bridge <i>Thomas Schumacher, Narges Pahnabi, Bruce Johnson</i>
14:45-15:05	7540	Ultrasonic Tomographic Monitoring of Water Content in a Concrete Wall Undergoing Unidirectional Drying <i>Rouba Hariri, Nicolas Derrien, Maximilien Lehujeur, Jean-François Chaix, Vincent Garnier, Olivier Durand, Odile Abraham</i>
15:05-15:25	9224	SAFT imaging in concrete using movable ultrasonic array elements <i>Kazuyuki Nakahata, Arata Takechi, Tomohiro Mesaki, Kyosuke Shimizu</i>
15:25-15:45	9382	Waveform Inversion Of Ultrasonic Data – First Synthetic And Laboratory Experiments <i>Alina Suchkova, Ernst Niederleithinger</i>
F2: Structural Health Monitoring 1		
Session Chair: Engin Aktas		
14:05-14:25	1880	Use of Non-Destructive Testing Methods for Structural Health Monitoring of Railway Tracks: An Analytical Approach and a Practical Insight <i>N. Özgür Bezgin, Asger Eriksen</i>

14:25-14:45	3138	NDT methods for monitoring internal swelling reactions in concrete <i>Goodluck Msigwa, Narintsoa Ranaivomanana, Stéphane Multon</i>
14:45-15:05	5262	Insights from the Carola Bridge Incident: Lessons and Future Approaches <i>Enes Savli, Kilian Tschöke, Bianca Weihnacht, Lars Schubert, Max Fiedler</i>
15:05-15:25	6003	Application of Distributed Fiber Optic Sensing in Bridge Structural Health Monitoring: Insights from Real-Life Implementations in Germany <i>Marta Bochenska, Michal Goldyn, Katarzyna Zdanowicz</i>
15:25-15:45	6268	Optimal Sensor Placement for Vibration-Based Structural Health Monitoring of Yusufeli Arch Dam <i>Ebru Kaalkan Okur, Fatih Yesevi Okur, Ahmet Can Altunışık</i>
F3: Radar		
Session Chair: Alexander Taffe		
14:05-14:25	3577	NDT-based Condition Assessment of Concrete Tanks in Mine Facilities <i>Mohammadhossein Afsharipour, Richard Malantic, Farid Moradi Marani, Hamed Layssi</i>
14:25-14:45	6061	Optimizing Flexible Pavement Density during Construction with Closed-Loop GPR Monitoring <i>Imad L. Al-Qadi, Lama Abufares, Yihan Chen</i>
G		
G1: Special Session 3.3 & Sensors		
Session Chairs: Thomas Schumacher, Eric Landis		
16:05-16:25	5701	Automated Road Damage Detection Using UAVs and Deep Learning: A Scalable Solution for Infrastructure Maintenance <i>Burcu Güldür Erkal, Tuğba Yıldızlı, Merve Bayraktar</i>
16:25-16:45	7513	Advanced Applications of 1H NMR Relaxometry in Building Material Characterization <i>Sabine Kruschwitz, Sarah Munsch, Thilo Bintz, Lili Grobla, Haifa Rifai</i>
16:45-17:05	9563	A Study of Concrete Porosity and Interfaces Using X-Ray CT and High Frequency Ultrasound <i>Joshua Emery, Eric Landis</i>
17:05-17:25	9983	Determining the air-void content of hardened concretes using tactile sensing <i>Eyuphan Kucukkalfa, Patrick Holthuizen, Oguzhan Copuroglu, Erik Schlangen, Mohammad Fotouhi</i>
17:25-17:45	1848	Inspection of concrete structures with an air-coupled impact-echo scanner <i>Aurelia Muller, Leonardo Rossler, Yael Fischer, Teddy Loeliger, Daniel Algernon</i>
G2: Ultrasonics 2		
Session Chairs: Odile Abraham, Maria Grohmann		
16:05-16:25	4715	Structural Condition Assessment and Retrofit of Post-Tensioned Roof Structure to Support Next Generation Aircraft <i>Nathaniel Rende, Marwa Abdelrahman</i>
16:25-16:45	5471	Damage assessment of reinforced concrete buildings after seismic events using sonic and ultrasonic measurements <i>Vincenza A.M. Luprano, Francesco Morelli, Angelo Tati, Cecilia Capotorti, Ivan Roselli</i>
16:45-17:05	6275	New trends in the ultrasonic pulse-echo tomography of concrete structures <i>Andrey Bulavinov, Roman Pinchuk, Andrey Samokrutov</i>
17:05-17:25	6423	Case studies of ultrasonic full waveform inversion for inspecting concrete structures <i>Chris Udell, Christian Boehm, Lion Krischer, David Sollberger, Elmar Strobach</i>
17:25-17:45	8414	Simulation of ultrasonic concrete inspection using finite element methods and representative elementary volumes <i>Vincent Dorval, Nicolas Leymarie</i>
G3: Training, Education & Standardization		
Session Chair: Herbert Wiggerhauser		
16:05-16:25	3157	NDTTitans <i>Claus Germann Petersen, Nicholas Carino, Andrzej Moczko</i>
16:25-16:45	6563	Bridging the Certification Gap in Civil Infrastructure NDT: A Modular, Standards-Based Approach for Global Practice <i>Charalampos (Babis) Loutsetis</i>
September 26, 2025		
H		
H1: Acoustic Emission		
Session Chair: Tomoki Shiotani		
09:00-09:40		Plenary Lecture AE and Innovative NDT Approaches for the Sustainability of Infrastructure <i>Tomoki Shiotani, Prof. Dr. Kyoto University, Japan</i>
09:40-10:00	5648	Effect of Coconut Fiber on Geopolymer Mortar with Acoustic Emission Analysis <i>Khaira Gusti, Özge Andıç Çakır</i>
10:00-10:20	8411	Assessment of anisotropic damage in ASR-affected concrete structures by utilizing acoustic emission <i>Patrick Holthuizen, Branko Šavija, Oğuzhan Çopuroğlu</i>
10:20-10:40	6791	Acoustic Emission Monitoring of Jacketed Concrete Beams and Columns <i>Dimitrios Papasalouros, Athanasios Anastasopoulos, Dimitrios Kourosis</i>

10:40-11:00	9499	Guideline for monitoring of prestressing wire breaks with Acoustic Emission Technique <i>Löhr Manuel, Pirkawetz Stephan</i>
H2: Ultrasonics 3		
Session Chair: Daniel Algernon		
09:00-09:20	7395	Influence of the pore structure of biochar on the load-bearing and filtering behavior of biochar as a concrete admixture <i>Hatice Kilci</i>
09:20-09:40	8942	Exploring the Fusion of Multi-Channel Ground Penetrating Radar and Terrestrial Scan Data for Concrete Structures <i>Reuben Barnes, Huw James, William Ward</i>
09:40-10:00	6616	Correlation between ultrasonic and sonic tests to optimize structural diagnostic campaigns on reinforced concrete buildings <i>Giuseppe Marghella, Elena Candigliota, Anna Marzo, Saverio Mazzarelli, Angelo Tati, Concetta Tripepi, Michele Morici, Valeria Leggieri, Andrea Dell'Asta, Vincenza A.M. Luprano</i>
H3: BDI Special Session		
09:00-09:20	2945	Development of a Robotic Platform for Implementing Ultrasonic Tomography on Vertical Concrete Surfaces <i>Shane Boone, Arezoo Imani, Jack Cornes</i>
09:20-09:40	9179	Use of Automated Robotic Phased Array Ultrasonic Testing for Inspection of T1 Steel Butt Welds <i>Shane Boone</i>
I1: Structural Health Monitoring 2		
Session Chair: N. Özgür Bezgin		
11:00-11:20	2735	Bayesian Model Updating Based on Structural Health Monitoring using Metamodeling Techniques <i>Ertuğrul Türker Uzun, Çağlayan Hızal, Engin Aktaş</i>
11:20-11:40	4534	Implementation of rope monitoring system at hazardous industrial facilities: results and problems <i>Egor Dyskin</i>
11:40-12:00	5442	Evaluation of the Effects of Superstructure Characteristics on the Performance of Bridge Decks under Traffic Loads <i>Sharef Farrag, Nenad Gucunski</i>
12:00-12:20	5525	Development of Low-Cost IoT-Based Displacement Sensor using Laser-Camera Interaction <i>Fatih Yesevi Okur, Ebru Kalkan Okur, Ahmet Can Altunışık</i>
12:20-12:40	1027	Graph Convolutional Networks Model for Fire Damage Assessment of Suspension Bridge Towers <i>Sara Mostofi, Yunus Emrahan Akbulut, Fatih Yesevi Okur, Ahmet Can Altunışık</i>
I2: Concrete		
Session Chair: Chia Chi Cheng		
11:00-11:20	9738	Impact of Saturation and Frequency of AC Voltage on Impedance and Piezoresistive Response of Self-Sensing Concrete for Structural Health Monitoring (SHM) <i>Shaban Shahzad, Saeed Busubul, Mohammed A. Al-Osta, Ahmed Mohsen Abd El Fattah</i>
11:20-11:40	8265	Non-destructive evaluation of concrete properties in depth. <i>Vincent Garnier, Silva Dos Santos Klayne, Rouba Hariri, Cédric Payan, Jean François Chaix, Benoit Durville, Sandrine Morin, Odile Abraham</i>
11:40-12:00	1188	Approaches and Limitations of Non-Destructive Testing for Evaluating Bituminous Concrete <i>Mohamed Belmokhtar, Nabil Maifia, Géraldine Villain, Denis Vautrin, Alexis Cothenet</i>
12:00-12:20	3350	Development and Validation of an NDT-Based Reusability Assessment Guideline for Structural Concrete Elements <i>Serkan Karatosun, Katja Thygesen, Karoline F. Gustafsson, Alexander M. B. Christiansen, Lisbeth M. Ottosen</i>
12:20-12:40	6919	Development Super Fibre Warm Mix Asphalt for Desert Environments: Mechanical Performance and Implications <i>Suleiman Abdulrahman, Mohammed A. Al-Osta, Hamad Al-Abdul Wahhab, Waqas Rafiq, Ali M. Babalghaith, Abdulhadi Al-Juhani, Aib Farouk</i>
12:40-13:00	5521	Comparative analysis for air permeability and durability core testing results <i>Jelena Bijeljic, Ernst Niederleithinger</i>
I3: Ultrasonics 4		
Session Chair: Kazuyuki Nakahata		
11:00-11:20	1531	Simulation of ultrasonic inspection of concrete using finite elements and analytical models <i>Nouhayla Khalid, Manda Ramaniraka, Vincent Dorval, Jean-François Chaix, Michel Darmon</i>
11:20-11:40	2506	Comprehensive Condition Assessment of Dam Crest Structures Using Multi-Method Non-Destructive Evaluation Techniques <i>Farid Moradi Marani, Hamed Layssi, Mohammadhossein Afsharipour, Richard Malantic</i>
11:40-12:00	5035	Integrating Complementary NDT Methods for Subsurface Void Detection in Reinforced Concrete: A Field Case Study <i>Charalampos (Babis) Loutsetis</i>
12:00-12:20	7131	Climbing Robots Meet Ultrasonic Tomography: A New Era for NDT on Tall Structures <i>Jean Marie Henault, Jack Cornes, Andrey Bulavinov</i>

NDT-CE2025 - POSTERS		
September 24, 2025 (16:10-16:35)		
1157		Efficient Maintenance of Damaged RC Structures by Integrating 3D Data and Crack Information for Digital Twin <i>Tetsuya Suzuki, Kazuma Shibano, Ninel Alver</i>
2834		Detection of Cracking Damage of Concrete Slab in Service Road Bridge by Deep Learning with Scene Classification <i>Hiromu Tanaka, Kazuma Shibano, Tetsuya Suzuki</i>
5998		Hoop Strain-Based Approach to Detecting Leak Phenomena in Service Pipeline with Pressure Wave Conditions <i>Yuto Takahashi, Toma Tsubota, Taiki Hagiwara, Tetsuya Suzuki</i>

6683	Investigating the impact of material rheology on geometric accuracy in 3D concrete printing using real-time monitoring
	<i>Olubunmi Anthony Jeyifous, Eric Schönsee, Christoph Strangfeld, Götz Hüsken</i>
7852	Initial systematic ultrasound measurements at the Khufu and Menkaure pyramids in Giza
	<i>Benedikt Maier, Amr G. Hamza, Alejandro Ramirez-Pinero, Olga Popovych, Khaled Taie, Thomas Schumacher, Mohamed Elkarmoty, Mehdi Tayoubi, Hany Helal, Christian U. Grosse</i>
9679	AE-SiGMA Code Approach to Detecting Concrete Damage Characteristics in Core Test
	<i>Moeka Mukai, Kazuma Shibano, Tetsuya Suzuki</i>