

IAES-27, IIIAE 2025 NAGOYA & ICAE-11

Conference Program

Tentative Version OCT /22nd / 2025

Date: 4th/November/2025 – 7th/November/2025

Conference venue:

Nagoya Convention Hall & Hybrid Studio

4-60-12 Hiraike-chou, Nakamura-ku, Nagoya, Aichi, 453-6102, Japan

<https://www.nagoya.conventionhall.jp/english.html>

Casual Dinner:

Kouyouen Beer Garden, Nagoya

2-chōme-24-10 Chikusa, Chikusa Ward, Nagoya, Aichi 464-0858, Japan

<https://akr4855942853.owst.jp/en/>

Banquet:

ANA Crowne Plaza Hotel Grand Court Nagoya

1-chōme-1-1 Kanayamachō, Naka Ward, Nagoya, Aichi 460-0023, Japan

<https://www.ihg.com/crowneplaza/hotels/us/en/aichi/ngoja/hoteldetail>

Organizer: JSNDI & IIIAE

Co-organizer: AEWG, EWGAE, RILEM,

Kyoto University (Office of Institutional Advancement and Communications (IAC))

Website: <https://2025.iiiae.org/>

Contact E-mail: iiiae2025@iiiae.org

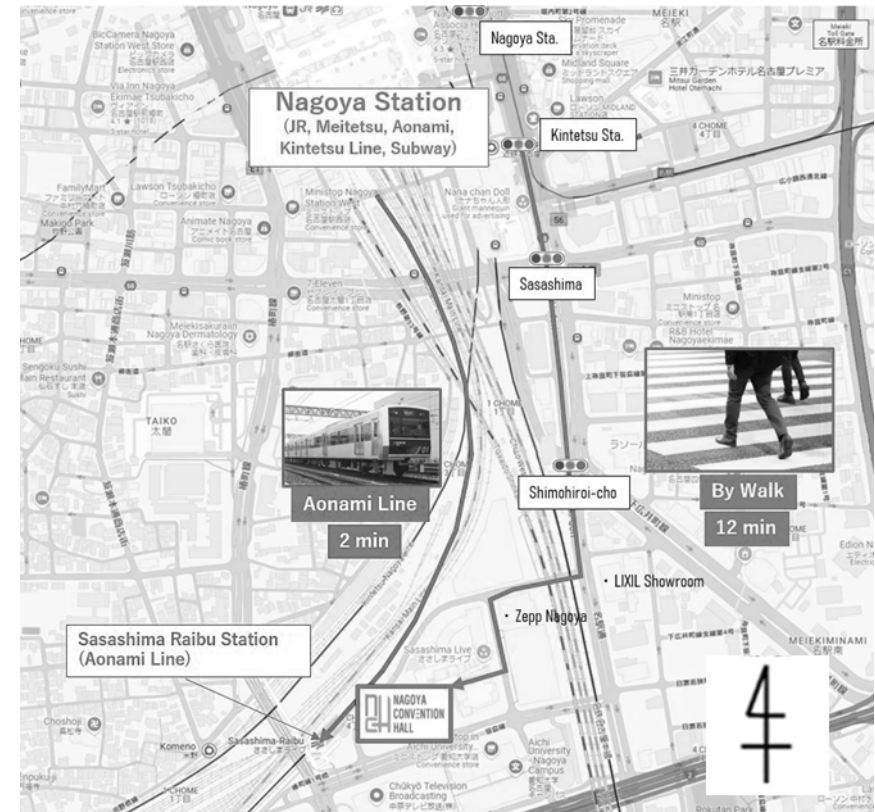
Registration:

<https://2025.iiiae.org/registration/>

Monday, November 3

Registration 17:00 - 19:00

@Nagoya Convention Hall & Hybrid Studio



Monday, November 3 @Nagoya Convention Hall & Hybrid Studio

	Foyer (3F)		
17:00 -	Registration		
17:00 – 19:00	Pre-registration & Casual Welcome Gathering We invite you to join us for pre-registration and a casual welcome gathering the day before the conference. A simple selection of snacks (such as packaged treats or light nibbles) and one drink will be available. This informal get-together offers a chance to collect your conference materials early and connect with other participants in a relaxed setting.		

Tuesday, November 4 @Nagoya Convention Hall & Hybrid Studio

09:00 -	Registration		
09:40 - 10:30	Opening Ceremony		
10:45 - 12:00	Keynote Lecture I		
	Advances in Guided Ultrasonics, Smart Sensing, and Processing for Enhanced Performance of Fiber-Metal Laminates Prof. Christian Hühne <i>(Professor at Technische Universität Braunschweig / Head of the Institute of Lightweight Systems, German Aerospace Center (DLR))</i>		
12:00 – 13:30	Lunch		
13:30 - 15:00	Signal Processing 1	Civil Engineering 1	Machine Engineering
	[Invited Talk] Experimental and Simulation-based Investigation to Create a Library in AE Field <i>X. Chen, N. Godin, A. Doitrand, C. Fusco (INSA de Lyon, Univ. Lyon)</i> Damage Visualization of RC Bridge Deck Using Wireless AE Sensor System <i>Y. Ueda, T. Usui, H. Takamine, K. Watabe (Toshiba Corporation)</i> Onset Detection of Acoustic Emission Signal Using Root Mean Square Change-point Method <i>A. Benmoussa, T. Sakai (Saitama University)</i> Dispersion Compensation of Lamb Waves Detected by AE Sensors with a Finite Diameter <i>H. Cho, A. Nakajima, K. Nishimiya (Aoyama Gakuin University)</i> Benefits of Continuous AE Waveform Measurement <i>K. Ito, (National Institute for Materials Science)</i>	[Invited Talk] Acoustic Emission and Ultrasonic Transmission Measurements in a Large-Scale Reinforced Concrete Specimen <i>G. Manthei, M. Koob, N. Lingner, J. Minnert (THM University of Applied Sciences)</i> Evaluation of Crack Depth and Repair Material Filling in Concrete Using Rayleigh Wave Amplitude Distribution <i>N. Okude (Tokai Technology Center /Kyoto University), T. Shiotani (Kyoto University)</i> New Bridge Inspection Support Technology Using Point Cloud Models <i>K. Yufune (CORE Institute of Technology Corp.), N. Ogura (Kyoto University), Y. Fukuchi (Autodesk Inc.), T. Shiotani (Kyoto University)</i> Elastic Wave-Based Evaluation of the Fracture Behavior in RC Columns Retrofitted with 3DCP Shell and BFRTP Longitudinal Reinforcement <i>H. Asaue, T. Shiotani, N. Okude, N. Ogura, W. Sun (Kyoto University), Y. Yamamoto, K. Kinomura (Taisei Advanced Center of Technology)</i> Structural Innovation and Self-Evaluation in Embedded Sensing Elements for Hydration Monitoring of Cementitious Materials <i>Y. Liu (Foshan University), W. Ding (Shenzhen Polytechnic University), T. Shiotani (Kyoto University)</i>	[Invited Talk] Diagnostics and Assessment of the Technical Condition of Underground Pipelines <i>I. Baran (Office of Technical Inspection (UDT)), Z. Klimek (AGH University of Krakow), J. Grześkowiak (Office of Technical Inspection (UDT))</i> In Situ Observations of Friction Surface and AE Sensing in Rolling Contact Fatigue Tests <i>Y. Mukai (Nippon Steel Technology Co., Ltd.), A. Hase (Saitama Institute of Technology)</i> Time-frequency Analysis of AE Wave Due to Laser Hardening <i>T. Yasuda, K. Nishimoto, Y. Okumoto (National Institute of Technology, Anan College)</i> Feasibility of Acoustic Emission Monitoring of Composite Marine Propellers subjected to Fatigue <i>A. Huijter, C. Kassapoglou, L. Pahlavan (Delft University of Technology)</i>
15:00-15:30	Break		

Tuesday, November 4 @Nagoya Convention Hall & Hybrid Studio

15:30 - 17:00	AE & Related NDT 1	Civil Engineering 2	Materials Science 1
	Numerical Investigation of Sensor Response to AE Waveforms Using Lattice Modelling <u>Y. Zhou</u> (Delft University of Technology), B. B. Aydin (Middle East Technical University (METU)), Y. Yang (Delft University of Technology) Radar Condition Monitoring System Using Acoustic Emission and Vibration Fusion Sensing Technology <u>K. Dong-Hyun</u>, H. Yoon-Gi, H. Soon-Kook (RECTUSON Co., LTD.) Listening to Heritage: Detecting Wood-Boring Insects in Cultural Artifacts with Acoustic Emission Testing <u>L. A. Limmer</u> (HAWK Hildesheim), S. Biebl (Ingenieurbüro für Holzschutz), C. Messal (HAWK Hildesheim) Assessment of Load-Bearing Characteristics of Composite Ring NOL Specimens by the Acoustic Emission Energy Release Rate Model <u>B. Muravin</u> (Integrity Diagnostics Ltd.), Y. Seri (Faculty of Aerospace Engineering, Technion), O. Regev (Rafael Advanced Defense Systems, P.O.B.), H. Abramovich (Faculty of Aerospace Engineering, Technion), E. Gal (Ben-Gurion University of the Negev) Improving Accuracy of Grouting Inspection by Means of UPE Phase Analysis <u>A. Sagradyan</u> (CORE Institute of Technology Corp.), N. Ogura (Kyoto University), H. Maruyama (Tectus Japan Co., Ltd.), T. Shiotani (Kyoto University)	In-Situ Acoustic Emission Monitoring of Accelerated Corrosion of Wrought Iron <u>K. Akceceka</u>, S. Acikgoza, H. Viles (University of Oxford) Acousto-Ultrasonic Testing of Suspension Bridge Anchor Bases: Optimization of Protocol <u>R. Johannes</u> (Université Gustave Eiffel), N. Godin, (INSA de Lyon, Univ.), L. Gaillet (Université Gustave Eiffel) Identifying Dynamic Characteristics of a Steel Truss Bridge with Severed Members – a Field Experiment <u>S. Borjigin</u> (NingboTech University), K. Chang, N. Ogura (Kyoto University), K. Hashimoto (Hokkaido University), T. Shiotani (Kyoto University) Digital Twin for the Simulation of Acoustic Emission Wave Propagation in Prestressed Concrete Elements <u>S. Pirskawez</u>, G. Zaripova (Bundesanstalt für Materialforschung und -prüfung), N. Brinkmann, L. Gebraad, C. Boehm (Mondaic AG), H. Trattinig (Vallen Systeme GmbH) Evaluation of Compressive Stress in Prestressed Concrete Beam by Simple Ultrasonic Testing <u>T. Watanabe</u>, S. Mori (Tokushima University), Y. Kitano, T. Okubo (Kawada Construction Co., Ltd.) Acoustic Emission Entropy as A Measure of Cracking Damage in Reinforced Concrete Beams Under Bending <u>D. D'Angela</u>, G. Magliulo, D. Losanno, F. Parisi, A. Prota (University of Naples Federico II)	[Invited Talk] Acoustic Emission Monitoring of Basalt Fiber Bio-Composites at Tension and Shear Behavior <u>T. Kek</u>, Z. Bergant, M. Halilović, A. Maček, R. Šturm (University of Ljubljana) Insights into Complexity of Deformation Behavior of β-Ti Alloys from AE-Powered in situ Micromechanical Testing <u>A. Vinogradov</u> (Kumamoto University), P. Döring (TU Bergakademie Freiberg) Phenomenological Theory of Acoustic Emission in Metals due to Plastic Deformation <u>A. Vinogradov</u> (Kumamoto University) AE Monitoring of Cu and Cu/Nb Laminates Corrosion in Sodium Chloride Solution <u>W. Yang</u>, K. Wu, T. Shiraiwa (The University of Tokyo), M. Enoki (Tokyo University of Technology)

Wednesday, November 5 @Nagoya Convention Hall & Hybrid Studio

09:00 -	Registration		
09:15 - 10:30	Keynote Lecture II		
	Social Infrastructure and Engineering Struggling with Diverse Scales Prof. Noboru Kikuchi <i>(Prof. Noboru Kikuchi is an Emeritus Professor of Mechanical Engineering at the University of Michigan, President and CEO, Toyota Konpon Research Institute)</i>		
10:30 - 11:00	Break		
11:00 - 12:30	Civil Engineering 3	Materials Science 2	AE & Related NDT 2
	[Invited Talk] Active Control of Concrete Curing Based on Acoustic Emission <i>E. Korda (Vrije Universiteit Brussel), D. Snoeck (Université Libre de Bruxelles), E. Tsangouri (Vrije Universiteit Brussel), G. D. Schutter (Ghent University), D. G. Aggelis (Vrije Universiteit Brussel)</i> Influence of the Number of AE Sensors on the Accuracy of AE Source Location Based on The Minimum Residual Sum of Squares of Arrival Time Differences <i>K. Ohno (Tokyo Metropolitan University)</i> Effect of Vehicle Position on the Damage Assessment of Bridge Deck utilizing Active Elastic Wave Measurements <i>K. Watabe, H. Takamine, T. Fumikura, K. Ueno (Toshiba Corporation), H. Ichiyama (Fukuoka-Kitakyushu Expressway Public Corporation)</i> Internal Crack Detection of RC Deck with Vehicle-induced Elastic Waves <i>H. Takamine, K. Ueno, T. Fumikura, K. Watabe (Toshiba Corporation), H. Ichiyama (Fukuoka-Kitakyushu Expressway Public Corporation)</i>	Detection of Stress Corrosion Cracking on Stainless Steel Using Acoustic Emission Technique <i>K. Ueno, T. Usui, K. Watabe (Toshiba Corporation)</i> AE Characterization from Stress-Induced Martensitic Transformations in Superelastic NiTiNol <i>R. Carmi, P. Sittner, L. Heller (FZU, Physics Institute of the Czech Academy of Sciences), M. Knappek (Charles University), J. Kopeček, E. Iaparova, A. Bhardwaj, M. Lamač, E. Alarcon (FZU, Physics Institute of the Czech Academy of Sciences), A. Bussiba, (Tel Aviv University)</i> Evaluation of the Relationship between AE Generation Behavior and Tensile Strength of Polyacrylate Ropes for Super-Pressure Balloons Irradiated with Ultraviolet Rays <i>T. Matsuo, T. Saijo (Meiji University)</i> Mechanical Properties of Aluminum Materials after Anodizing and Pore-Sealing, Evaluated by Acoustic Emission Measurement <i>K. Fukuzawa, K. Saito, M. Yamaguchi, M. Chiba (National Institute of Technology, Asahikawa College)</i> Determination of Mode I Tensile Fracture Energy by Acoustic Emission and Digital Image Correlation <i>C. Cruz, Y. Fuentes-García, F. J. Rescalvo (University of Granada), J. Lorenzana, M. Portela, M. Guaita (University of Santiago de Compostela), R. Bravo, A. Gallego (University of Granada)</i>	[Invited Talk] Acoustic Emission as a Key Element of Industry 5.0 <i>M. G. R. Sause, Q. Luong, P. Nadkarni, M. Merzkirch (University of Augsburg)</i> Overview About Newest Developments for NDT and Monitoring of Hydrogen Infrastructure <i>L. Schubert, T. Gaul, P. Krüger, J. Augustin, C. Prüfer, K. Tschöke, M. Schulze (Fraunhofer IKTS), S. Wenderoth (Fraunhofer ISC)</i> Development of a Non-Destructive Evaluation Technique for Metal Joints Using Acoustic Emission and Elastic Waves <i>D. Kitagawa (National Institute of Technology, Nara College), T. Itaya (National Institute of Technology, Suzuka College), Y. Abiru, H. Nishiguchi (National Institute of Technology, Sasebo College)</i> Investigation of Differences Between AE from Fiber Breakage and Other AE in Composite Overlapped Pressure Vessels for Hydrogen <i>M. Samejima, Y. Mizutani (Institute of Science Tokyo)</i> An Exploration into the Efficacy of Using Acoustic Emission in Characterizing and Detecting Damage in Soft Tissue Repair Devices <i>H. Booley, L.G. Jordan, H. Postles, J. P. McCrory, H. Wyatt (Cardiff University), R. Ryan (Lockdown Medical Limited), S.L. Evans (Cardiff University)</i>
12:30 - 14:00	Lunch		

Wednesday, November 5 @Nagoya Convention Hall & Hybrid Studio

14:00 - 15:30	Civil Engineering 4	Materials Science 3	AE & Related NDT 3
	[Invited Talk] Acoustic Emission–Based Corrosion Damage Assessment in Concrete Members Using Data Analytics <i>Y. Gao (Constructex Ltd.), H. K. Chai, M. C. Forde (The University of Edinburgh)</i> Enhancing the Ultrasonic Pulsing Method for Condition Assessment of Reclaimed Building Materials <i>E. Vandecruys, E. Verstrynge (KU Leuven)</i> Cyclic Flexural Damage Evolution in UHPFRC - Insights from AE and Micro-CT Analysis <i>T. Yadlin (Shamoon College of Engineering), O. Golan (Tel-Aviv Academic College of Engineering), R. Carmi (NRCN - Dimona)</i> Application of Smart Aggregates for Acoustic Emission Monitoring of Accelerated Rebar Corrosion in Concrete <i>A. Vanquaille, C. V. Steen, E. Verstrynge (KU Leuven)</i> Use of Pressure Wave for Leak Detection of in-Service Pipeline in Non-Steady Conditions <i>T. Suzuki, Y. Takahashi (Niigata University), T. Hagiwara (Yamaguchi University)</i>	Estimation of the Remaining Useful Lifetime During Fatigue Tests Based on AE Indicators <i>T. Vié, N. Godin, S. Deschanel, B. Normand (Univ Lyon, INSA Lyon)</i> Data-Driven Analysis of Acoustic Emission Signals for Predicting Fatigue Damage in Metallic Materials <i>T. Shiraiwa, H. Hu (The University of Tokyo), M. Enoki (Tokyo University of Technology)</i> Microfracture Analysis of SiC/SiC Composites by Acoustic Emission-Based Feature Extraction Using Machine Learning <i>O. Orihashi, T. Shiraiwa (The University of Tokyo), M. Enoki, T. Sekigawa, Y. Tanaka (Tokyo University of Technology)</i> The Damage Process in Structures with Quasi-Brittle behavior in the perspective <i>L. Iturrioz, B. N. R. Tanzi (Federal University of Rio Grande do Sul), A. B. Colpo, L. F. Friedrich (Federal University of Pampa), G. Lacidogna (Politecnico di Torino)</i> A Study of AE Monitoring with MEMS Sensors in 3D-Printed Structures <i>L. F. Friedrich, V. B. Puglia, A. V. G. Pinto, A. G. Fraga, A. G. Girardi, M. Romanssini (Federal University of Pampa), L. Iturrioz (Federal University of Rio Grande do Sul), G. Lacidogna (Politecnico di Torino)</i>	Verification of Internal Damage Detection Performance of Reinforced Concrete Decks Using Elastic Wave Tomography <i>S. Fukumoto, G. Shioya (IHI Inspection & Instrumentation Co., LTD.), T. Shiotani, H. Asaue (Kyoto University)</i> Acoustic Emission Tomography Optimised by Elastic Net Regularisation: Numerical and Experimental Investigations <i>F. Chen, R. Qin, J. Huang, S. A. Abeysinghe, D. Fernando, H. K. Chai (The University of Edinburgh)</i> Damage Detection for Composite Plates Using an AI-powered Acousto-Ultrasonic Method <i>J. Anderson, J. Steinmetz, C. Luthardt (Technical University of Braunschweig), Y. Mizutani (Institute of Science Tokyo), O. Völkerink (Technical University of Braunschweig)</i> Investigating Elastic Modulus of 3D-Printed Short Carbon Fiber Reinforced Plastics (CFRP) Using Acousto-Ultrasonics (AU) <i>T. Ke, Y. Mizutani (Institute of Science Tokyo)</i>
15:30 - 16:00	Break		

Wednesday, November 5 @Nagoya Convention Hall & Hybrid Studio

Wednesday, November 5 @Nagoya Convention Hall & Hybrid Studio			
16:00 - 17:30	Geo-Resource Engineering	Sensor & System	AE & Related NDT 4
	[Invited Talk] Detection of AE Using Downhole Three-Component Detector and Measurement of the Subsurface Structure Based on Particle Motion of Waves <i>H. Moriya (Tohoku University)</i> Monitoring Complex Multiphase Flow by Acoustic Emission <i>E. Serris, L. H. M. Lino, V. De Almeida, G. Lavallo, A. Cameirao, J. M. Herri (Univ. Lyon)</i> Monitoring Shear-Responsive Fluids via Seismic Velocity for Subsurface Flow Control <i>Y. Mukuhira (Tohoku University), K. Sawayama (Kyoto University), T. Kawahito, T. Ito (Tohoku University)</i> Continuous AE Measurement in Laboratory Shear Slip Experiments <i>T. Kawahito, Y. Mukuhira, T. Ito (Tohoku University)</i>	Quantification of the Temperature Effect on Acoustic Emission Measurement in Concrete <i>T. Atkinson, M. Pearson, J. McCrory (Cardiff University), R. Marks (MISTRAS Group Ltd.), R. Pullin (Cardiff University)</i> Ultra-Low Power Acoustic Emission Statistics Monitoring Sensor with Long-Range Wireless Transmission <i>T. Usui, Y. Ueda, K. Watabe (Toshiba Corporation)</i> The Liquid H₂ Transportation & Storage Will Have Early Warning System Using Automated Acoustic Emission Sensors <i>S. Chakravarty (Velosi (M) Sdn. Bhd)</i> Low-Cost AE Sensors for Concrete Monitoring: Characterization of MEMS and HSLC PZT Disc Sensors <i>A. M. Skłodowska, A. Kocherla, H. A. C. Subia (Bundesanstalt für Materialforschung und -prüfung (BAM)), D. Ozevin, T. Khan (University of Illinois Chicago)</i> Classification of Corrosion-Induced Acoustic Emission Signals in Oil Tank Bottom Plates Using Fiber-Optic Sensors via Multi-Channel Convolutional Block Attention Module <i>Y. Feng, L. Jianwei, L. Wei, J. Peng, D. Yuhan (Northeast Petroleum University)</i>	[Invited Talk] Monitoring Structural Integrity: Advanced Techniques for Assessing Garisenda Tower of Bologna <i>G. Lacidogna, S. Invernizzi, P. Montanari (Corso Duca degli Abruzzi), B. N. R. Tanzi, I. Iturrioz (Federal University of Rio Grande do Sul (UFRGS))</i> Application of IoT Acoustic Emission Technology in Monitoring Wire Breaks in Bridge Cables <i>J. Xie, Y. Liu, S. Liu (Qingcheng AE Institute)</i> Study on Non-Destructive Evaluation of 3D Printed Concrete Using Elastic Wave Method <i>W. Sun, N. Okude, N. Ogura, H. Asaue, T. Shiotani (Kyoto University)</i> AI-Driven Evaluation of 3D-Printed Concrete: Analyzing Printed Patterns Using Impact-Echo and Acoustic Emission <i>J. Pandum, K. Hashimoto, T. Sugiyama, K. Nakase (Hokkaido University)</i> Acoustic Emission Monitoring of Fracture Behaviour of 3D Printed Concrete with Different Printing Paths <i>K. Nakase (Hokkaido University), Y. Zhou (Delft University of Technology), K. Hashimoto, T. Sugiyama (Hokkaido University), Y. Yang (Delft University of Technology)</i>
18:30 - 21:00	Casual Dinner @Kouyouen Beer Garden, Nagoya		

Thursday, November 6 @Nagoya Convention Hall & Hybrid Studio

09:00 -	Registration		
09:00 - 11:00	Exhibition Viewing		
11:00 - 12:30	Signal Processing 2	RILEM TC Workshop (3DCP)	Industries
	[Invited Talk] Acoustic Emission Leak Detection in Noisy Environments <i>A. Anastasopoulos, D. Papasalouros, D. Kourousis, E. Aerakis (Mistras Group Hellas)</i> Evaluation of AE Source Location Accuracy Considering Uncertainty of Sensing Position <i>T. Yoshihara, H. Yuki (The University of Electro-Communications)</i> Impact of Higher Frequency on Image Reconstruction in Acoustic Emission Tomography <i>M. A. Rahman, T. I. Khan, N. Sakib, T. Hibiki (Saga University)</i> Development of AE Classification Method Using Simulated Waveforms as Training Data <i>Y. Yamaguchi, T. Matsuo (Meiji University)</i> Improved Crack Progression Evaluation via RMS-derived Ib-value Analysis <i>D. Jung, Y. Choi (Korea Atomic Energy Research Institute)</i>	<i>This workshop, organized by the RILEM Technical Committee (TC), aims to explore and promote rationalized non-destructive testing (NDT) methods for inspecting and evaluating the casting (or 3D printing) quality of cementitious composites. The focus will be on ensuring the structural soundness and material homogeneity of the layered components, as well as assessing the long-term service performance of printed structures. The workshop provides a platform for discussion and knowledge exchange among researchers and practitioners engaged in this emerging field.</i> Morning Session Opening Address <i>T. Shiotani (Chair, Kyoto University)</i> Overview of the Technical Committee <i>H.K. Chai (Vice Chair, The University of Edinburgh)</i> [keynote lecture] Introducing the JSCE Recommendations: 3D Printing in Concrete Engineering – Research, Practice, and Standardization in Japan <i>T. Ishida (The University of Tokyo)</i>	[Invited talk] Leakage Detection of In-Service Underground Gas Pipelines by Advanced Source Location Algorithm <i>D. Yoon, S. Lee, C. Park (Korea Research Institute of Standards and Science)</i> [Invited talk] Monitoring Advanced Nuclear Reactor Piping Networks Using Acoustic Emission <i>D. Ozevin, C. Xu, T. Khan, M. Daly (University of Illinois Chicago), M. G. Nunez (MISTRAS Group), D. Kultgenc (Argonne National Laboratory)</i> CNN based Damage Detection and Localization for Pipeline Monitoring <i>S. Lee, C. Park, D. Yoon (Non-Destructive Metrology Group)</i>
12:30 – 13:30	Lunch		

Thursday, November 6 @Nagoya Convention Hall & Hybrid Studio

13:30 - 15:00	Tribology Organized Session	RILEM TC Workshop (3DCP)	
	<i>Tribology-Driven Innovation: Sensing, Monitoring, and Advanced Manufacturing I</i> [keynote lecture] Correlation Mapping between AE Frequencies and Deformation and Fracture Phenomena for In-Process Diagnosis <i>A. Hase (Saitama Institute of Technology)</i> Real-Time Detection of Punch Wear Abnormalities Using Acoustic Emission and an LSTM-AE Hybrid Model <i>K. Endo (National Institute of Technology, Suzuka College), D. Kitagawa(National Institute of Technology, Nara College), T. Itaya (National Institute of Technology, Suzuka College)</i> Research on Damage Detection of Sliding Bearings Used as Engine Bearings Using AE Sensors <i>M. Koushima, M. Nagata(Daido Metal. Co., Ltd.)</i> Online condition monitoring of rotating machinery bearings using the AE method <i>R. Ogawa, T. Hioki, M. Maeda (Chiyoda Corporation)</i> Full-scale evaluation of brake shoes for railway vehicles using AE method <i>S. Saga (Railway Technical Research Institute), A. Hase (Saitama Institute of Technology)</i>	Scientific workshop 1 Influence of interlayer voids and bonding on mechanical properties of material extrusion-based 3D printed concrete <i>M. Ohno, T. Ishida (The University of Tokyo)</i> Evaluation of voids in 3D printed walls by utilizing UPV <i>K. Shahzad, T. Kato, M. Kunieda (Gifu University)</i> Case Studies on the Application of Elastic Wave-Based Non-Destructive Testing for Internal Damage Evaluation of 3D Printed Concrete Structures in Japan <i>H. Asaque, N. Okude, N. Ogura, W. Sun, T. Shiotani (Kyoto University)</i> Fracture behavior of 3D printed geopolymers concrete containing waste ceramic <i>J. Xu, C. Ye, Y. Qi, P. Jia (Tianjin University)</i>	
15:00 - 15:30	Break		

Thursday, November 6 @Nagoya Convention Hall & Hybrid Studio

15:30 - 17:00	Tribology Organized Session	RILEM TC Workshop (3DCP)	
	<i>Tribology-Driven Innovation: Sensing, Monitoring, and Advanced Manufacturing 2</i> [keynote lecture] Estimation Method for Workpiece Surface Roughness in Cylindrical Grinding Using Acoustic Emission Technique <i>T. Kon (University of Fukui)</i> Detection of Seizure Sign in Tapered Roller Bearings Using Acoustic Emission Sensing <i>Y. Shishihara (JTEKT Corporation / Saitama Institute of Technology), A. Hase (Saitama Institute of Technology)</i> Evaluation of multiple CNN models for knee osteoarthritis classification using acoustic emission signals with transfer learning <i>N. Sakib, T. I. Khan (Saga University), M. M. Hasan, S. Ide (Tsuruta orthopedic clinic)</i> Development of predictive maintenance technology for rotating equipment using wavelet transform and neural network <i>T. Morikawa, Y. Mizutani (Institute of Science Tokyo), T. Nagata, I. Asai (Komatsu Ltd.)</i>	Scientific workshop 2 Research Advances in Low-Carbon and Resilient 3D-Printed Concrete at the University of Sheffield <i>B. Nematollahi (The University of Sheffield)</i> Implementation of 3D Printing in Construction: Representative Case Studies from Japan <i>H. Kamada, H. Sasano, N. Asano, S. Ishikiriyama, Y. Tomita (Polyuse Inc.)</i> Mechanical Properties of 3D Printed Concrete: The RILEM 304-ADC Interlaboratory Study – Compressive Strength and Modulus of Elasticity <i>S. Muthukrishnan, V. Mechtcherine (TU Dresden)</i> Noteworthy progress of additive construction in Japan <i>K. Kinomura, Y. Yamamoto, S. Murata (Taisei Corporation)</i> Closing Remarks <i>T. Shiotani (Chair, Kyoto University)</i>	
19:00 - 21:00 (Reception starts at 18:45.)	Banquet @ ANA Crowne Plaza Hotel Grand Court Nagoya		

Friday, November 7 @Nagoya Convention Hall & Hybrid Studio

09:00 -	Registration		
09:00 - 11:00	Special Talk		
	Evaluation of material processing and properties by novel AE methods Prof. Manabu Enoki <i>(Professor, Tokyo University of Technology)</i> <i>(Professor Emeritus, The University of Tokyo)</i> Acoustic Emission in Concrete reviewed from Basics to Standards Prof. Masayasu Ohtsu <i>(President, Advanced Technology Institute of Infra-Maintenance)</i> <i>(Professor Emeritus, Kumamoto University)</i>		
11:00 - 11:10	Break		
11:10 - 11:40	Closing Ceremony		

Friday, November 7

13:00 - 18:00	Technical Tour & Museum Tour
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