

IAES-23, IIIAE 2016 KYOTO & ICAE-8

Conference Program Tentative Version NOV/18th/2016

Date: 5th/December/2016 - 8th/December/2016

Conference venue: Kyoto TERRSA

70 Shimotonoda-cho Higashikujyo Kyoto, Kyoto, 601-8047, Japan

<http://www.kyoto-terrsa.or.jp/>

Welcome reception and Banquet: Rihga Royal Hotel KYOTO

Shimogyo-ku Higashihorikawa-dori Shiokoji-sagaru Taimatsu-cho 1

Kyoto, Kyoto, 600-8237, Japan

<http://www.rihgaroyalkyoto.com/>

Conference Website: <http://iiiiae.org/iiiiae2016/>

Contact: +81-75-383-3496 Takahiro Nishida

E-mail: info@iiiiae.org

Organizers: The Japanese Society for Non-Destructive Inspection (JSNDI)
& International Institute of Innovative Acoustic Emission (IIIAE)

Co-organizers: Acoustic Emission Working Group (AEWG)
& European Working Group on Acoustic Emission (EWGAE)

Supported by

Graduate School of Engineering and Faculty of Engineering, Kyoto University

Japan Society of Civil Engineers (JSCE)

Japan Concrete Institution (JCI)

Japan Prestressed Concrete Institution (JPCI)

New Energy and Industrial Technology Development Organization (NEDO)

National Institute of Advanced Industrial Science and Technology (AIST)

Japan Science and Technology Agency (JST)

Cross-ministerial Strategic Innovation Promotion Program (SIP)

National Institute for Materials Science (NIMS)

NMEMS Technology Research Organization

Japan Prestressed Concrete Contractors Association (Kansai Branch)

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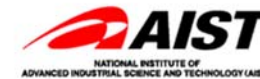
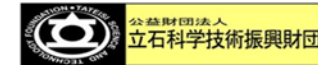
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Toukai Technical Center

京都大学教育研究振興財団



Registration:

<http://iiiiae.org/iiiiae2016/registration.html>

Related Events:**Welcome Reception & Registration**

Monday, December 5

17:00 - 20:00

@ SHUNJU 2nd floor of Rihga Royal Hotel KYOTO

Banquet

Wednesday, December 7

18:30 - 21:00

@ SUZAKU, 2nd floor of Rihga Royal Hotel KYOTO

Conference Tour

Friday, December 9

08:30 - 18:00

@ Kyoto City

Related Meetings:**Steering Committee Meeting of IIIAE**

Tuesday, December 6

12:15 - 13:15

@ Kyoto TERRSA

Executive Meeting of R&T Committee on AE, JSNDI

Wednesday, December 7

12:20 - 13:20

@ Kyoto TERRSA

International Advisory Meeting of IAES

Thursday, December 8

12:20 - 13:20

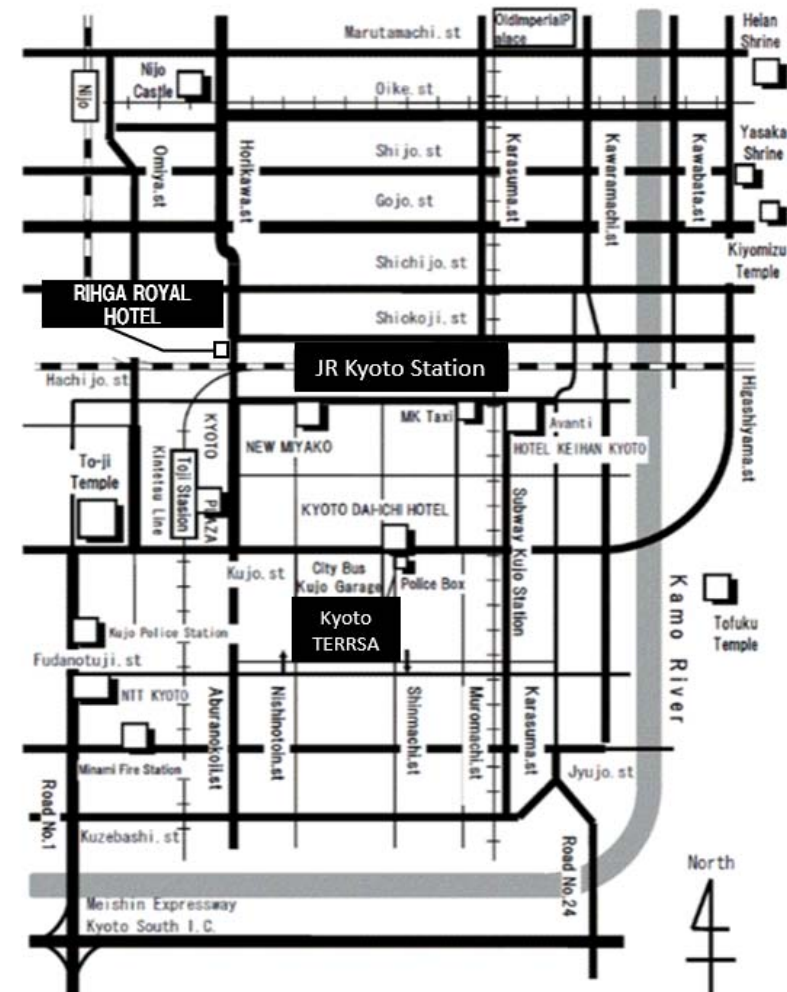
@ Kyoto TERRSA

Meeting of RILEM TC IAM

Thursday, December 8

16:00 - 18:00

@ Kyoto TERRSA



Tuesday, December 6 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
09:00 - 10:00	Registration		
10:00 - 11:00	Opening Ceremony		
11:00 - 12:00	Keynote Lecture I Session Chair: Tomoki Shiotani		
	A New R&D program "Infrastructure maintenance, renovation and management" in Japan for Innovation in Infrastructure Maintenance and Management <i>Prof. Yozo Fujino</i> (Professor Emeritus, the University of Tokyo & Distinguished Professor, Yokohama National University, Program Director, Cross-ministerial Strategic Innovation Proportion Program), Japan .		
12:00 - 13:30	Lunch break Steering Committee Meeting of IIIAE is held @ Meeting Room D		
13:30 - 15:00	AE & Related NDT 1 Session Chair: C. R. Rios-Soberanis, K. Ito	Industries Session Chair: I. J. Baran, K. Hashimoto	Machine Engineering Session Chair: G. Qi, Y. Kobayashi
	Acoustical Emission Propagation in a Prismatic Guided Wave: Simulations Using Lattice Discrete Element Method <i>E. B. Groth</i> (Federal University of Rio Grande do Sul (UFRGS)), <i>G. Sumajer</i> (University of Pampa (Unipampa)), <i>I. Iturrioz</i> (Federal University of Rio Grande do Sul (UFRGS)), <i>L. Kostasny</i> (University of Pampa (Unipampa)), <i>T. R. Clarke</i> (Federal University of Rio Grande do Sul (UFRGS)), Brazil . Development of Leak Detection Technology due to AE Method Using Gas Pipe <i>K. Yoshida, K. Kikugawa</i> (Tokushima Bunri University), Japan . Source Location of Impact Damages in Multi-Layered Composite Vessel by Acoustic Emission Parametric Zone Technology <i>D. Yoon, B. Han, C. Park, I. Kwon</i> (Korea Research Institute of Standards and Science), Korea . Evaluation of Acoustic Emission Generation Behavior of Cathodic Hydrogen Charged and Non-Charged A7075-T651 and A6061-T6 Aluminum Alloys in Fatigue Testing under Atmospheric Environment <i>H. Cho, N. Shoji, H. Ito</i> (Aoyama Gakuin University), Japan . Evaluation of Grouting Condition of Post-tensioned Concrete by using Spectral Ratio <i>S. Nagase, T. Shiotani, T. Nishida, H. Asaue, A. Sagrafyan</i> (Kyoto University), Japan .	[Invited Talk] The Survey of Underground Technological Pipelines of Crude Oil of Fuel Storage Depots by Acoustic Emission Method <i>I. J. Baran, I. Lyasota</i> (Cracow University of Technology), <i>K. Skrok</i> (PERN Przejazn S.A.), Poland . Structural Health Monitoring of Blast Furnace in Steel Mill Using Acoustic Emission Technique <i>D. H. Kim, S. B. Lee</i> (RECTUSON), <i>B. S. Yang, D. M. Bae</i> (Pukyong National University), Korea . Corrosion Detection for Ferritic Structures <i>P. Tscheliesnig</i> (AT - Consult e.U.), <i>A. Jagebnrein, G. Lackner</i> (TUV AUSTRIA SERVICES GmbH), Austria . Monitoring Power Transformer Tap-Changers with Acoustic Emission <i>O. G. S. Filho</i> (Eletrobras Eletronorte), Brazil .	A Study on AE Signals during Micro Cutting by In Situ Observation of Metal Cutting <i>A. Hase</i> (Saitama Institute of Technology), Japan . AE Monitoring by High Sensitivity and Portable Optical Fiber AE System <i>I. Shinozaki, G. Nakayama, Y. Sakakibara</i> (IHI Corporation), <i>T. Ohtsuka, H. Konda, T. Hattori</i> (Sumitomo Electric Industries, Ltd.), Japan . Estimation of the Mechanism of Stress Corrosion Crack Propagation during a Crevice Bent Beam Test in Sensitized SUS304 Steel by Using an Optical Fiber AE Sensor <i>T. Matsuo, K. Sano</i> (Meiji University), <i>I. Shinozaki, G. Nakayama</i> (IHI Corporation), Japan . AE Generation Mechanism of Rotating Component during Bending Fatigue Test by Non-contact AE Monitoring System <i>D. Hatanaka, T. Matsuo</i> (Meiji University), Japan . Analytical and Experimental Comparison of Basalt and Carbon Fiber Composites Overwrapping of Highly Pressurized Steel Cylinders <i>J. C. Schmidt</i> (Cracow University of Technology), <i>T. K. Nowak</i> (ABB Corporate Research Cracow), <i>I. J. Baran</i> (Cracow University of Technology), Poland .
15:00-15:30	Coffee Break sponsored by CORE Institute of Technology Corp.		

Tuesday, December 6 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
15:30 - 17:00	<p>Medical Science Session Chair: I. J. Baran, K. Hashimoto</p>	<p>Civil Engineering 1 Session Chair: M. C. Forde, T. Watanabe</p>	<p>Materials Science 1 Session Chair: G. Qi, Y. Kobayashi</p>
	<p>Development of Non-invasive Diagnosis Method for Knee Osteoarthritis by Using Knee Joint Angle and Acoustic Information <i>T. Sakai, K. Kodama (Saitama University), S. Wakayama (Tokyo Metropolitan University), K. Kageyama (Saitama University), K. Hase (Tokyo Metropolitan University), S. Ota (Seijoh University), Japan.</i></p> <p>AE Characterization of Microdamage in Tendon under Different Loading Condition <i>F. Matsuoka, S. Wakayama (Tokyo Metropolitan University), T. Sakai (Saitama University), E. Yamamoto (Kinki University), Japan.</i></p> <p>The Advancement of AE Technique in Biomechanics Research in Our Laboratory <i>J. Li (Inova Fairfax Hospital), M. Theiss (Inova Fairfax Medical Campus), G. Qi (University of Memphis), U.S.A.</i></p>	<p>Features of the AE Method Use in Monitoring of Bridge Structures <i>S. Elizarov, V. Bardakov, V. Barat, D. Terentyev, D. Chernov (INTERUNIS-IT LLC), Russia.</i></p> <p>Forecasting of Concrete Strength During the Hardening Process by Means of Acoustic Emission Method <i>V. Bardakov ("INTERUNIS-IT" LLC), A. Sagaidak (JSC SIC Construction), Russia.</i></p> <p>Damage Evaluation of RC Bridge Deck under Wheel Loading Test by Means of AE Tomography <i>T. Nishida, T. Shiotani, H. Asaue (Kyoto University), T. Maeshima, Y. Kobayashi (Nihon University), Japan.</i></p> <p>Acoustic Emission Properties of Concrete Slab during Fatigue Testing by Load on Wheel <i>M. Shiwa (National Institute for Materials Science), Z. Li (Nippon Physical Acoustics, Ltd.), T. Maeshima, H. Koda (Nihon University), Y. Tanaka (Institute of industrial Science, The University of Tokyo), Japan.</i></p> <p>Delamination between Concrete and Steel Plate in RC Deck Slab Reinforced with Steel Plate Bonding Method by Elastic Wave Technique <i>K. Ohno, T. Saito, K. Uji, A. Ueno, M. Sekiguchi (Tokyo Metropolitan Government), Japan.</i></p> <p>Monitoring of Crack Growth in Masonry with Acoustic Emission and Fibre Optic Sensors <i>E. Verstrynge, M. Wevers (KU Leuven), Belgium.</i></p>	<p>[Invited Talk] Characterization of Aluminum Microstructural Damage under Tensile Loading using a Data-enabled Approach <i>S. F. Wayne, G. Qi, J. Li, L. Zhang (Tianjin University of Science and Technology), China.</i></p> <p>Study of the Acoustic Emission Method by Tensile Test of the CFRP Specimen <i>M. Takizawa, H. Kawasaki, S. Oomori, T. Sasaki (IHI Inspection & Instrumentation Co., Ltd.), Japan.</i></p> <p>Estimation and Controlling of Crack Generation in Thermal Barrier Coatings during Suspension Plasma Spraying by AE Method <i>N. Yoneda, K. Ito (The University of Tokyo), H. Araki, X. Chen, S. Kuroda (National Institute for Materials Science), M. Enoki (The University of Tokyo), Japan.</i></p> <p>Evaluation of the Effect of Laser Induced Breakdown on Laser Shock Peening <i>T. Takata, M. Enoki (The University of Tokyo), Japan.</i></p>

Wednesday, December 7 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
09:00 - 09:30	Registration		
09:30 - 10:30	Keynote Lecture II Session Chair: Tomoki Shiotani		
	Design of Autonomous System with Self-State Awareness and High Mobility <i>Prof. Fu-Kuo Chang</i> <i>(Professor, Stanford University)</i>		
10:30 - 10:45	Coffee Break sponsored by IHI Inspection & Instrumentation Co., Ltd.		
10:45 - 12:15	AE & Related NDT 2 Session Chair: G. Lacidogna, Y. Mizutani	Geo-Resource Engineering Session Chair: G. Manthei, T. Nishida	Signal Processing 1 Session Chair: D. V. Hemelrijck, H. Asaue
	Recent Advances in Structural Health Monitoring using Acoustic Emission <i>O. Ley, R. Gostautas, V. F. Godinez-Azcuage (Mistras Group Inc.), U.S.A.</i>	[Invited Talk] Moment Tensor Inversion on Acoustic Emission Events in Rock in Much Differing Scale <i>G. Manthei (THM University of Applied Sciences, Gießen, Germany), Germany.</i>	Acoustic Emission Source Localization through Excitability Prediction and Dispersion Removal Technique <i>K. Grabowski, M. Gawronski, W. J. Staszewski, T. Uhl, P. Packo (AGH University of Science and Technology), Poland.</i>
	Development of an Internal Concrete Damage Evaluation Technique for Steel Plate-Bonded Slabs <i>N. Ogura (CORE Institute of Technology Corporation), H. Yatsumoto (Hanshin expressway company limited), T. Nishida, T. Shiotani (Kyoto University), Japan.</i>	Study of AE due to Domain Structure Relaxation in Triglycine Sulfate Single Crystals <i>S. Azimov, V. Petukhov (The Physical-technical Institute, Academy of Sciences, Tajikistan), A. Leksovskii, B. Baskin (Ioffe Physical Technical Institute, Russian Academy of Sciences, St. Petersburg, Russia), Tajikistan.</i>	Localization of Acoustic Emission Sources in Complex Three Dimensional Fiber Composites Using Artificial Neural Networks <i>S. Kalafat, M. Bornschlegl, M. G. R. Sause (University of Augsburg), Germany.</i>
	Evaluation of Grouting Condition of Prestressing Reinforcement by Means of Wave Velocity Tomography <i>A. Sagradyan, T. Shiotani, T. Nishida, H. Asaue (Kyoto University) Y. Kobayashi, (Nihon University), Japan.</i>	Acoustic Emission Characteristics of Rocks Subject to Uniaxial Compressive and Splitting Loads <i>X. Liu, J. Wang, X. Li, M. Pan (Central South University), China.</i>	High-precision Source Location of AE Event Using Automatic Error Correction of Signal Rising Time <i>K. Ito, M. Enoki (The University of Tokyo), Japan.</i>
	Fracture Behavior of Deteriorated FRP by UV Radiation <i>D. Jung, Y. Mizutani, A. Todoroki, Y. Suzuki (Tokyo Institute of Technology), Japan.</i>	Thermal Fracture Source Localization in Rocks Using the Efficient Closed-form Solution (ECS) for Locating AE Sources <i>L. Dong, D. Sun, Z. Wang, X. Shang, W. Shu (Central South University), China.</i>	Efficient Damage Inspection of Deteriorated RC Bridge Deck with rain-induced AE Activity <i>H. Takamine, K. Watabe (Corporate Research and Development Center, Toshiba Corporation), H. Miyata (West Nippon Expressway Company Limited), H. Asaue, T. Nishida, T. Shiotani (Kyoto University), Japan.</i>
	Measuring of Impact Force by Sensor Integrated Protector for KARATE <i>Y. Mizutani (Tokyo Institute of Technology), K. Kokubo, K., Sato, G. Taga (ITEngineering), T. Ashizawa, L. Suzuki (Tokyo Institute of Technology), M. Kudaka (World Koshiki Karatedo Federation), A. Kuroda (Gsport inc.), Japan.</i>	Spatio-temporal Variation in Propagation Characteristics of Elastic Waves in a Sand Soil during a Water Injection Test <i>M. Nakayama, H. Kawakata (Ritsumeikan University), I. Doi (DPRI, Kyoto University), N. Takahashi (Sumitomo Mitsui Construction Co., Ltd.), Japan.</i>	Sensitivity of Ultrasonic Waves to Surface-breaking Cracks in Reinforced Concrete Beams <i>L. P. Pahlavan (TNO Netherlands), S. Pirskawetz, G. Hüskén (BAM Germany), G. Blacquièrè (TNO Netherlands), Netherlands.</i>
12:15 - 13:30	Lunch break Executive Meeting of R&T Committee on AE, JSNDI is held @ Meeting Room D		

Wednesday, December 7 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
13:30 - 15:00	<p>AE & Related NDT 3 Session Chair: G. Lacidogna, Y. Mizutani</p> <p>[Invited Talk] Concrete Specimens under Four-point Bending: Correlation Between Acoustic Emission Signals and Modal Frequency Variation <i>A. Carpinteri, G. Lacidogna, G. Piana, (Politecnico di Torino), Italy.</i></p> <p>Estimation of Fracture Behavior in a Pressured Al-Mg-Si Alloy Heat Exchanger Based on AE Pattern Recognition Technique <i>K. Sashi, H. Ito, H. Cho (Aoyamagakuin University), T. Ueda, Y. Niidome, M. Yanagida (Sumitomo precision products Co., Ltd), Japan.</i></p> <p>Three-dimensional Q-value AE-tomography and ITS Verification on Numerical Investigations <i>Y. Kobayashi (Nihon University), T. Shiotani (Kyoto University), Japan.</i></p> <p>The Magneto Acoustic Emission Characteristics of Q235 Mild Steel <i>Y. Shen, G. Shen (China special equipment and research institute), W. Ke (Nanchang Hangkong University), China.</i></p> <p>Calibration of Acoustic Emission Sensors with Laser Ultrasound and Multi-Physics Modeling <i>L. Zhang, D. Ozevin (University of Illinois at Chicago), U.S.A.</i></p>	<p>Civil Engineering 2 Session Chair: D. V. Hemelrijck, H. Asaue</p> <p>[Invited Talk] Additive Manufacturing: the Next Industrial Revolution? <i>D. V. Hemelrijck, Maria Strantz (Vrije Universiteit Brussel), Belgium.</i></p> <p>Updating Cracks within a Heterogeneous Numerical Model Based on Estimated AE Source Locations <i>S. Gollob, T. Vogel (ETH Zurich), Switzerland.</i></p> <p>Acoustic Emission Analysis for Identification of Damage Mechanisms in Fiber-reinforced Polymer Composites and Structural Integrity Assessment: Selected Examples and Challenges <i>A. J. Brunner (Empa, Swiss Federal Laboratories for Materials Science and Technology), Switzerland.</i></p> <p>Continuous AE Monitoring of Fresh Concrete <i>S. N. Iliopoulos, E. Dzaye, Y. E. Khattabi (Vrije Universiteit Brussel), G. D. Schutter (University of Ghent), D. G. Aggelis (Vrije Universiteit Brussel), Belgium.</i></p> <p>Acoustic Emission Study on 50 Years old Reinforced Concrete Beams under Bending and Shear Tests <i>Y. Yang, D. A. Hordijk (Delft University of Technology), A. D. Boer (Ministry of Infrastructure and the Environment), Netherlands.</i></p>	<p>Materials Science 2 Session Chair: N. Godin, T. Suzuki</p> <p>Modeling of Acoustic Emission Sources in Fiber Reinforced Composites <i>M. G. R. Sause (University of Augsburg), Germany.</i></p> <p>Acoustic Emission Monitoring during Laser Surface Quenching to the Carbon Steels <i>T. Yasuda, K. Nishimoto, Y. Okumoto (National Institute of Technology, Anan College), Japan.</i></p> <p>Study of the Effect of Weave Architecture on the Mechanical Behavior of Geotextiles Used for Coastal Recovery by Using AE Technique <i>C. R. Rios-Soberanis, J. Rodriguez-Laviada (Centro de Investigacion Cientifica de Yucatan), E. Perez-Pacheco (Instituto Tecnológico Superior en el Estado de Campeche), Mexico.</i></p> <p>Acoustic Emission and Damage Evolution at mean Temperature under Air of a SiC/[Si-B-C] Composite Subjected to Cyclic and Static Loading: Towards Lifetime Prediction <i>E. Racle, N. Godin, P. Reynaud, M. Rmili, G. Fantozzi (INSA de Lyon), France.</i></p> <p>Source of AEs from IG-SCC of Face Centered Cubic Metals under Static or Dynamic Straining <i>M. Takemoto, S. Ueno, M. Nakamura (Kanmeta Engineering), Japan.</i></p> <p>Influence of Texture and Heat Treatment on Plastic Deformation of Magnesium Alloy Sheets: Acoustic Emission Study <i>P. Dobron, D. Drozdenko, J. Balik (Charles University in Prague), J. Bohlen (Helmholtz-Zentrum Geesthacht), P. Lukáč (Charles University in Prague), Czech.</i></p>
15:00 - 15:30	Coffee Break sponsored by Nippon Physical Acoustics		

Wednesday, December 7 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
15:30 - 17:00	<p>Sensor & System 1 Session Chair: G. Manthei, T. Nishida</p> <p>Remote Imaging of Plate-like Structures with E-camera <i>T. Hayashi (Kyoto University), Japan.</i></p> <p>Elastic Wave Measurement Using a MEMS AE Sensor <i>T. Omori, T. Usui, K. Watabe (Corporate Research and Development Center, Toshiba Corporation), M. D. Nguyen (IRT Research Institute, The University of Tokyo), K. Matsumoto (Toyo University), I. Shimoyama (IRT Research Institute, The University of Tokyo), Japan.</i></p> <p>Detection of Acoustic Emission Signals with the Fabry-perot Interferometer Type Optical Fiber Sensor <i>K. Tada, H. Yuki (The University of Electro - Communications), Japan.</i></p> <p>Effect of Compressive Pre-strain on the Mechanical Properties of LPSO-Mg Alloys <i>K. Tamura, T. Shiraiwa, M. Enoki (The University of Tokyo), Japan.</i></p> <p>Development of a New Piezoelectric Transducer Usable as a Seismograph <i>H. Kawakata (Ritsumeikan University), H. Inaba (Fuji Ceramics Corporation), Japan.</i></p>	<p>Civil Engineering 3 Session Chair: M. C. Forde, T. Watanabe</p> <p>[Invited Talk] Predicting the Ultimate Load Capacity of Concrete Bridge Beams from the "Relaxation Ratio" Analysis of AE Signals <i>M. C. Forde, S. Colombo, I. G. Main (University of Edinburgh), M. Ohtsu (Kyoto University), M. Shigeishi (Kumamoto University), Scotland.</i></p> <p>Characterization of Mechanical Behaviour of Masonry under Compression Using Acoustic Emission <i>N. Shetty (KU Leuven), G. Livitsanos, D. V. Hemelrijck, D.G. Aggelis (Vrije Universiteit Brussel), M. Wevers, E. Verstrynghe (KU Leuven), Belgium.</i></p> <p>Numerical Simulation of Wave Propagation and AE Characterization of Fracture Mode in Masonry <i>G. Livitsanos (Vrije Universiteit Brussel), N. Shetty, E. Verstrynghe (KU Leuven), M. Wevers, D. V. Hemelrijck, D.G. Aggelis (Vrije Universiteit Brussel), Belgium.</i></p> <p>Influence of Pipe Material on the Transmission of Leak Vibro-acoustic Signals in Water Distribution Systems <i>J. D. Butterfield, R. Collins, S. Beck (University of Sheffield), England.</i></p> <p>Visualization of Internal Damage in RC Slab with Single Side Access Attenuation Tomography <i>C. Granier (EPFL), T. Shiotani, K. Hashimoto, T. Nishida (Kyoto University), Japan.</i></p>	<p>Materials Science 3 Session Chair: N.Godin, T. Suzuki</p> <p>[Invited Talk] AE Parameter-based Characterization of Hybrid Materials' Fracture <i>D. G. Aggelis, S. Verbruggen, S. D. Sutter, T. Tysmans (Vrije Universiteit Brussel), Belgium.</i></p> <p>In-situ Investigation of Deformation Mechanisms in Various Magnesium Alloys by X-ray Diffraction and Acoustic Emission <i>K. Mathis, J. Čapek (Charles University), A. Vinogradov (Norwegian University of Science and Technology), G. Garcés (National Centre for Metallurgical Research), Czech.</i></p> <p>Damage Characterization in Quasi-static Mode of Ti-6Al-4V Additive Manufacture by Acoustic Emission Method <i>R. Carmi (Ben-Gurion University of the Negev, Beer Sheva - Israel), E. Tiferet, E. Chackotay, G. Gutman (NRCN - Israel), R. Shneck (Ben Gurion University of the Negev, Beer-Sheva, Israel), A. Bussiba (NRCN - Israel), Israel.</i></p> <p>Acoustic Emission and Neutron Diffraction Measurement during Loading and Unloading of Magnesium Aluminum Binary Alloys <i>J. Čapek, K. Mathis (Charles University), Czech.</i></p> <p>The Acoustic Emission Study of Plasticity Size Effect in Micron-scale Metallic Samples <i>M. Knappek, K. Máthis, P. Dobroň, F. Chmelík (Charles University in Prague), Czech.</i></p>
18:30 - 21:00	Banquet @ SUZAKU, 2nd floor of RIHGA ROYAL HOTEL KYOTO		

Thursday, December 8 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
09:00 - 09:30	Registration		
09:30 - 10:30	Keynote Lecture III Session Chair: Tomoki Shiotani		
	Development of AE Measurements in Concrete and Evolutional Applications <i>Prof. Masayasu Ohtsu</i> <i>(Professor Emeritus, Kumamoto University & Specially Appointed Professor of Kyoto University)</i>		
10:30 - 10:45	Coffee Break sponsored by IHI Inspection & Instrumentation Co., Ltd.		
10:45 - 12:15	AE & Related NDT 4 Session Chair: L. P. Pahlava, M. G. R. Sause	Civil Engineering 4 Session Chair: D. Kosnik, T. Hayashi	Signal Processing 2 Session Chair: I. Shimoyama, A. Gallego
	Investigation on Acoustic Emission Characteristics of Roller Coaster Track <i>J. Zhang, G. Shen, Z. Wu, Y. Yuan (China Special Equipment Inspection and Research Institute), China.</i> A New Methodology for Detecting the First Arrival Time of an Acoustic Wave <i>A. K. Das, C. K. Y. Leung (Hong Kong University of Science and Technology), China.</i> Evaluation of Irrigation Response using AE Method for Management of High-frequency Irrigation of Hydroponic Miniature-tomato <i>K. Kageyama, T. Sakai (Saitama University), Japan.</i> Evaluation of Water Leakage Repair by One Side Access Elastic Wave Tomography Using Rayleigh Wave <i>H. Asaue, T. Shiotani, T. Nishida, C. Huang (Kyoto University) Y. Kobayashi, (Nihon University), Japan.</i> Influence of an Optical Fiber Embedded on Unidirectional CFRP Laminates Evaluated with the Acoustic Emission and 3D Digital Image Correlation Techniques <i>E. Suarez (University of Granada), M. G. R. Sause (Institute for Physics), A. Gallego (University of Granada), Spain.</i>	[Invited Talk] Review of Acoustic Emission Source Mechanisms on Large Movable Structures <i>D. Kosnik (CTLGroup), U.S.A.</i> Detection of Elastic Waveform Parameter to Evaluate Deterioration of Concrete <i>T. Watanabe (Tokushima University), Y. Yamaguchi (JFE Engineering Corporation), N. Mori (Shikoku Construction Consultant Co., Ltd), C. Hashimoto (Tokushima University), T. Shiotani (Kyoto University), Japan.</i> Application of Acoustic Emission Analysis of Crushable Material <i>S. Luo, A. Diambra, E. Ibraim (University of Bristol), England.</i> Investigation of Acoustic Emission Source Locations in Reinforced Concrete Beams under Cyclic Loading <i>R. Lee, J. Ongpeng, A. Oreta (De La Salle University - Manila), S. Hirose (Tokyo Institute of Technology), Philippines.</i> Evaluations of Crack due to Drying Shrinkage in Mortar and Concrete by AE Method <i>K. Nishiyama, T. Watanabe (Tokushima University), K. Nakashima (SHIMIZU CORPORATION), C. Hashimoto (Tokushima University), T. Shiotani (Kyoto University), Japan.</i>	[Invited talk] Super-Acoustic Sensor for Bridge Health Monitoring <i>I. Shimoyama, M. D. Nguyen (The University of Tokyo), Japan.</i> Damage Evaluation for In-field RC Bridge Deck by AE Tomography <i>M. Fukuda (West Nippon Expressway Company limited), T. Shiotani, T. Nishida, H. Asaue (Kyoto University), Y. Kobayashi, (Nihon University), Japan.</i> Identification of Similar Seismic Events Using Phase-only Correlation Technique <i>H. Moriya (Tohoku University), Japan.</i> Amplitude of AE Propagating in Laminated FRP Plates <i>Y. Mizutani, T. Miki, Y. Suzuki, A. Todoroki (Tokyo Institute of Technology), Japan.</i> Obtaining Wave-path Information from Waveform Data of the Sensor Coupling Test <i>H. Vallen, T. Thenikl, H. Trattng (Vallen Systeme GmbH), Germany.</i>
12:15 - 13:30	Lunch break International Advisory Meeting of IAES is held @ Meeting Room D		

Thursday, December 8 @ Kyoto TERRSA

	TERRSA HALL (West bldg.)	Seminar Room 2-3 (East bldg. 2F)	Meeting Room A-C (East bldg. 3F)
13:30 - 15:00	Sensor & System 2 Session Chair: L. P. Pahlava, M. G. R. Sause	Civil Engineering 5 Session Chair: I. Shimoyama, A. Gallego	Materials Science 4 Session Chair: D. Kosnik, T. Hayashi
	<p>[Invited Talk] On Acoustic Emission Sensor Characterization <i>K. Ono (UCLA), U.S.A.</i></p> <p>Development of Elastic Wave Tomography Method for Evaluation of Internal Concrete Using Drilling Holes <i>H. Yatsumoto (Hanshin expressway company limited), T. Nishida, T. Shiotani, C. Huang (Kyoto University), N. Ogura (CORE Institute of Technology Corporation), Y. Kobayashi (Nihon University), Japan.</i></p> <p>About the Verification of acoustic emission (AE) Instrumentation Characteristics <i>H. Vallen, T. Thenikl, H. Trattinig (Vallen Systeme GmbH), Germany.</i></p> <hr/> <p>Discussion on the Latest Test Report on AE Sensor Calibration, <i>Kanji Ono, Hidehiro Inaba, Hideo Cho, Yoshihiro Mizutani and Tomoki Shiotani</i></p>	<p>[Invited Talk] AE Energy in Reinforced Concrete Specimens Subjected to Different Loading Patterns <i>A. Gallego, F. Sagasta (University of Granada), A. B. Climent (Polytechnic University of Madrid), G. Cortes (University of Granada), Spain.</i></p> <p>Evaluation of Ultrasonic Propagation Properties in Reinforced Concrete that Reproduced Rebar Corrosion by Artificial Defect and Chloride Damage <i>H. Fukutomi, T. Watanabe, C. Hashimoto (Tokushima University), K. Miyazaki (Hanshin Expressway), K. Ishimaru (Tokushima University), Japan.</i></p> <p>Behavior of Reinforced Concrete Slab Monitored by Acoustic Emission <i>Y. Kan (Chaoyang University of Technology), K. Pei (Institute of Nuclear Energy Research), China.</i></p> <p>A Basic Study of an Elastic-wave Based Inspection Technique for Evaluating Rebar-concrete Interface Conditions <i>N. Okude (Tokai Technology Center), T. Nishida, T. Shiotani (Kyoto University), Japan.</i></p>	<p>Classification of Acoustic Emission Signals Using Wavelets and Random Forests: Application to Localized Corrosion <i>N. Morizet, N. Godin, M. Fregonese, J. Tang, B. Normand (INSA de Lyon), France.</i></p> <p>Acoustic Emission Modelling from the Source to the Detected Signal: Model Validation and Identification of Relevant Descriptors <i>T. Le, N. Godin, T. Monnier, C. Fusco, Z. Hamam (INSA de Lyon), France.</i></p> <p>Three-dimensional Source Location by Water Propagating Waves in the Hydraulic Test of CFRP Pressure Vessel <i>S. Fukumoto, S. Oomori, M. Takizawa, H. Kawasaki, T. Nishido (IHI Inspection & Instrumentation Co., Ltd.), Japan.</i></p> <p>Influence of Pre-compression on Tensile Behavior in Wrought AZ31 Studied by the Acoustic Emission Technique <i>D. Drozdenko, P. Dobron (Charles University in Prague), J. Bohlen, S. Yi (Helmholtz-Zentrum Geesthacht), F. Chmelik (Charles University in Prague), Czech.</i></p>
15:00 – 15:15	Coffee Break sponsored by IPH Repair Method Association		
15:15 - 15:45	Closing Ceremony		

16:00 – 18:00	Meeting of RILEM TC IAM @ Meeting Room D
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Friday, December 9

09:00 - 18:00	Conference Tour
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Poster Session @ Seminar Room 1 (East bldg. 2F) during Conference

- P-01: Fracture Process Evaluation of Cement Improved Soil by AE in Core Test
Y. Shimamoto, T. Suzuki and T. Morii
- P-02: Evaluation of Improved Water Flow Performance in Pipeline using AE Parameter Analysis
T. Suzuki, Y. Honda, T. Naka and H. Taruya
- P-03: Orientation and Strain Rate Effects on the Mechanical and Acoustic Responses of Al-2024
E. Chakotay, I. Alon, R. Carmi, G. Guttman, A. Cohen and A. Bussiba
- P-04: Mechanical and Fracture Characteristics Evaluation of Magnesium Alloy AZ91 Welded by FSW – Evaluation with AE method -
M. Takuma, S. Matsuda, Y. Asagoe, K. Saitoh, Y. Takahashi and T. Sato
- P-05: High Sensitive and Very Low Noise Optical Fiber AE Sensors
T. Ohtsuka, H. Konda, T. Hattori, I. Shinozaki and G. Nakayama
- P-06: Development of a Classification Method for the Acoustic Emission Signals Based on Simulation of AE Waveforms
K. Arakawa and T. Matsuo
- P-07: Application of RBF Network in City Gas Pipeline Leakage Detection Positioning
Y. Hao, Q. Xue, Y. Bai and J. Liu
- P-08: Investigation of Rock Deformation Mechanism using Neutron Diffraction Technique and AE Signal Measurement
J. Abe, K. Sekine, S. Harjo, W. Gong and K. Aizawa
- P-09: A Novel Detection Method of the Acoustic Emission by using the Scanning Probe Microscope
S. Fujisawa, H. Mano and K. Miyake
- P-10: AE Measurement with Rock Triaxial Compression Test and AE Simulation using PFC Analysis
T. Mori, T. Inuzuka and M. A. M. Ismail
- P-11: Damage Location Tests in Metal Structure by Means of 3D Acoustic Emission Tomography
Y. Jiang, S. B. Xu, Z. Yang, F. Xu and A. Gallego
- P-12: Monitoring of Debondings in Timber Beams Reinforced with Using Acoustic Emission Technique
F. J. Rescalvo, I Valverde-Palacios, E. Suarez and A. Gallego

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