

第 23 回国際アコースティック・エミッション  
シンポジウム (IAES-23),  
(合同開催 : IIIAE2016 創立記念会議および  
第 8 回国際 AE 会議)

期 日 : 2016 年 12 月 5 日 (月) ~ 9 日 (金)

会 場 : 京都テルサ

〒601-8047

京都府京都市南区東九条下殿田町 70

電話 : 075-692-3400

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

主 催 : (社) 日本非破壊検査協会,

III AE (国際先端 AE 学会)

共 催 : AEWG (米国), EWGAE (欧州)

後 援 : 京都大学大学院工学研究科

助 成 : 京都大学教育振興財団

(公) 関西・大阪 21 世紀協会

(公) 立石科学技術振興財団

(公) コペシジョンビューロー

協 賛 : 20 関連学協会・団体

ホームページ : <http://iii ae.org/iii ae2016/>

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その他 :

- ・ 参加ご希望の方は、以下の URL から直接お申し込み  
ください。

<http://iii ae.org/iii ae2016/registration.html>

- ・ 技術展示・コーヒープレイクスポンサーを募集して  
います。詳細は以下をご参照ください。

<http://iii ae.org/iii ae2016/exhibitions.html>

予告プログラム

- 注) 予告プログラムは変更となる場合があります。  
最新プログラムはホームページをご参照ください。

**Monday, December 5**

**Welcome Reception & Registration 17:00 - 20:00**

@ Rihga Royal Hotel KYOTO

**Tuesday, December 6**

**Registration 09:00 - 10:00**

**Opening Ceremony 10:00 - 11:00**

**Keynote Lecture I 11:00 - 12:00**

(Title: TBA)

**Prof. Yoza Fujino**

(Professor Emeritus, the University of Tokyo &  
Distinguished Professor, Yokohama National University,  
Program Director, Cross-ministerial Strategic Innovation  
Propotion Program)

----- Lunch -----

**AE & Related NDT 1**

**13:30 - 15:00**

**Acoustical Emission Propagation in a Prismatic Wave  
Guided: Simulations Using Truss Like Discrete Element  
Method**

*E. B. Groth (Federal University of Rio Grande do Sul  
(UFRGS)), G. Sumajer (University of Pampa (Unipampa)),  
I. Iturrioz (Federal University of Rio Grande do Sul  
(UFRGS)), L. Kostas (University of Pampa  
(Unipampa)), T. R. Clarke (Federal University of Rio  
Grande do Sul (UFRGS))*

**Development of Leak Detection Technology due to AE  
Method Using Gas Pipe**

*K. Yoshida, K. Kikugawa, A. Miura (Tokushima Bunri  
University)*

**Source Location of Impact Damages in Multi-Layered  
Composite Vessel by Acoustic Emission Parametric Zone  
Technology**

*D. Yoon, B. Han, C. Park, I. Kwon (Korea Research  
Institute of Standards and Science)*

**Evaluation of AE Generation Behavior of Cathodic  
Hydrogen Charged and Non-Charged A7075-T651 and  
A6061-T6 Aluminum Alloys in Fatigue Testing under  
Atmospheric Environment**

*H. Cho, N. Shoji, H. Ito (Aoyama Gakuin University)*

**Analysis of Acoustic Emission Parameters from Corrosion  
and Leak of AST Bottom Plate in Field Testing**

*W. Suwansin (King Mongkut's Institute of Technology  
Ladkrabang), C. Jirarungsatian, C. Jomdecha (King  
Mongkut's University of Technology Thonburi)*

**Industries**

**13:30 - 15:00**

**[Invited Talk] The Survey of Underground Technological  
Pipelines of Crude Oil of Fuel Storage Depots by Acoustic  
Emission Method**

*I. J. Baran, I. Lyasota (Cracow University of Technology),  
K. Skrok (PERN Przyjazn S.A.)*

**Early Shell Crack and Leak Detection Technique in Steel  
Mill Using Acoustic Emission**

*D. Hyun (RECTUSON)*

**Corrosion Detection for Ferritic Structures**

*P. Tscheliesnig (AT - Consult e.U.), A. Jagebnbrein, G.  
Lackner (TÜV AUSTRIA SERVICES GmbH)*

**Acoustic Emission Testing of the Column from Stainless  
Steel**

*V. P. Gomera, V. L. Sokolov, S. A. Tyupin, V. P. Fedorov, A. D.  
Smirnov (Kirishinefteorgsintez Ltd), D. A. Legostaev (SPA  
Lencor)*

**Monitoring Power Transformer Tap-Changers with Acoustic  
Emission**

*O. Santos (Eletrobras Eletronorte)*

**Machine Engineering**

**13:30 - 15:00**

**A Study on AE Signals during Micro Cutting by in Situ  
Observation of Metal Cutting**

*A. Hase (Saitama Institute of Technology)*

**AE Monitoring by High Sensitivity and Portable Optical  
Fiber AE System**

*I. Shinozaki, G. Nakayama, Y. Sakakibara (IHI)*

Corporation), T. Ohtsuka, H. Konda, T. Hattori (Sumitomo Electric Industries, Ltd.)

**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**

T. Matsuo, K. Sano (Meiji University), I. Shinozaki, G. Nakayama (IHI Corporation)

**AE Generation Mechanism of Rotating Component during Bending Fatigue Test by Non-contact AE Monitoring System**

D. Hatanaka, T. Matsuo (Meiji University)

**Analytical and Experimental Comparison of Basalt and Carbon Fiber Composites Overwrapping Highly Pressurized Steel Cylinders**

J. C. Schmidt (Cracow University of Technology), T. K. Nowak (ABB Corporate Research Cracow), I. J. Baran (Cracow University of Technology)

**Prognoses Different Welded Steel Plates Defects Using Acoustic Emission**

M. N. El-Shaib, M. F. Shehadeh (Arab Academy for Science Technology & Maritime Transport (AASTMT))

----- Break -----

<b>Medical Science</b>	<b>15:30 - 17:00</b>
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**Development of Non-invasive Diagnosis Method for Knee Osteoarthritis by Using Knee Joint Angle and Acoustic Information**

T. Sakai, K. Kodama (Saitama University), S. Wakayama (Tokyo Metropolitan University), K. Kageyama (Saitama University), K. Hase (Tokyo Metropolitan University), S. Ota (Seijoh University)

**AE Characterization of Microdamage in Tendon under Different Loading Condition**

F. Matsuoka, S. Wakayama (Tokyo Metropolitan University), T. Sakai (Saitama University), E. Yamamoto (Kinki University)

**The Advancement of AE Technique in Biomechanics Research in Our Lab**

J. Li (Inova Fairfax Hospital), G. Qi (University of Memphis), M. Theiss (Inova Fairfax Medical Campus)

**Development of Artificial Bone for the Assessment of Adhesive Strength between Bone and Endoprosthesis by Means of Acoustic Emission Analysis (AEA)**

J. Subke, O. Nalik (THM University of Applied Sciences), P. Franke (BoneDias GbR), U. Wolf (University of Applied Sciences), H. Schwalbe, B. Ziegler (THM University of Applied Sciences)

<b>Civil Engineering 1</b>	<b>15:30 - 17:00</b>
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**Features of the AE Method Application in Monitoring of Bridge Constructions**

S. Elizarov (INTERUNIS-IT LLC)

**Forecasting of Concrete Strength During the Hardening Process by Means of the Acoustic Emission Method**

V. Bardakov ("INTERUNIS-IT" LLC), A. Sagaidak (JSC SIC Construction)

**Damage Evaluation of RC Bridge Deck under Wheel Loading by Means of AE Tomography**

T. Nishida, T. Shiotani, H. Asaue (Kyoto University), T. Maejima (Nihon University)

**Acoustic Emission Properties of Concrete Slab during Fatigue Testing by Load on Wheel**

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)

**Detection of Delamination between Concrete and Steel Plate in the RC Deck Slab Reinforced with Steel Plate Bonding Method by Elastic Wave**

K. Ohno, T. Saito, K. Uji, A. Ueno, M. Sekiguchi (Tokyo Metropolitan Government)

**Evaluation of Concrete Bridge Deck by Means of Attenuation-based Methods**

C. Granier (EPFL), T. Shiotani, T. Nishida (Kyoto University)

<b>Materials Science 1</b>	<b>15:30 - 17:00</b>
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**Study of the Acoustic Emission Method by Tensile Test of CFRP Specimen**

M. Takizawa, H. Kawasaki, S. Oomori, T. Sasaki (IHI Inspection & Instrumentation Co., Ltd.)

**Characterization and Modeling Aluminum Microstructural Damage under Tensile Loading using a Data-enabled Approach**

G. Gary, S. F. Wayne, J. Li (Tianjin University of Science and Technology)

**Estimation and Controlling of Crack Generation in Thermal Barrier Coatings during Suspension Plasma Spraying by AE Method**

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)

**Evaluation of the Effect of Laser Induced Breakdown on Laser Shock Peening**

T. Takata, M. Enoki (The University of Tokyo)

**Feature Extraction and Selection Sensitive to Matrix Failure During Fatigue Testing of Composite Structures**

D. Zarouchas, N. Eleftheroglou, R. Benedictus (Delft University of Technology)

**Wednesday, December 7**

<b>Registration</b>	<b>09:00 - 09:30</b>
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<b>Keynote Lecture II</b>	<b>09:30 - 10:30</b>
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(Title: TBA)

*Prof. Fu-Ko Chang*  
(Professor, Stanford University)

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<b>AE &amp; Related NDT 2</b>	<b>11:00 - 12:30</b>
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**Development of an Internal Concrete Damage Evaluation Technique for Steel Plate-Bonded Slabs**

N. Ogura (CORE Institute of Technology Corporation), H. Yatsumoto (Hanshin expressway company limited), T. Nishida, T. Shiotani (Kyoto University)

**Evaluation of Grouting Condition of Post-tensioned Concrete by Means of Elastic-wave Velocity Tomography**

A. Sagradyan, T. Shiotani, T. Nishida, H. Asaue (Kyoto University)

**Fracture Behavior of Deteriorated FRP by UV Radiation**

D. Jung, Y. Mizutani, A. Todoroki, Y. Suzuki (Tokyo Institute of Technology)

**Evaluation of Grouting Condition of Post-tensioned Concrete by using Spectral Ratio**

S. Nagase, T. Shiotani, T. Nishida, H. Asaue, A. Sagradyan (Kyoto University)

**Measuring of Impact Force by Sensor Integrated Protector for Karate**

Y. Mizutani (Tokyo Institute of Technology), K. Kokubo, K. Sato, H. Taga (ITEngineering), T. Ashizawa, I. Suzuki (Tokyo Institute of Technology)

**Geo-Resource Engineering 11:00 - 12:30**

**[Invited Talk] Moment Tensor Inversion on Acoustic Emission Events in Rock in Much Differ-ing Scale**

G. Manthei (THM University of Applied Sciences, Gießen, Germany)

**Study of AE due to Domain Structure Relaxation in Triglycine Sulfate Single Crystals**

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)

**Frequency Characteristics of Rock Acoustic Emission under Compressive and Splitting Loading Conditions**

X. Liu, J. Wang, X. Li, M. Pan (Central South University)

**Thermal Fracture Source Localization in Rocks Using the Analytical Method for Locating AE Sources**

L. Dong (Central South University)

**Signal Processing 1 11:00 - 12:30**

**Acoustic Emission Source Localization through Excitability Prediction and Dispersion Removal Technique**

K. Grabowski, M. Gawronski, W. J. Staszewski, T. U. Pawel Packo (AGH University of Science and Technology)

**Localization of Acoustic Emission Sources in Complex Three Dimensional Fiber Composites Using Artificial Neural Networks**

S. Kalafat, M. Bornschlegl, M. G. R. Sause (University of Augsburg)

**High-precision Source Location of AE Event Using Automatic Error Correction of Signal Rising Time**

K. Ito, M. Enoki (The University of Tokyo)

**Efficient Damage Inspection of Deteriorated RC Bridge Deck with AE Activity**

H. Takamine, K. Watabe, H. Miyata (West Nippon

Expressway Company Limited), H. Asaue, T. Nishida, T. Shiotani (Kyoto University)

**Sensitivity of Ultrasonic Waves to Surface-breaking Cracks in Reinforced Concrete Beams**

L. P. Pahlavan (TNO Netherlands), S. Pirskawetz, G. Hüskén (BAM Germany), G. Blacquière (TNO Netherlands)

----- Lunch -----

**AE & Related NDT 3 13:30 - 15:00**

**[Invited Talk] Concrete Specimens under Four-point Bending: Correlation Between Acoustic Emission Signals and Modal Frequency Variation**

G. Lacidogna, G. Piana, A. Carpinteri (Politecnico di Torino)

**Estimation of Fracture Behavior in a Pressured Al-Mg-Si Alloy Heat Exchanger Based on an AE Pattern Recognition Technique**

K. Sashi, H. Ito, H. Cho (Aoyamagakuin University), T. Ueda, Y. Niidome, M. Yanagida (Sumitomo precision products Co., Ltd)

**Three-dimensional Q-value AE-tomography and ITS Verification on Numerical Investigations**

Y. Kobayashi (Nihon University), T. Shiotani (Kyoto University)

**Analytical Investigation of the Sources of Magneto-acoustic Emission**

Y. Shen, G. Shen (China special equipment and research institute), W. Ke (Nanchang Hangkong University)

**Calibration of Acoustic Emission Sensors with Laser Ultrasound and Multi-Physics Modeling**

D. Ozevin, L. Zhang (University of Illinois at Chicago)

**Civil Engineering 2 13:30 - 15:00**

**Updating Cracks within a Heterogeneous Numerical Model Based on Estimated AE Source Locations**

S. Gollob, T. Vogel (ETH Zurich)

**Acoustic Emission Analysis for Identification of Damage Mechanisms in Fiber-reinforced Polymer Composites and Structural Integrity Assessment: Selected Examples and Challenges**

A. J. Brunner (Empa, Swiss Federal Laboratories for Materials Science and Technology)

**Spatio-temporal Variation in Propagation Characteristics of Elastic Waves in a Sand Soil during a Water Injection Test**

M. Nakayama, H. Kawakata (Ritsumeikan University), I. Doi (DPRI, Kyoto University), N. Takahashi (Sumitomo Mitsui Construction Co., Ltd.)

**Continuous AE Monitoring of Fresh Concrete**

S. N. Iliopoulos, E. Dzaye, Y. El (Vrije Universiteit Brussel), G. De (University of Ghent), D. G. Aggelis (Vrije Universiteit Brussel)

**Acoustic Emission Study on 50 Years-old Reinforced Concrete Beams under Bending and Shear Tests**

Y. Yang, D. Hordijk (Delft University of Technology), A. De (Ministry of Infrastructure and the Environment)

**Characterization of the Mechanical and Damage Behavior of Web-plastifying Dampers by Means of Preisach-mayergoyz Hysteron Space**

V. Kus, C. Kozena (Czech Technical University in Prague), E. Suarez (University of Granada), A. Benavent-Climent (Polytechnic University of Madrid), A. Gallego (University of Granada)

**Material Science 2** 13:30 -  
**15:00**

**Modeling of Acoustic Emission Sources in Fiber Reinforced Composites**

M. Sause (University of Augsburg)

**Acoustic Emission Monitoring during Laser Surface Quenching to the Carbon Steels**

T. Yasuda, K. Nishimoto, Y. Okumoto (National Institute of Technology, Anan College)

**Study of the Effect of Weave Architecture on the Mechanical Behavior of Geotextiles Used for Coastal Recovery by Using AE Technique**

C. R. Rios-Soberanis, J. Rodriguez-Laviada (Centro de Investigacion Cientifica de Yucatan), E. Perez-Pacheco (Instituto Tecnológico Superior en el Estado de Campeche)

**Acoustic Emission and Damage Evolution at High Temperature under Air of a SiC/[Si-B-C] Composite Subjected to Cyclic and Static Loading: Towards Lifetime Prediction**

N. Godin, E. Racle, P. Reynaud, M. Rmili, G. Fantozzi (INSA de Lyon)

**Influence of Texture and Heat Treatment on Plastic Deformation of Magnesium Alloy Sheets: Acoustic Emission Study**

P. Dobron, D. Drozdenko, J. Balík (Charles University in Prague), J. Bohlen (Helmholtz-Zentrum Geesthacht), P. Lukáč (Charles University in Prague)

----- Break -----

**Sensor & System 1** 15:30 -  
**17:00**

**Remote Imaging of Plate-like Structures with E-camera**

T. Hayashi (Kyoto University)

**Elastic Wave Measurement Using a MEMS AE Sensor**

T. Omori, U. Takashi, 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)

**Detection of Acoustic Emission Signals with the Fabry-perot Interferometer Type Optical Fiber Sensor**

K. Tada, H. Yuki (The University of Electro-Communications)

**Effect of Compressive Pre-strain on the Mechanical Properties of LPSO-Mg Alloys**

K. Tamura, T. Shiraiwa, M. Enoki (The University of Tokyo)

**Development of a New Piezoelectric Transducer Usable as a**

**Seismograph**

H. Kawakata (Ritsumeikan University), H. Inaba (Fuji Ceramics Corporation)

**MEMS Acoustic Emission Sensor for Structural Health Monitoring**

M. Nguyen, K. Matsumoto, I. Shimoyama (The University of Tokyo)

**Civil Engineering 3** 15:30 -  
**17:00**

**[Invited Talk] AE Parameter-based Characterization of Materials Fracture**

D. G. Aggelis, S. Verbruggen, S. De, T. Tysmans (Vrije Universiteit Brussel)

**Characterization of Mechanical Behaviour of Masonry under Compression Using Acoustic Emission**

N. Shetty (KU Leuven), G. Livitsanos, D. V. Hemelrijck, D. G. Aggelis (Vrije Universiteit Brussel), M. Wevers, E. Verstryngne (KU Leuven)

**Numerical Simulation of Wave Propagation in Masonry Using Real AE Signatures**

G. Livitsanos (Vrije Universiteit Brussel), N. Shetty, E. Verstryngne (KU Leuven), M. Wevers, D. V. Hemelrijck, D. G. Aggelis (Vrije Universiteit Brussel)

**Monitoring of Crack Growth in Masonry with Acoustic Emission and Fibre Optic Sensors**

E. Verstryngne, M. Wevers (KU Leuven)

**The New Proposed Standard Guide for Acoustic Emission Examination of Concrete Structures**

Boris Muravin (Integrity Diagnostics Ltd.)

**Material Science 3** 15:30 -  
**17:00**

**Investigation of the Influence of the Microstructural Parameters on the Plasticity by Advanced in-situ Methods**

K. Mathis, J. Čapek (Charles University), A. Vinogradov (Norwegian University of Science and Technology), G. Garcés (National Centre for Metallurgical Research)

**Damage Characterization in Quasi-static and Cyclic Modes of Ti6Al4V Additive Manufacture by Acoustic Emission Method**

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)

**Source of AEs from IG-SCC of Face Centered Cubic Metals under Static or Dynamic Straining**

M. Takemoto, S. Ueno, M. Nakamura (Kanmeta Engineering)

**Acoustic Emission and Neutron Diffraction Measurement during Loading and Unloading of Magnesium Aluminum Binary Alloys**

J. Capek, K. Mathis (Charles University)

**In-situ Investigation of Deformation Mechanisms in Magnesium and Magnesium Alloys by Advanced Acoustic Emission Technique**

*A. Vinogradov (Norwegian University of Science and Technology), E. Vasilev, M. Linderov, E. Agletdinov (Togliatti State University)*

**Banquet 18:30 - 21:00**

@ Rihga Royal Hotel KYOTO

**Thursday, December 8**

**Registration 09:00 - 09:30**

**Keynote Lecture III 09:30 - 10:30**

**Development of AE Measurements in Concrete and Evolutional Applications**

**Prof. Masayasu Ohtsu**

*(Professor Emeritus, Kyoto University)*

----- Break -----

**AE & Related NDT 4 11:00 - 12:30**

**[Invited Talk] Application of Acoustic Emission Technique in Detection of Roller Coaster Track**

*G. Shen, J. Zhang, Z. Wu, Y. Yuan (China Special Equipment Inspection and Research Institute)*

**Power Approach to Determine the Arrival Point of the Acoustic Wave in Concrete**

*A. K. Das, K. Y. Christopher (Hong Kong University of Science and Technology)*

**Evaluation of Irrigation Response using AE Method for Management of High-frequency Irrigation of Hydroponic Miniature-tomato**

*K. Kagevama, I. B. Abd Halim (Saitama University)*

**Damage Location Tests in Metal Structure by Means of 3D Acoustic Emission Tomography**

*Y. Jiang (Jinling Institute of Technology), S. Xu (School of Science, Nanjing Tech University), Z. Yang (Jinling Institute of Technology), Y. Xu (Southeast University), A. Gallego (University of Granada)*

**Evaluation of Water Leakage Repair by One Side Access Elastic Wave Tomography Using Rayleigh Wave**

*H. Asaue, T. Shiotani, T. Nishida, C. Huang (Kyoto University)*

**Civil Engineering 4 11:00 - 12:30**

**[Invited Talk] Comparative Study of Acoustic Emission Source Mechanisms on Movable Structures**

*D. Kosnik (CTLGroup)*

**Detection of Elastic Waveform Parameter to Evaluation Deterioration of Mortar and Concrete**

*T. Watanabe (Tokushima University), Y. Yamaguchi (JFE Engineering Corporation), N. Mori (Shikoku Construction Consultant Co., Ltd), C. Hashimoto (Tokushima University), T. Shiotani (Kyoto University)*

**The Application of Acoustic Emission Analysis on Monitoring Crack Formation of Chalk Cylinder Specimens in Uniaxial Compression Tests**

*S. Luo, A. Diambra, E. Ibraim (University of Bristol)*

**Investigation of Acoustic Emission Parameters in Reinforced Concrete Beams Tested using Four-point Bending under Cyclic Loading**

*R. Lee, J. Ongpeng, A. Oreta (De La Salle University - Manila), S. Hirose (Tokyo Institute of Technology)*

**Evaluations of Crack due to Drying Shrinkage in Mortar and Concrete by AE Method**

*K. Nishiyama, T. Watanabe (Tokushima University), K. Nakashima (SHIMIZU CORPORATION), C. Hashimoto (Tokushima University), T. Shiotani (Kyoto University)*

**Signal Processing 2 11:00 - 12:30**

**Damage Evaluation for In-field RC Bridge Deck by AE Tomography**

*M. Fukuda (West Nippon Expressway Company limited), T. Shiotani, T. Nishida, H. Asaue (Kyoto University)*

**Identification of Similar Seismic Events Using Phase-only Correlation Technique**

*H. Moriya (Tohoku University)*

**Amplitude of AE Propagating in Laminated FRP Plates**

*Y. Mizutani, T. Miki, Y. Suzuki, A. Todoroki (Tokyo Institute of Technology)*

**Obtaining Wave Path Information from Waveform Data of the Sensor Coupling Test**

*T. Thenikl, H. Vallen, H. Trattnig (Vallen Systeme GmbH)*

**Geodetic Iterative AE Source Localization Combined with Statistical Cluster Separation Techniques**

*V. Kus, M. Zavesky (Czech Technical University in Prague)*

----- Lunch -----

**Sensor & System 2 13:30 - 15:00**

**[Invited Talk] Current Status of Acoustic Emission Sensor Characterization**

*K. Ono (UCLA)*

**Development of Detection Method of Acoustic Emission by Using Scanning Probe Microscope**

*S. Fujisawa, H. Mano, K. Miyake (National Institute of Advanced Industrial Science and Technology (AIST))*

**The Development of the Seismic Tomography to Evaluate the Internal Concrete Quality by Using Drilling Method**

*H. Yatsumoto (Hanshin expressway company limited), T. Nishida, T. Shiotani, C. Huang (Kyoto University), N. Ogura (CORE Institute of Technology Corporation)*

**About the Verification of AE Instrumentation Characteristics**

*H. Vallen, T. Thenikl, H. Trattnig (Vallen Systeme GmbH)*

**Civil Engineering 5 13:30 - 15:00**

**[Invited Talk] AE Energy in Reinforced Concrete Specimens Subjected to Different Loading Patterns**

*A. Gallego, F. Sagasta (University of Granada), A. B. Climent (Polytechnic University of Madrid)*

**Evaluation of Ultrasonic Propagation Properties in Reinforced Concrete that Reproduced Rebar Corrosion by Artificial Defect and Chloride Damage**

*H. Fukutomi, T. Watanabe, C. Hashimoto (Tokushima University)*

University), *K. Miyazaki (Hanshin Expressway), K. Ishimaru (Tokushima University)*

**Behavior of Reinforced Concrete Slab Monitored by Acoustic Emission**

*Y. Kan (Chaoyang University of Technology), K. Pei (Institute of Nuclear Energy Research)*

**AE for Characterizing Crack Propagation in an Ultra High Performance Concrete Beam**

*S. Tayfur, S. Erees, N. Alver (Ege University)*

**Experimental Performance of Autonomously Healed Concrete Beams Under Three Point Flexural Test Monitored by Digital Image Correlation and Acoustic Emission Tomography Techniques**

*C. Huang, T. Shiotani, T. Nishida (Kyoto University), E. Tsangouri, A. G. Dimitrios (Vrije Universiteit Brussel)*

<b>Materials Science 4</b>	<b>13:30 - 15:00</b>
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**Influence of Weak Electric Field on Damage Evolution of Granite Specimen during Uniaxial Compression According to Acoustic Emission Data**

*I. Panteleev (Institute of continuous media mechanics Ural Branch of Russian Academy of Science), V. Mubassarova (Research Station of Russian Academy of Science in Bishkek), L. Bogomolov (Institute of Marine Geology and Geophysics Far Eastern Branch of Russian Academy of Science), O. Naimark (Institute of continuous media mechanics Ural Branch of Russian Academy of Science)*

**Classification of Acoustic Emission Signals Using Wavelets and Random Forests: Application to Localized Corrosion**

*N. Morizet, N. Godin, M. Fregonese, B. Normand, J. Tang (INSA de Lyon)*

**Acoustic Emission Modelling from the Source to the Detected Signal: Model Validation and Identification of Relevant Descriptors**

*T. Le, Z. Hamam, N. Godin, T. Monnier, C. Fusco (INSA de Lyon)*

**3-dimensional AE Source Location using a Water Propagating Waves in the Water Pressure Test of CFRP Pressure Vessel**

*S. Fukumoto, S. Oomori, M. Takizawa, H. Kawasaki, T. Nishido (IHI Inspection & Instrumentation Co., Ltd.)*

**The Acoustic Emission Study of Plasticity Size Effect in Micron-scale Metallic Samples**

*M. Knapek, K. Máthys, P. Dobroň, F. Chmelík (Charles University in Prague)*

----- Break -----

<b>Closing Ceremony</b>	<b>15:30 - 16:30</b>
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**Friday, December 9**

<b>Conference Tour</b>	<b>09:00 - 18:00</b>
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