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Tribikram Kundu

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Contents

Part One

- xiii *Conference Committee*
- xvii *Introduction*
- xix *The upcoming revolution in ultrasonic guided waves (Plenary Paper) [798302]*
J. L. Rose, The Pennsylvania State Univ. (United States) and FBS Inc. (United States)

SESSION 1 GUIDED WAVES IN COMPLEX STRUCTURES

- 7984 02 **Wave propagation in isogrid structures** [7984-01]
W. D. Reynolds, D. Doyle, B. Arritt, Air Force Research Lab. (United States)
- 7984 03 **Monitoring of hidden damage in multi-layered aerospace structures using high-frequency guided waves** [7984-02]
A. Semoroz, Univ. of Applied Sciences (Switzerland) and Univ. College London (United Kingdom); B. Masserey, Univ. of Applied Sciences (Switzerland); P. Fromme, Univ. College London (United Kingdom)

SESSION 2 GUIDED WAVES IN COMPOSITES

- 7984 06 **Delamination detection in a composite plate using a dual piezoelectric transducer network** [7984-05]
C. M. Yeum, H. Sohn, Korea Advanced Institute of Science and Technology (Korea, Republic of); J. B. Ihn, The Boeing Co. (United States)
- 7984 07 **Structural health monitoring strategy for detection of interlaminar delamination in composite plates** [7984-06]
N. Quaegebeur, P. Micheau, P. Masson, A. Maslouhi, Univ. de Sherbrooke (Canada)
- 7984 08 **Composite piezoelectric strip transducer development for structural health monitoring** [7984-07]
S. Li, C. J. Lissenden, The Pennsylvania State Univ. (United States)
- 7984 09 **Design of mode selective actuators for Lamb wave excitation in composite plates** [7984-08]
D. Schmidt, C. Heinze, W. Hillger, A. Szewieczek, M. Sinapius, P. Wierach, Deutsches Zentrum für Luft- und Raumfahrt e.V. (Germany)
- 7984 0A **Characterization of guided wave propagation with piezoelectric wafer actuators in prestressed plates** [7984-09]
F. Song, G. L. Huang, Univ. of Arkansas at Little Rock (United States)

SESSION 3 GUIDED WAVES FOR LARGE STRUCTURE MONITORING: PIPE, RAIL, SHIP, ETC.

- 7984 0B **Time reversal data communications on pipes using guided elastic waves: Part I. Basic principles** [7984-10]
Y. Jin, Univ. of Maryland Eastern Shore (United States); D. Zhao, Univ. of Electronic Science and Technology of China (China); Y. Ying, Carnegie Mellon Univ. (United States)
- 7984 0C **Time reversal data communications on pipes using guided elastic waves: Part II. Experimental studies** [7984-11]
Y. Jin, Univ. of Maryland Eastern Shore (United States); Y. Ying, Carnegie Mellon Univ. (United States); D. Zhao, Univ. of Electronic Science and Technology of China (China)
- 7984 0D **Simulation and control system of a power harvesting device for railroad track health monitoring** [7984-12]
K. J. Phillips, C. A. Nelson, Univ. of Nebraska-Lincoln (United States); M. Fateh, Federal Railroad Administration (United States)
- 7984 0E **Guided ultrasonic waves for the health monitoring of existing sign support structures** [7984-13]
X. Zhu, P. Rizzo, Univ. of Pittsburgh (United States)
- 7984 0F **A comparison of impedance and Lamb wave SHM techniques for monitoring structural integrity of and through welded joints** [7984-14]
B. L. Grisso, L. W. Salvino, Naval Surface Warfare Ctr. Carderock Div. (United States); G. Singh, G. Singh, I. N. Tansel, Florida International Univ. (United States)
- 7984 0G **Health monitoring of cylindrical structures using torsional wave generated by piezoelectric macro-fiber composite** [7984-15]
L. Cui, Y. Liu, C. K. Soh, Nanyang Technological Univ. (Singapore)
- 7984 0H **Damage classification of pipelines under a water flow operation using a multi-scale actuated sensing technology** [7984-16]
C. Lee, S. Park, Sungkyunkwan Univ. (Korea, Republic of)

SESSION 4 GUIDED WAVES WITH DISTRIBUTED SENSORS I

- 7984 0I **Multi-mode and multi-frequency guided wave imaging via chirp excitations** [7984-17]
J. E. Michaels, S. J. Lee, J. S. Hall, T. E. Michaels, Georgia Institute of Technology (United States)
- 7984 0J **Chirp generated acoustic wavefield images** [7984-18]
T. E. Michaels, J. E. Michaels, S. J. Lee, X. Chen, Georgia Institute of Technology (United States)

SESSION 5 NONLINEAR ACOUSTICS FOR SHM

- 7984 0L **Feasibility of using nonlinear guided waves to measure acoustic nonlinearity of aluminum** [7984-20]
K. H. Matlack, J.-Y. Kim, L. J. Jacobs, Georgia Institute of Technology (United States); J. Qu, Northwestern Univ. (United States)

- 7984 0M **Integrated material state awareness system with self-learning symbiotic diagnostic algorithms and models** [7984-21]
S. Banerjee, Acellent Technologies, Inc. (United States); L. Liu, S. T. Liu, F.-G. Yuan, North Carolina State Univ. (United States); S. Beard, Acellent Technologies, Inc. (United States)
- 7984 0N **Diagnosis of space structures using embedded sensors and elastic waves** [7984-22]
A. Murray, A. Zagrai, D. Conrad, New Mexico Institute of Mining and Technology (United States)

SESSION 6A GUIDED WAVES WITH DISTRIBUTED SENSORS II

- 7984 0S **Phased annular array transducers for ultrasonic guided wave applications** [7984-26]
F. Yan, FBS Inc. (United States); C. Borigo, Y. Liang, J. P. Koduru, The Pennsylvania State Univ. (United States); J. L. Rose, FBS Inc. (United States) and The Pennsylvania State Univ. (United States)
- 7984 0T **Hybrid model prediction of guided wave array system detection sensitivity for the SHM of fatigue cracks in large structures** [7984-27]
P. Fromme, Univ. College London (United Kingdom)
- 7984 0U **A novel imaging technique for structural health monitoring using sparse and compact arrays** [7984-28]
P. Masson, N. Quaegebeur, D. L. Demers, Univ. de Sherbrooke (Canada)

SESSION 6B BIOLOGICAL AND MEDICAL APPLICATIONS I

- 7984 0V **A novel hyper-elastic thin film nitinol covered stent significantly decreases intra-aneurysmal flow in vitro** [7984-29]
Y. Chun, S. C. Hur, Univ. of California, Los Angeles (United States); C. P. Kealey, David Geffen School of Medicine at UCLA (United States); D. S. Levi, Mattel Children's Hospital UCLA (United States); K. P. Mohanchandra, D. Di Carlo, G. P. Carman, Univ. of California, Los Angeles (United States)
- 7984 0X **Online monitoring of cartilage tissue in a novel bioreactor** [7984-31]
E. von der Burg, M. von Buttlar, W. Grill, Univ. Leipzig (Germany)
- 7984 0Y **Elastic characterization of swine aorta by scanning acoustic microscopy at 30 MHz** [7984-32]
C. Blase, Johann Wolfgang Goethe-Univ. (Germany); A. Shelke, T. Kundu, The Univ. of Arizona (United States); J. Bereiter-Hahn, Johann Wolfgang Goethe-Univ. (Germany)
- 7984 0Z **Fiber optic plantar pressure/shear sensor** [7984-33]
W. Soetanto, N. T. Nguyen, W.-C. Wang, Univ. of Washington (United States)

SESSION 7A GUIDED WAVES: NOVEL APPLICATIONS AND DAMAGE DETECTION

- 7984 10 **Determination of the stress dependence of the velocity of Lamb waves in aluminum plates** [7984-34]
U. Amjad, D. Jha, K. S. Tarar, H. Klinghammer, W. Grill, Univ. Leipzig (Germany)

- 7984 11 **Multiple component mode conversion coefficients via Lamb wave polarization measurements** [7984-35]
J. T. Ayers, U.S. Army Research Lab. (United States); N. Apetre, M. Ruzzene, Georgia Institute of Technology (United States)
- 7984 12 **High-resolution damage imaging in flat and bent plate-like structures through warped-basis pursuit** [7984-36]
E. Baravelli, Univ. degli Studi di Bologna (Italy) and Georgia Institute of Technology (United States); L. De Marchi, Univ. degli Studi di Bologna (Italy); M. Ruzzene, Georgia Institute of Technology (United States); N. Speciale, Univ. degli Studi di Bologna (Italy)
- 7984 13 **Zero order mode selective excitation and highly resolved observations of Lamb waves** [7984-37]
A. Abdelrahman, U. Amjad, D. Jha, K. S. Tarar, W. Grill, Univ. Leipzig (Germany)
- 7984 14 **Investigating mode-converted Lamb wave signals induced by a notch on a beam in the frequency domain** [7984-38]
E. J. Kim, Dong-A Univ. (Korea, Republic of); H. Sohn, Korean Advanced Institute of Science and Technology (Korea, Republic of); H. W. Park, Dong-A Univ. (Korea, Republic of)
- 7984 15 **Metamorphosis of bulk waves to Lamb waves in anisotropic piezoelectric crystals** [7984-39]
A. Shelke, The Univ. of Arizona (United States); A. Habib, Univ. Siegen (Germany); U. Amjad, M. Pluta, Univ. Leipzig (Germany); T. Kundu, The Univ. of Arizona (United States); U. Pietsch, Univ. Siegen (Germany); W. Grill, Univ. Leipzig (Germany)
- 7984 16 **Acoustic emission source localization in anisotropic structures with diffuse field conditions using a time reversal approach** [7984-40]
F. Ciampa, M. Meo, Univ. of Bath (United Kingdom)

SESSION 7B BIOLOGICAL AND MEDICAL APPLICATIONS II

- 7984 17 **Study of thinly sectioned melanoma skin tissues with mechanical scanning acoustic reflection microscopy** [7984-41]
B. R. Tittmann, C. Miyaska, The Pennsylvania State Univ. (United States); Y. Tian, E. Maeva, Univ. of Windsor (Canada); D. Shum, Windsor Regional Hospital (Canada)
- 7984 18 **X-ray imaging using K-edge filters** [7984-42]
G. Zentai, Varian Medical Systems, Inc. (United States)
- 7984 19 **Synchronous monitoring of muscle dynamics and electromyogram** [7984-43]
M. Zakir Hossain, W. Grill, Univ. Leipzig (Germany)
- 7984 1A **Adaptive sensor array algorithm for structural health monitoring of helmet** [7984-44]
X. Zou, Y. Tian, N. Wu, K. Sun, X. Wang, Univ. of Massachusetts Lowell (United States)
- 7984 1C **A reliable wireless monitoring network for healthcare applications** [7984-46]
A. Abou-Elhour, A. Safi, A. N. Alaalu, Ajman Univ. of Science & Technology (United Arab Emirates)

SESSION 8 GUIDED WAVES FOR IMPACT MONITORING

- 7984 1E **Validation of the piezoelectric rosette technique for locating impacts in complex aerospace panels** [7984-48]
S. Salamone, Univ. at Buffalo (United States); I. Bartoli, Drexel Univ. (United States); J. Rhymer, F. Lanza di Scalea, H. Kim, Univ. of California, San Diego (United States)
- 7984 1F **Impact force identification in aerospace panels by an inverse ultrasonic guided wave problem** [7984-49]
I. Bartoli, Drexel Univ. (United States); S. Salamone, Univ. at Buffalo (United States); F. Lanza di Scalea, J. Rhymer, H. Kim, Univ. of California, San Diego (United States)
- 7984 1G **Impact localization in an aircraft fuselage using laser based time reversal** [7984-50]
H. Sohn, Korea Advanced Institute of Science and Technology (Korea, Republic of); M. P. DeSimio, S. E. Olson, Univ. of Dayton Research Institute (United States); K. Brown, M. Derriso, Air Force Research Lab. (United States)

Part Two

SESSION 9 VIBRATION-BASED SHM

- 7984 1I **Vibration characteristics of shear loaded post-buckled aluminum panels** [7984-52]
B. Ali, L. Sripragash, M. Sundaresan, North Carolina A&T State Univ. (United States)
- 7984 1J **Vibration-based detection of fatigue cracks in structures** [7984-53]
P. Razi, F. Taheri, Dalhousie Univ. (Canada)
- 7984 1K **Structural health monitoring by high-frequency vibration measurement with non-contact laser excitation** [7984-54]
I. Kajiwara, D. Miyamoto, Hokkaido Univ. (Japan); N. Hosoya, Shibaura Institute of Technology (Japan); C. Nishidome, Hokkaido Univ. (Japan)

SESSION 10A NOVEL DEVICES AND TECHNIQUES

- 7984 1L **Energy harvesting in electroactive materials: a comparison between ferroelectrics and electrostrictive polymers** [7984-55]
D. Guyomar, P.-J. Cottinet, M. Lallart, Institut National des Sciences Appliquées de Lyon(France)
- 7984 1M **Thickness effects in electroactive polymers actuators: a simple explanation and modeling** [7984-56]
K. Yuse, D. Guyomar, M. Kanda, Institut National des Sciences Appliquées de Lyon (France)
- 7984 1N **Improved optical feedback reference tracking for diamagnetically levitating motor system** [7984-57]
W. C. Wang, J. Vu, S. Khanna, Univ. of Washington (United States)
- 7984 1P **Development of a prototype self-configuring building block** [7984-59]
H.-Y. Lin, C.-L. Tsui, Univ. of Washington (United States); W.-J. Wu, National Taiwan Univ. (Taiwan); W.-C. Wang, Univ. of Washington (United States)

SESSION 10B MODELING AND SIMULATION I

- 7984 1Q **Breathing crack localization using bio-inspired combination tone** [7984-60]
G.-W. Kim, Kyungpook National Univ. (Korea, Republic of); D. R. Johnson, F. Semperlotti, K. W. Wang, Univ. of Michigan (United States)
- 7984 1S **Wave propagation and vibration analysis in two-dimensional elastic chiral metacomposite** [7984-62]
G. L. Huang, X. N. Liu, Univ. of Arkansas at Little Rock (United States); M. Reynolds, Univ. of Arkansas at Fort Smith (United States)
- 7984 1T **Introducing a user-friendly MATLAB-based application interface software (AIS) for DPSM modeling: applied to ultrasonic problems** [7984-63]
A. Rivollef, D. Placko, Ecole Normale Supérieure de Cachan (France); T. Kundu, The Univ. of Arizona (United States)

SESSION 11A GUIDED WAVES: MODELING ASPECTS

- 7984 1V **Scattering of the lowest Lamb wave modes by a corrosion pit** [7984-65]
B. W. Strom, Northwestern Univ. (United States); S. Hao, ACII, Inc. (United States); S. Krishnaswamy, J. D. Achenbach, Northwestern Univ. (United States)
- 7984 1W **Advanced DPSM approach for modeling ultrasonic wave scattering in an arbitrary geometry** [7984-66]
S. K. Yadav, The Univ. of Arizona (United States); S. Banerjee, Acellent Technologies, Inc. (United States); T. Kundu, The Univ. of Arizona (United States)
- 7984 1X **Local interaction simulation of guided-wave propagation in composite plates** [7984-67]
K. S. Nadella, C. E. S. Cesnik, Univ. of Michigan (United States)
- 7984 1Y **A parametric study of piezoceramic thickness effect on the generation of fundamental Lamb modes** [7984-68]
R. Mohamed, D. L. Demers, P. Masson, Univ. de Sherbrooke (Canada)
- 7984 1Z **Guided waves filtering with warped curvelets** [7984-69]
L. De Marchi, Univ. degli Studi di Bologna (Italy); E. Baravelli, Univ. degli Studi di Bologna (Italy) and Georgia Institute of Technology (United States); M. Ruzzene, Georgia Institute of Technology (United States); N. Speciale, Univ. degli Studi di Bologna (Italy)

SESSION 11B CIVIL STRUCTURES: WIND TURBINE AND PIPE

- 7984 21 **Probabilistic analysis of mean-response along-wind induced vibrations on wind turbine towers using wireless network data sensors** [7984-71]
A. Velazquez, R. A. Swartz, Michigan Technological Univ. (United States)
- 7984 23 **High temperature monitoring the height of condensed water in steam pipes** [7984-73]
Y. Bar-Cohen, S.-S. Lih, M. Badescu, X. Bao, S. Sherrit, S. Widholm, P. Ostlund, J. Blosiu, Jet Propulsion Lab. (United States)

- 7984 24 **Acoustic emission and guided wave monitoring of fatigue crack growth on a full pipe specimen** [7984-74]
R. M. Meyer, S. Cumblidge, P. Ramuhalli, B. Watson, S. R. Doctor, L. J. Bond, Pacific Northwest National Lab. (United States)
- 7984 25 **Investigating the use of advanced health monitoring systems in oil and gas pipelines infrastructures** [7984-75]
M. Riahi, P. Gholami, Iran Univ. of Science and Technology (Iran, Islamic Republic of)

SESSION 12A SENSOR NETWORK

- 7984 26 **Resource-efficient wireless monitoring based on mobile agent migration** [7984-76]
K. Smarsly, K. H. Law, Stanford Univ. (United States); M. König, Ruhr-Univ. Bochum (Germany)
- 7984 27 **Hierarchical fiber-optic-based sensing system for impact damage monitoring of large-scale CFRP structures** [7984-77]
S. Minakuchi, N. Takeda, H. Tsukamoto, H. Banshoya, The Univ. of Tokyo (Japan)

SESSION 12B SHM WITH FIBER OPTICS

- 7984 29 **Fiberoptic metal detector capable of profile detection** [7984-79]
W.-S. Hua, National Taiwan Univ. (Taiwan); J. R. Hooks, N. A. Erwin, Univ. of Washington (United States); W.-J. Wu, National Taiwan Univ. (Taiwan); W.-C. Wang, Univ. of Washington (United States)
- 7984 2A **Customization and calibration of BOTDR sensors for underground structural health monitoring** [7984-80]
W. L. Sham, Y. Yang, M. Pravin, Nanyang Technological Univ. (Singapore)
- 7984 2B **Fiberoptic microphone using a polymeric cavity** [7984-81]
W.-C. Wang, W. Soetanto, K. Gu, Univ. of Washington (United States)

SESSION 13A CIVIL ENGINEERING APPLICATIONS: CONCRETE AND BUILDING MONITORING

- 7984 2C **Investigation of born approximation applied to non-destructive evaluation of concrete media** [7984-82]
A. Ganguli, C. M. Rappaport, Northeastern Univ. (United States); E. L. Miller, Tufts Univ. (United States); S. Wadia-Fascetti, Northeastern Univ. (United States)
- 7984 2F **Acoustic emission monitor and evaluation method of steel corrosion damage for reinforced concrete** [7984-84]
D. Li, S. Ding, Y. Tao, Dalian Univ. of Technology (China)

SESSION 13B SIGNAL PROCESSING

- 7984 2H **Statistical quantification of the uncertainty in transmissibility feature for structural condition binary classification** [7984-86]
Z. Mao, M. Todd, Univ. of California, San Diego (United States)

- 7984 2I **Characterization of satellite components assembly for responsive space applications** [7984-87]
D. Mascarenas, Los Alamos National Lab. (United States); D. Macknelly, Imperial College London (United Kingdom); J. Mullins, Vanderbilt Univ. (United States); H. Wiest, Rose-Hulman Institute of Technology (United States); G. Park, C. Farrar, Los Alamos National Lab. (United States)
- 7984 2J **Time-frequency and space-wavenumber analysis for damage inspection of thin-walled structures** [7984-88]
P. F. Pai, Univ. of Missouri-Columbia (United States); M. J. Sundaesan, North Carolina A&T State Univ. (United States)
- 7984 2K **Maximum a posteriori probability estimation for localizing damage using ultrasonic guided waves** [7984-89]
E. B. Flynn, M. D. Todd, Univ. of California, San Diego (United States); P. D. Wilcox, B. W. Drinkwater, A. J. Croxford, Univ. of Bristol (United Kingdom)

SESSION 14A CIVIL ENGINEERING APPLICATIONS: BRIDGE MONITORING

- 7984 2L **Fatigue and fracture assessment of cracks in steel elements using acoustic emission** [7984-90]
N. Nematì, Univ. of Miami (United States); B. Metrovich, Case Western Reserve Univ. (United States); A. Nanni, Univ. of Miami (United States)
- 7984 2N **Correlation between damage detection and observed damage for a full-scale four-story steel building during the collapse test** [7984-92]
L. Mei, A. Mita, Keio Univ. (Japan)
- 7984 2P **Moving forces identification based on structure health monitoring for cable-stayed bridge with regularizations** [7984-94]
F. Zhang, H. Li, Harbin Institute of Technology (China)

SESSION 14B MODELING AND SIMULATION II

- 7984 2Q **Application of the multi-scale finite element method to wave propagation problems in damaged structures** [7984-95]
F. Casadei, M. Ruzzene, Georgia Institute of Technology (United States)
- 7984 2R **Lattice dynamics approach to determine the dependence of the time-of-flight of transversal polarized acoustic waves on external stress** [7984-96]
K. S. Tarar, M. Pluta, U. Amjad, W. Grill, Univ. Leipzig (Germany)
- 7984 2S **Porosity estimation using wave propagation based methodology for structural health monitoring of a composite beam** [7984-97]
V. Ajith, S. Gopalakrishnan, Indian Institute of Science (India)

SESSION 15 GUIDED WAVES, MODELING, AND SIGNAL PROCESSING

- 7984 2V **Guided wave interaction with aerospace aluminium stringer feet** [7984-100]
K. Tiplady, B. W. Drinkwater, Univ. of Bristol (United Kingdom); C. Paget, Airbus Operations Ltd. (United Kingdom)
- 7984 2W **Assessing the value of information for long-term structural health monitoring** [7984-101]
M. Pozzi, A. Der Kiureghian, Univ. of California, Berkeley (United States)
- 7984 2X **Lamb wave based detection of damage in a stiffener bonded to a plate** [7984-102]
G. Kolappan Geetha, V. T. Rathod, D. Roy Mahapatra, S. Gopalakrishnan, Indian Institute of Science (India)
- 7984 2Y **Analysis of instantaneous characteristics of guided ultrasonic waves in metallic structures with aluminium repair patches** [7984-103]
S. Pavlopoulou, W. J. Staszewski, C. Soutis, G. Manson, The Univ. of Sheffield (United Kingdom)
- 7984 2Z **CUDA technology for Lamb wave simulations** [7984-104]
T. Bielak, EC Systems (Poland); P. Packo, AGH Univ. of Science and Technology (Poland); A. Spencer, The Univ. of Sheffield (United Kingdom); W. J. Staszewski, The Univ. of Sheffield (United Kingdom) and AGH Univ. of Science and Technology (Poland); T. Uhl, AGH Univ. of Science and Technology (Poland); K. Worden, The Univ. of Sheffield (United Kingdom)
- 7984 30 **Utilization of wavelet analysis for determination of back wall effects in health monitoring of small coupons** [7984-105]
M. Riahi, H. Farahpour, Iran Univ. of Science and Technology (Iran, Islamic Republic of)

POSTER SESSION

- 7984 31 **A no-calorimetric method for measuring SAR in MRI** [7984-106]
R. Romano, F. Acernese, F. Barone, Univ. degli Studi di Salerno (Italy) and Istituto Nazionale di Fisica Nucleare (Italy)
- 7984 32 **MATCAKE: a flexible toolbox for 2D NMR spectra integration by CAKE algorithm** [7984-107]
R. Romano, F. Acernese, S. Vilasi, Univ. degli Studi di Salerno (Italy) and Istituto Nazionale di Fisica Nucleare (Italy); D. Paris, A. Motta, Istituto Nazionale di Ottica Applicata (Italy); F. Barone, Univ. degli Studi di Salerno (Italy) and Istituto Nazionale di Fisica Nucleare (Italy)
- 7984 33 **Intelligent monitoring of seismic damage identification using wireless smart sensors: design and validation** [7984-108]
J. Kim, Korea Railroad Research Institute (Korea, Republic of); Y.-D. Jang, W. Jang, Seoul Metro (Korea, Republic of)

- 7984 34 **Reflective measurement of water concentration using millimeter wave illumination** [7984-109]
S. Sung, D. Bennett, Z. Taylor, N. Bajwa, P. Tewari, A. Maccabi, Univ. of California, Los Angeles (United States); M. Culjat, Univ. of California, Los Angeles (United States) and Ctr. for Advanced Surgical and Interventional Technology (United States); R. Singh, Ctr. for Advanced Surgical and Interventional Technology (United States); W. Grundfest, Univ. of California, Los Angeles (United States) and Ctr. for Advanced Surgical and Interventional Technology (United States)
- 7984 35 **Research progress of microbial corrosion of reinforced concrete structure** [7984-112]
S. Li, Zhengzhou Univ. (China); D. Li, Shenzhen Univ. (China); N. Jiang, D. Wang, Zhengzhou Univ. (China)
- 7984 36 **Microorganism index, physical, and chemical property of silt around pier in the typical area of yellow river** [7984-113]
S. Li, Zhengzhou Univ. (China); D. Li, Shenzhen Univ. (China); N. Jiang, Y. Lu, D. Wang, Zhengzhou Univ. (China)

Author Index

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Jennifer E. Michaels, Georgia Institute of Technology (United States)

Won-Bae Na, Pukyong National University (Korea, Republic of)

Christopher Niezrecki, University of Massachusetts Lowell (United States)

Perngjin F. Pai, University of Missouri-Columbia (United States)
Paul D. Panetta, Applied Research Associates, Inc. (United States)
Dominique Placko, École Normale Supérieure de Cachan (France)
Henrique L. Reis, University of Illinois at Urbana-Champaign (United States)
Hoon Sohn, Korea Advanced Institute of Science and Technology (Korea, Republic of)
Nobuo Takeda, The University of Tokyo (Japan)
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Wei-Chih Wang, University of Washington (United States)
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George Zentai, Varian Medical Systems, Inc. (United States)

Session Chairs

- 1 Guided Waves in Complex Structures
Tribikram Kundu, The University of Arizona (United States)
Wolfgang Grill, Universität Leipzig (Germany)
- 2 Guided Waves in Composites
Hoon Sohn, Korea Advanced Institute of Science and Technology (Korea, Republic of)
Francesco Lanza di Scalea, University of California, San Diego (United States)
- 3 Guided Waves for Large Structure Monitoring: Pipe, Rail, Ship, etc.
Francesco Lanza di Scalea, University of California, San Diego (United States)
Hoon Sohn, Korea Advanced Institute of Science and Technology (Korea, Republic of)
- 4 Guided Waves with Distributed Sensors I
Hoon Sohn, Korea Advanced Institute of Science and Technology (Korea, Republic of)
Francesco Lanza di Scalea, University of California, San Diego (United States)
- 5 Nonlinear Acoustics for SHM
Sridhar Krishnaswamy, Northwestern University (United States)
Andrei N. Zagrai, New Mexico Institute of Mining and Technology (United States)
- 6a Guided Waves with Distributed Sensors II
Paul D. Wilcox, University of Bristol (United Kingdom)
Paul Fromme, University College London (United Kingdom)

- 6b Biological and Medical Applications I
Wolfgang Grill, Universität Leipzig (Germany)
George Zentai, Varian Medical Systems, Inc. (United States)
- 7a Guided Waves: Novel Applications and Damage Detection
Anthony J. Croxford, University of Bristol (United Kingdom)
Guoliang Huang, University of Arkansas at Little Rock (United States)
- 7b Biological and Medical Applications II
George Zentai, Varian Medical Systems, Inc. (United States)
Paul D. Panetta, Applied Research Associates, Inc. (United States)
- 8 Guided Waves for Impact Monitoring
Francesco Lanza di Scalea, University of California, San Diego
(United States)
Hoon Sohn, Korea Advanced Institute of Science and Technology
(Korea, Republic of)
- 9 Vibration-Based SHM
George Zentai, Varian Medical Systems, Inc. (United States)
Shawn Beard, Acellent Technologies, Inc. (United States)
- 10a Novel Devices and Techniques
Paul D. Panetta, Applied Research Associates, Inc. (United States)
Michael D. Todd, University of California, San Diego (United States)
- 10b Modeling and Simulation I
Jerome P. Lynch, University of Michigan (United States)
Won-Bae Na, Pukyong National University (Korea, Republic of)
- 11a Guided Waves: Modeling Aspects
Jennifer E. Michaels, Georgia Institute of Technology (United States)
Paul D. Wilcox, University of Bristol (United Kingdom)
- 11b Civil Structures: Wind Turbine and Pipe
Won-Bae Na, Pukyong National University (Korea, Republic of)
Christopher Niezrecki, University of Massachusetts Lowell
(United States)
- 12a Sensor Network
Victor Giurgiutiu, University of South Carolina (United States)
Daniel R. Osmont, ONERA (France)
- 12b SHM with Fiber Optics
Paul Fromme, University College London (United Kingdom)

- 13a Civil Engineering Applications: Concrete and Building Monitoring
Andrei N. Zagrai, New Mexico Institute of Mining and Technology (United States)
Pengjin F. Pai, University of Missouri-Columbia (United States)
- 13b Signal Processing
Paul Fromme, University College London (United Kingdom)
Wolfgang Grill, Universität Leipzig (Germany)
- 14a Civil Engineering Applications: Bridge Monitoring
Won-Bae Na, Pukyong National University (Korea, Republic of)
Anthony J. Croxford, University of Bristol (United Kingdom)
- 14b Modeling and Simulation II
Paul D. Panetta, Applied Research Associates, Inc. (United States)
Pengjin F. Pai, University of Missouri-Columbia (United States)
- 15 Guided Waves, Modeling, and Signal Processing
Guoliang Huang, University of Arkansas at Little Rock (United States)
Daniel R. Osmont, ONERA (France)

Introduction

In the year 2001 the SPIE conference 4335 on health monitoring of structural and biological systems brought engineers, materials scientists, medical doctors, and biologists together to exchange their ideas on this important issue. After having a positive experience at that conference, yearly conferences were organized on the same topic and the next one has been planned for the year 2012. Proceedings volume 7984 contains papers presented at the 2011 conference. Papers presented in the earlier conferences can be found in Proceedings volume 4335 for 2001 papers, vol. 4702 for 2002, vol. 5047 for 2003, vol. 5394 for 2004, vol. 5768 for 2005, vol. 6177 for 2006, vol. 6532 for 2007, vol. 6935 for 2008, vol. 7295 for 2009, and vol. 7650 for 2010 papers.

The emphasis of this conference is to recognize that sensing by nondestructive evaluation, sensor array design, signal acquisition and transmission, signal processing, energy harvesting, etc., are integral parts of health monitoring for both structural and biological systems. I believe that biological and physical science communities are learning from each other by coming to this conference and exchanging ideas. Some of the recent advances in the science and technology of health monitoring techniques that go beyond the traditional nondestructive testing for internal flaw detection are presented in these proceedings. New diagnosis, prognosis and rehabilitation techniques applied to engineering structures made of metal, concrete, and composites, as well as biological systems, are presented. The papers published here cover a wide range of technologies. It is hoped that this conference will stimulate further interactions between physical and life science community resulting in newer development of more innovative techniques for health monitoring applications.

I am thankful to the conference cochair, program committee members, authors, session chairs, and the SPIE staff for putting together this excellent conference.

Tribikram Kundu

