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Tribikram Kundu

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The CID number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages. Numbers in the index correspond to the last two digits of the six-digit CID number.

Contents

xi	<i>Symposium Committee</i>
xiii	<i>Conference Committee</i>
xvii	<i>Introduction</i>

SESSION 1 SHM FOR AEROSPACE APPLICATIONS I

- 6935 03 **Detection of impact damage on thermal protection systems using thin-film piezoelectric sensors for integrated structural health monitoring** [6935-02]
J. K. Na, S. J. Kuhr, Univ. of Dayton Research Institute (USA); K. V. Jata, Air Force Research Lab. (USA)
- 6935 04 **Detection of disbonds in a honeycomb composite structure using guided waves** [6935-03]
H. Baid, Univ. of California, Los Angeles (USA); S. Banerjee, Saint Louis Univ. (USA); S. Joshi, Nextgen Aeronautics (USA); A. Mal, Univ. of California, Los Angeles (USA)
- 6935 05 **Embedded nonlinear ultrasonics for structural health monitoring of satellite joints** [6935-04]
A. Zagrai, New Mexico Institute of Mining and Technology (USA); D. Doyle, New Mexico Institute of Mining and Technology (USA) and Air Force Research Lab. (USA); B. Arritt, Air Force Research Lab. (USA)

SESSION 2 GUIDED WAVES FOR SHM I

- 6935 06 **Sensing and actuation of smart chiral honeycombs** [6935-06]
H. Abramovitch, Technion (Israel); M. Burgard, Fraunhofer FhG-IPA (Germany);
L. Edery-Azulay, Technion (Israel); K. E. Evans, Univ. of Exeter (United Kingdom);
M. Hoffmeister, Fraunhofer FhG-IPA (Germany); W. Miller, Univ. of Exeter (United Kingdom);
F. Scarpa, Univ. of Bristol (United Kingdom); C. W. Smith, Univ. of Exeter (United Kingdom);
K. F. Tee, Univ. of Bristol (United Kingdom); A. Schönecker, L. Seffner, Fraunhofer FhG-IKTS (Germany)
- 6935 07 **Recent advances on pipe inspection using guided waves generated by electromagnetic acoustic transducers** [6935-07]
M. Vasiljevic, T. Kundu, Univ. of Arizona (USA); W. Grill, E. Twerdowski, Univ. of Leipzig (Germany)
- 6935 08 **Passive-only wave-based structural health monitoring from ambient noise** [6935-08]
K. G. Sabra, A. Duroux, Georgia Institute of Technology (USA); A. Srivastava, F. Lanza di Scalea, I. Bartoli, Univ. of California, San Diego (USA)
- 6935 09 **Instantaneous crack detection using dual PZT transducers** [6935-09]
S. B. Kim, Carnegie Mellon Univ. (USA); H. Sohn, Korea Advanced Institute of Science and Technology (South Korea)

- 6935 0A **Ultrasonic wireless health monitoring system for near real-time damage identification of structural components** [6935-10]
S. Banerjee, K. Mitchell, B. Sholy, Saint Louis Univ. (USA)

SESSION 3 GUIDED WAVES FOR SHM II

- 6935 0B **Design and characterization of the CLoVER transducer for structural health monitoring** [6935-11]
K. I. Salas, C. E. S. Cesnik, Univ. of Michigan (USA)
- 6935 0C **Lamb wave propagation in negative Poisson's ratio composites** [6935-12]
C. Remillat, P. Wilcox, F. Scarpa, Univ. of Bristol (United Kingdom)
- 6935 0D **Structural health monitoring of aerospace applications with restricted geometry** [6935-13]
R. T. Underwood, E. D. Swenson, S. R. Soni, Air Force Institute of Technology (USA)
- 6935 0E **Guided wave SHM with a distributed sensor network** [6935-14]
A. J. Croxford, P. D. Wilcox, B. W. Drinkwater, Univ. of Bristol (United Kingdom)
- 6935 0G **Guided elastic waves and their impact interaction in CFRP structures characterized by 3D laser scanning vibrometry** [6935-16]
L. Schubert, M. Barth, T. Klesse, B. Köhler, B. Frankenstein, Fraunhofer Institute for Non-Destructive Testing (Germany)
- 6935 0H **Quantification of environmental compensation strategies for guided wave structural health monitoring** [6935-17]
A. J. Croxford, P. D. Wilcox, Univ. of Bristol (United Kingdom); Y. Lu, J. Michaels, Georgia Institute of Technology (USA); B. W. Drinkwater, Univ. of Bristol (United Kingdom)
- 6935 0I **Wireless structural health monitoring for critical members of civil infrastructures using piezoelectric active sensors** [6935-82]
S. Park, C.-B. Yun, Korea Advanced Institute of Science and Technology (South Korea); D. J. Inman, Virginia Polytechnic Institute and State Univ. (USA); G. Park, Los Alamos National Lab. (USA)

SESSION 4 SHM FOR AEROSPACE APPLICATIONS II

- 6935 0J **Damage diagnostics of metallic structures using magneto-mechanical impedance technique** [6935-18]
A. Zagrai, H. Çakan, New Mexico Institute of Mining and Technology (USA)
- 6935 0K **Modeling of elastic wave scattering by a hole in a half-space** [6935-19]
S. Das, S. Banerjee, T. Kundu, Univ. of Arizona (USA)

SESSION 5 NONLINEAR METHODS FOR DAMAGE DETECTION AND SHM

- 6935 0M **Active ultrasonic joint integrity adjudication for real-time structural health monitoring** [6935-21]
E. H. Clayton, Quartus Engineering Inc. (USA); M. B. Kennel, T. R. Fasel, M. D. Todd, Univ. of California, San Diego (USA); M. C. Stabb, Quartus Engineering Inc. (USA); B. J. Arritt, Air Force Research Lab. (USA)
- 6935 0N **Nonlinearity detection in multiple-degree-of-freedom systems using the auto-bispectral density** [6935-22]
J. M. Nichols, Naval Research Lab. (USA); P. Marzocca, A. Milanese, Clarkson Univ. (USA)
- 6935 0O **The analytical trispectrum for multiple-degree-of-freedom systems possessing cubic nonlinearity** [6935-23]
J. M. Nichols, Naval Research Lab. (USA); A. Milanese, P. Marzocca, Clarkson Univ. (USA)
- 6935 0P **Implementation of nonlinear acoustic techniques for crack detection in a slender beam specimen** [6935-24]
M. Haroon, D. E. Adams, Purdue Univ. (USA)
- 6935 0Q **Damage detection in structures through nonlinear excitation and system identification** [6935-25]
M. R. Hajj, G. G. Bordonaro, A. H. Nayfeh, J. C. Duke, Virginia Tech (USA)

SESSION 6 NEXT-GENERATION SENSING AND ALGORITHMIC TECHNOLOGIES FOR SHM

- 6935 0S **Wave propagation models for quantitative defect detection by ultrasonic methods** [6935-27]
A. Srivastava, I. Bartoli, S. Coccia, F. Lanza di Scalea, Univ. of California, San Diego (USA)
- 6935 0T **Decentralized wireless structural sensing and control with multiple system architectures operating at different sampling frequencies** [6935-28]
Y. Wang, Georgia Institute of Technology (USA); R. A. Swartz, A. Zimmerman, Univ. of Michigan (USA); A. C. Askin, Stanford Univ. (USA); J. P. Lynch, Univ. of Michigan (USA); K. H. Law, Stanford Univ. (USA); K.-C. Lu, C.-H. Loh, National Taiwan Univ. (Taiwan)
- 6935 0U **Passive and active corrosion sensing for metals using magnetic sensors** [6935-29]
J. S. Popovics, G. E. Gallo, M. Johnson, P. L. Chapman, Univ. of Illinois, Urbana-Champaign (USA)

SESSION 7 SIGNAL PROCESSING AND NDE FOR SHM

- 6935 0W **Health monitoring of plate structures using guided waves** [6935-31]
P. Fromme, Univ. College London (United Kingdom)
- 6935 0X **Defect characterization using ultrasonic arrays** [6935-32]
P. D. Wilcox, J. Zhang, B. W. Drinkwater, Univ. of Bristol (United Kingdom)

- 6935 0Y **Experimental verification of a Kalman filter approach for estimating the size of fastener hole fatigue cracks** [6935-33]
A. C. Cobb, J. E. Michaels, T. E. Michaels, Georgia Institute of Technology (USA)
- 6935 0Z **An autofocus algorithm for flexible ultrasonic arrays based on maximisation of image contrast** [6935-34]
A. J. Hunter, B. W. Drinkwater, P. D. Wilcox, Univ. of Bristol (United Kingdom)
- 6935 10 **Effectiveness of in situ damage localization methods using sparse ultrasonic sensor arrays** [6935-35]
J. E. Michaels, Georgia Institute of Technology (USA)
- 6935 11 **A nonlinear acoustic technique for crack detection in metallic structures** [6935-37]
D. Dutta, Carnegie Mellon Univ. (USA); H. Sohn, Korea Advanced Institute of Science and Technology (South Korea); K. Harries, P. Rizzo, Univ. of Pittsburgh (USA)
- 6935 12 **Mapping some functions and four arithmetic operations to multilayer feedforward neural networks** [6935-83]
J.-S. Pei, E. C. Mai, Univ. of Oklahoma (USA); J. P. Wright, Weidlinger Associates Inc. (USA)

SESSION 8 SHM FOR AEROSPACE APPLICATIONS III

- 6935 13 **Structural health monitoring: an enabler for responsive satellites** [6935-38]
B. J. Arritt, L. M. Robertson, B. K. Henderson, Air Force Research Lab. (USA); L. Ouyang, S. Beard, Acellent Technologies Inc. (USA); E. Clayton, Quartus Engineering Inc. (USA); M. D. Todd, Univ. of California, San Diego (USA); D. Doyle, A. Zagrai, New Mexico Institute of Mining and Technology (USA); S. J. Buckley, J. M. Ganley, J. S. Welsh, Air Force Research Lab. (USA)
- 6935 14 **Evaluation of bonded piezoelectric AE sensor for structural health monitoring** [6935-39]
M. Jacques, P. Desci, F. Salih, M. Sundaresan, North Carolina A&T State Univ. (USA)

SESSION 9 MODELING FOR SHM APPLICATIONS I

- 6935 16 **Structural health monitoring and nondestructive evaluation of double wall structures** [6935-41]
M. Bezdek, K. Joseph, M. Guers, B. R. Tittmann, The Pennsylvania State Univ. (USA)
- 6935 17 **Effect of transducer boundary conditions on the generated ultrasonic field** [6935-42]
T. Yanagita, Univ. of Arizona (USA); D. Placko, Ecole Normale Supérieure (France); T. Kundu, Univ. of Arizona (USA)
- 6935 18 **Finite element simulation of two points source method: its use for damage detection in concrete structures** [6935-43]
J. Lee, D.-S. Hong, W.-B. Na, J.-T. Kim, Pukyong National Univ. (South Korea)
- 6935 19 **A differential method for the determination of the time-of-flight for ultrasound under pulsed wide band excitation including chirped signals** [6935-44]
K. S. Tarar, R. Meier, E. Twerdowski, R. Wannemacher, W. Grill, Univ. of Leipzig (Germany)

SESSION 10 NOVEL INSTRUMENTATION AND SENSING FOR SHM I

- 6935 1B **An offset multilayered optic sensor for shear and pressure measurement** [6935-77]
C.-S. Liu, G.-W. Chou, National Defense Univ. (Taiwan); Y.-L. Lyu, Southern Taiwan Univ. of Technology (Taiwan); P. G. Reinhall, Univ. of Washington (USA); W.-C. Wang, Univ. of Washington (USA) and Southern Taiwan Univ. of Technology (Taiwan)
- 6935 1C **Determination of the velocity of sound with high resolution by ultrasonic imaging of wedge shaped objects in transmission with vector contrast** [6935-47]
U. Amjad, J. Ndop, E. Twerdowski, W. Grill, Univ. of Leipzig (Germany)
- 6935 1D **Enhanced image capabilities for industrial radiography applications using megavoltage x-ray sources and digital flat panels** [6935-48]
J. E. Clayton, G. Virshup, Varian Medical Systems, Inc. (USA); A. Davis, HYTEC Inc. (USA)
- 6935 1E **Optical viscosity sensor using bend loss of fiber** [6935-49]
C.-L. Chang, A. Perez, R. Kuver, P. Reinhall, W.-C. Wang, Univ. of Washington (USA)
- 6935 1F **Stand-off detection of mixed radiation fields** [6935-50]
G. C. Giakos, Univ. of Akron (USA)

SESSION 11 SHM FOR CIVIL INFRASTRUCTURE APPLICATIONS

- 6935 1G **Acoustic emission monitoring of externally bonded FRP-reinforced concrete** [6935-51]
S. Degala, P. Rizzo, K. Ramanathan, K. A. Harries, Univ. of Pittsburgh (USA)
- 6935 1H **Wireless ultrasonic guided wave tomography for corrosion monitoring** [6935-52]
J. P. Koduru, L. Breon, Pennsylvania State Univ. (USA); R. Royer, FBS Inc. (USA); J. L. Rose, Pennsylvania State Univ. (USA)
- 6935 1I **Hybrid vibration-impedance approaches for damage detection in plate-girder bridges** [6935-53]
D.-S. Hong, H.-S. Do, J.-T. Kim, W.-B. Na, H.-M. Cho, Pukyong National Univ. (South Korea)
- 6935 1J **Measurement of modal amplitudes of guided waves in rails** [6935-54]
P. W. Loveday, CSIR Material Science and Manufacturing (South Africa)
- 6935 1K **Damage detection in concrete and cementitious composites** [6935-55]
H.-C. Wu, Wayne State Univ. (USA); P. F. Pai, Univ. of Missouri, Columbia (USA)
- 6935 1L **Introduction of structural health and safety monitoring warning systems for Shenzhen-Hong Kong Western Corridor Shenzhen Bay Bridge** [6935-56]
N. Li, X. Y. Zhang, X. T. Zhou, J. Leng, Z. Liang, C. Zheng, X. F. Sun, China Highway Planning and Design Institute Consultants, Inc. (China)
- 6935 1M **Local health monitoring of Sifangtai Bridge using fiber Bragg grating sensors** [6935-57]
X. Zhao, Dalian Univ. of Technology (China); J. Ou, Dalian Univ. of Technology (China) and Harbin Institute of Technology (China)

SESSION 12 SIGNAL PROCESSING FOR SHM

- 6935 1N **Optimized guided wave excitations for health monitoring of a bolted joint** [6935-59]
T. R. Fasel, C. C. Olson, M. D. Todd, Univ. of California, San Diego (USA)
- 6935 1O **Experimental validation of a soft identification algorithm for a MDOF frame structure**
[6935-60]
B. Xu, Hunan Univ. (China) and Univ. of Houston (USA); P. Lu, Hunan Univ. (China); G. Song,
Univ. of Houston (USA)

SESSION 13 MODELING FOR SHM APPLICATIONS II

- 6935 1P **Integrated structural health monitoring for composites using proper orthogonal decomposition based model filter** [6935-61]
C. Shane, R. Jha, Clarkson Univ. (USA)
- 6935 1Q **Damage quantification using attenuation based signal processing for health monitoring in carbon fiber composites** [6935-62]
W. Reynolds, A. Chattopadhyay, Arizona State Univ. (USA)
- 6935 1R **Passive damage detection in composite laminates with integrated sensing networks**
[6935-63]
Y. Huang, F. Ghezzi, P. Rye, S. Nemat-Nasser, Univ. of California, San Diego (USA)
- 6935 1S **Structural damage detection and estimation by amplitude and frequency modulation analysis** [6935-64]
P. F. Pai, Univ. of Missouri, Columbia (USA)
- 6935 1T **A Dempster-Shafer evidence theory-based approach for online structural health monitoring** [6935-65]
Y. Bao, H. Li, Harbin Institute of Technology (China); J. Ou, Harbin Institute of Technology (China) and Dalian Univ. of Technology (China)

SESSION 14 NOVEL INSTRUMENTATION AND SENSING FOR SHM II

- 6935 1U **Comparative evaluation of ultrasonic lenses and electric point contacts for acoustic flux imaging in piezoelectric single crystals** [6935-66]
E. Twerdowski, Univ. of Leipzig (Germany); M. Pluta, Wroclaw Univ. of Technology (Poland);
R. Wannemacher, W. Grill, Univ. of Leipzig (Germany)
- 6935 1V **Development of a polymeric magnetostrictive fiber-optic sensor system** [6935-46]
W.-C. Wang, Univ. of Washington (USA); W.-S. Hua, National Taiwan Univ. (Taiwan); W.-H. Lin,
Southern Taiwan Univ. of Technology (Taiwan); W.-J. Wu, National Taiwan Univ. (Taiwan)
- 6935 1W **Evaluation of coupled piezoelectric and electromagnetic technique for vibration energy harvesting** [6935-68]
V. R. Challa, M. G. Prasad, F. T. Fisher, Stevens Institute of Technology (USA)

- 6935 1X **Effects of solvent vapor pressure and spin-coating speed on morphology of thin polymer blend films** [6935-70]
A. E. Kamanyi, Univ. of Leipzig (Germany); W. Ngwa, W. Luo, Univ. of Central Florida (USA); W. Grill, Univ. of Leipzig (Germany)

SESSION 15 BIOLOGICAL AND MEDICAL APPLICATIONS

- 6935 1Y **High-energy (MeV) x-ray imaging with a mercuric iodide imager** [6935-71]
G. Zentai, L. Partain, Varian Medical Systems (USA)
- 6935 1Z **Determination of mechanical properties of layered materials with vector-contrast scanning acoustic microscopy by polar diagram image representation** [6935-72]
E. T. Ahmed Mohamed, A. Kamanyi, M. von Buttlar, R. Wannemacher, K. Hillman, Univ. of Leipzig (Germany); W. Ngwa, Univ. of Central Florida (USA); W. Grill, Univ. of Leipzig (Germany)
- 6935 22 **Advanced shape tracking to improve flexible endoscopic diagnostics** [6935-75]
C. G. L. Cao, P. Y. Wong, Tufts Univ. (USA); L. Lilge, Univ. of Toronto (Canada); R. M. Gavalis, H. Xing, N. Zamarripa, Tufts Univ. (USA)
- 6935 23 **High speed ultrasound monitoring in the field of sports biomechanics** [6935-76]
M. Zakir Hossain, Univ. of Leipzig (Germany) and Bangladesh Sports Education Institute (Bangladesh); E. Twerdowski, W. Grill, Univ. of Leipzig (Germany)
- 6935 24 **Optical viscosity sensor based on the partially immersed fiber vibrations** [6935-67]
A. I. Fedorchenko, National Taiwan Univ. (Taiwan) and S.S. Kutateladze Institute of Thermophysics (Russia); I. Stachiv, National Taiwan Univ. (Taiwan); J. Ho, Univ. of Washington (USA); A.-B. Wang, National Taiwan Univ. (Taiwan); W.-C. Wang, Univ. of Washington (USA) and S.S. Kutateladze Institute of Thermophysics (Russia)

POSTER SESSION

- 6935 25 **Photonic sensor for nondestructive testing applications** [6935-69]
A.-D. Nguyen, Los Gatos Research, Inc. (USA)
- 6935 26 **A new method for SAR measurement in MRI** [6935-78]
R. Romano, Univ. degli Studi di Salerno (Italy); F. Acernese, INFN Sezione di Napoli (Italy); P. L. Indovina, Univ. degli Studi di Napoli Federico II (Italy); F. Barone, Univ. degli Studi di Salerno (Italy) and INFN Sezione di Napoli (Italy)
- 6935 2A **Uniform circular array for structural health monitoring of composite structures** [6935-85]
T. Stepinski, M. Engholm, Uppsala Univ. (Sweden)
- 6935 2B **Remote personal health monitoring with radio waves** [6935-86]
A. Nguyen, Univ. of California, Irvine (USA)

Author Index

Symposium Committee

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Session Chairs

- 1 SHM for Aerospace Applications I
Tribikram Kundu, The University of Arizona (USA)
Wolfgang Grill, Universität Leipzig (Germany)

- 2 Guided Waves for SHM I
Francesco Lanza di Scalea, University of California, San Diego (USA)
Hoon Sohn, Carnegie Mellon University (USA)
- 3 Guided Waves for SHM II
Hoon Sohn, Carnegie Mellon University (USA)
Francesco Lanza di Scalea, University of California, San Diego (USA)
- 4 SHM for Aerospace Applications II
Lingyu Yu, University of South Carolina (USA)
Jeong K. Na, University of Dayton Research Institute (USA)
- 5 Nonlinear Methods for Damage Detection and SHM
Muhammad Haroon, Purdue University (USA)
Jonathan Nichols, Naval Research Laboratory (USA)
- 6 Next-Generation Sensing and Algorithmic Technologies for SHM
Jerome P. Lynch, University of Michigan (USA)
Jennifer E. Michaels, Georgia Institute of Technology (USA)
- 7 Signal Processing and NDE for SHM
Jennifer E. Michaels, Georgia Institute of Technology (USA)
Jerome P. Lynch, University of Michigan (USA)
- 8 SHM for Aerospace Applications III
Jeong K. Na, University of Dayton Research Institute (USA)
- 9 Modeling for SHM Applications I
Sridhar Krishnaswamy, Northwestern University (USA)
Paul Wilcox, University of Bristol (UK)
- 10 Novel Instrumentation and Sensing for SHM I
Wolfgang Grill, Universität Leipzig (Germany)
Paul D. Panetta, Luna Innovations Inc. (USA)
- 11 SHM for Civil Infrastructure Applications
Hwai-Chung Wu, Wayne State University (USA)
Perngjin F. Pai, University of Missouri, Columbia (USA)
- 12 Signal Processing for SHM
Andrei N. Zagrai, New Mexico Institute of Mining and Technology (USA)
- 13 Modeling for SHM Applications II
Won-Bae Na, Pukyong National University (South Korea)
George Zentai, Varian Medical Systems, Inc. (USA)

- 14 Novel Instrumentation and Sensing for SHM II
George Zentai, Varian Medical Systems, Inc. (USA)
Olivier Giraud, ONERA (France)
- 15 Biological and Medical Applications
Wei-Chih Wang, University of Washington (USA)
Paul D. Panetta, Luna Innovations Inc. (USA)

Introduction

In the year 2001, the SPIE conference 4335 on Health Monitoring of Structural and Biological Systems brought together engineers, materials scientists, medical doctors, and biologists to exchange their ideas on this important issue. After the success of that conference, the yearly conferences—4702 in 2002, 5047 in 2003, 5394 in 2004, 5768 in 2005, 6177 in 2006, 6532 in 2007, and 6935 in 2008—followed, and the next one is being planned for the year 2009. Proceedings of SPIE volume 6535 contains papers presented at the 2008 conference.

The emphasis of this conference is to recognize that nondestructive evaluation is an integral part of health monitoring of both structural and biological systems. It is my hope that the 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 imaging of internal defects 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 the physical and life science communities, resulting in additional development of innovative techniques for health monitoring applications.

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

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