

# **Fourteenth International Congress on Sound and Vibration 2007**

**(ICSV14)**

**Cairns, Australia  
9-12 July 2007**

**Volume 1 of 5**

**ISBN: 978-1-62748-000-0**

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2007) by the Australian Acoustical Society  
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the Australian Acoustical Society  
at the address below.

Australian Acoustical Society  
P. O. Box 2183  
Magill North S.A. 5072  
Australia

Phone: (08) 7225 0112  
Fax: (08) 7225 0112

[GeneralSecretary@acoustics.asn.au](mailto:GeneralSecretary@acoustics.asn.au)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2634  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

# TABLE OF CONTENTS

## VOLUME 1

<b>ACTIVE NOISE CONTROL WITH A VIRTUAL ACOUSTIC SENSOR IN A PURE-TONE DIFFUSE SOUND FIELD</b> .....	1
<i>Danielle J. Moreau, Justin Ghan, Ben S. Cazzolato, Anthony C. Zander</i>	
<b>A RECENT INVESTIGATION INTO THE INFLUENCES OF SOME AUSTRALIAN ASPHALT PAVEMENT SURFACES ON ROAD TRAFFIC NOISE</b> .....	9
<i>Stephen Samuels, Jeff Parnell</i>	
<b>ENERGY CONSUMPTION AND MACHINERY VIBRATIONS</b> .....	17
<i>A. Elkhatab</i>	
<b>DIESEL ENGINE FAULT DIAGNOSIS BASED ON VIBRATION MONITORING AND ARTIFICIAL NEURAL NETWORK</b> .....	23
<i>Jianyuan Zhu</i>	
<b>AREAS OF HIGH ACOUSTIC QUALITY: SOUNDSCAPE PLANNING</b> .....	31
<i>A. L. Brown</i>	
<b>3D NUMERICAL SIMULATIONS OF ACOUSTIC INSTALLATION EFFECTS ON AFT FAN NOISE FOR TURBOFAN ENGINE</b> .....	38
<i>Stéphane Redonnet, Guillaume Desquesnes, Eric Manoha</i>	
<b>THE DIRECTIVITY OF THE FORCED RADIATION OF SOUND FROM PANELS AND OPENINGS</b> .....	45
<i>John Laurence Davy, Thomas Kannanaikkel John</i>	
<b>IN-CAR SPEECH ENHANCEMENT USING ENSEMBLE EMPIRICAL MODE DECOMPOSITION</b> .....	53
<i>Jiafang Zhang, Hai Huang, Xiangxian Chen</i>	
<b>RESPONSE AND PREDICTION OF DYNAMIC CHARACTERISTICS OF WORN RAIL PADS UNDER STATIC PRELOADS</b> .....	61
<i>Sakdirat Kaewunruen, Alex M. Remennikov</i>	
<b>SIMULATING SHOCK LOADS IN RAILWAY TRACK ENVIRONMENTS: EXPERIMENTAL STUDIES</b> .....	69
<i>Alex M. Remennikov, Sakdirat Kaewunruen</i>	
<b>THEORETICAL AND EXPERIMENTAL RESULTS OF THE TRANSMISSION LOSS OF A PLATE WITH DISCRETE MASSES ATTACHED</b> .....	77
<i>Carl Howard</i>	
<b>ACTIVE CONTROL FOR VIBROPROTECTION OF OPERATORS OF TECHNOLOGICAL MACHINES</b> .....	85
<i>L. A. Rybak, A. V. Chichvarin, Y.A. Shatokhin</i>	
<b>IDENTIFYING CHAOTIC DYNAMICS IN A FLYING VIBRATORY SYSTEM</b> .....	93
<i>Jin-Wei Liang, Shy-Leh Chen, Ching-Ming Yen</i>	
<b>A METHOD OF MEASURING THE AXIAL ELASTIC MODULUS OF A SANDWICH CYLINDER BASED ON MODAL TESTING</b> .....	101
<i>Li Ping, Su Shenjian, Zuo Jianli</i>	
<b>EFFECTS OF TEMPORARILY LIMITED NOISE CALMING PERIODS DURING SLEEP</b> .....	109
<i>Barbara Griefahn, Anke Marks, Sibylle Robens</i>	
<b>UNDERWATER ACOUSTIC PROPAGATION MODEL TO SIMULATE SEISMIC OCEANOGRAPHY EXPERIMENTS</b> .....	117
<i>Jean Kormann, Pedro Cobo, Carlos Ranz</i>	
<b>UNDERWATER NOISE IMPACT OF OFFSHORE WIND FARMS DURING CONSTRUCTION AND OPERATION PHASES</b> .....	125
<i>Pedro Cobo, Jean Kormann, Carlos Ranz</i>	
<b>PARTICLE DAMPING FOR VIBRATION AND NOISE REDUCTION</b> .....	133
<i>Zhiwei Xu, Michael Yu Wang, Tianning Chen</i>	
<b>LIMIT-CYCLE OSCILLATION OF SHAPE MEMORY ALLOY HYBRID COMPOSITE PLATES AT ELEVATED TEMPERATURES</b> .....	140
<i>Hesham Hamed Ibrahim, Mohammad Tawfik, Hani Mohammed Negr</i>	
<b>INVESTIGATE THE NOISE PROBLEMS OF BALL SCREWS WITH AND WITHOUT CAGE</b> .....	148
<i>Jhy-Hong Wang, Bor-Shen Shu</i>	
<b>MODELING OF THE SOUND TRANSMISSION LOSS OF LEAKS AND OPENINGS</b> .....	156
<i>Franck Sgard, Hugues Nelisse, Noureddine Atalla</i>	
<b>ACOUSTICS IN LARGE ATRIUM SPACES</b> .....	164
<i>Jian Kang, Pau Ling Yap, Yan Meng, Bing Chen</i>	

<b>POWERED SEAT ADJUSTER NOISE CHARACTERISTICS AND ITS PSYCHOACOUSTICS ASSESSMENT</b> .....	172
<i>Xu Wang, Aleksandar Subic, Jason Miller</i>	
<b>A NUMERICAL STUDY OF SOUND-STRUCTURE INTERACTION IN A DUCT STRUCTURE BY THE ACOUSTICAL WAVE PROPAGATOR METHOD</b> .....	180
<i>Shuzhi Peng, Li Cheng</i>	
<b>FINITE PERIODIC STRUCTURE OF BEAM FOR LOW FREQUENCY STRUCTURE-BORNE SOUND ATTENUATION</b> .....	188
<i>Yi Yun, C. M. Mak</i>	
<b>AN ACTUATOR FAULT DETECTION CONCEPT FOR ACTIVE VIBRATION CONTROL OF A HEAVY METRO VEHICLE</b> .....	195
<i>Christian Benatzky, Martin Kozek</i>	
<b>VIBRATIONS OF MULTI-SPAN BRIDGES UNDER MOVING LOADS</b> .....	203
<i>Hongan Xu, Wen L. Li</i>	
<b>DETECTION OF INCIPIENT BEARING FAULTS IN GAS TURBINE ENGINES</b> .....	213
<i>Michael J. Roemer, Carl S. Byington, Jeremy Sheldon</i>	
<b>INFLUENCE OF A RECTANGULAR PLATE INHOMOGENEITY ON NATURAL FREQUENCIES OF A CLAMPED RECTANGULAR PLATE</b> .....	221
<i>Valeri Lenchine</i>	
<b>USE OF SCATTERING OF ULTRASOUND PULSES AND SHOCK WAVES BY KIDNEY STONES FOR IMAGING IN LITHOTRIPSY</b> .....	229
<i>Oleg A. Sapozhnikov, Neil R. Owen, Michael R. Bailey, Alexander I. Gromov, Lawrence A. Crum</i>	
<b>THERAPEUTIC HIGH INTENSITY FOCUSED ULTRASOUND FIELDS (HIFU): ACOUSTIC CHARACTERIZATION AND NONLINEAR MECHANISMS OF HEATING</b> .....	237
<i>Vera A. Khokhlova, Michael R. Bailey, Michael S. Canney, Olga V. Bessonova, Lawrence A. Crum</i>	
<b>INVESTIGATION OF START-UP IMPACT CHARACTERISTICS OF LIQUID ROCKET ENGINES</b> .....	245
<i>Li Feng, He Zexia, Bao Futing</i>	
<b>GYROSCOPIC EFFECTS IN VIBRATING FLUID-FILLED SPHERES SUBJECTED TO INERTIAL ROTATION</b> .....	252
<i>M. Shatalov, S. V. Joubert, C. E. Coetzee, I. Fedotov</i>	
<b>AEROACOUSTIC COMPUTATIONS OF A COUNTER-ROTATING FAN</b> .....	260
<i>Cyril Polacsek, Raphael Barrier</i>	
<b>INVESTIGATION OF GYROSCOPIC EFFECTS IN VIBRATING FLUID-FILLED CYLINDERS SUBJECTED TO AXIAL ROTATION</b> .....	268
<i>M. Shatalov, S. Joubert, E. Voges</i>	
<b>ON GYROSCOPIC EFFECTS IN VIBRATING AND AXIALLY ROTATING SOLID AND ANNULAR DISCS</b> .....	276
<i>M. Shatalov, S.V. Joubert, I.Fedotov, W. Pretorius</i>	
<b>QUESTIONNAIRE-BASED SURVEY ON DRIVERS' NOISE AND VIBRATION DISCOMFORT</b> .....	283
<i>Mohd Jailani Mohd Nor, Baba Md Deros, Dian Darina Indah Daruis</i>	
<b>IDENTIFICATION OF VEHICLE INTERIOR NOISE SOURCES USING VIBRO-ACOUSTIC SPECTRAL ANALYSIS METHOD</b> .....	291
<i>M. Jailani, M. Nor, Mohammad Hosseini Fouladi, Ahmad Kamal Ariffin</i>	
<b>WAVELET DESIGN FOR MUSIC PERCEPTION APPLIED TO INDIAN CLASSICAL MUSIC</b> .....	299
<i>V.G. Das Charu, V. Prem Pyara, V. Prem Kumari</i>	
<b>STATE-WIDE ROAD NOISE MAPPING OF QUEENSLAND, AUSTRALIA</b> .....	307
<i>Daniel Naish</i>	
<b>DRIVER EXPOSURE TO NOISE FROM AUDIO TACTILE LINE MARKING IN QUEENSLAND</b> .....	314
<i>Daniel Naish</i>	
<b>NOISE CONTROL ON BACKHOE LOADERS BY COHERENCE AND INTENSITY TECHNIQUES</b> .....	322
<i>K. Alper Yalcinkaya, Mehmet Caliskan</i>	
<b>VIBRATION ANALYSIS OF VIBRATORY GYROS</b> .....	329
<i>C. S. Chou, C. O. Chang, F. H. Shieh</i>	
<b>RESEARCH ON THE THEORIES OF BEM BASED CYCLOSTATIONARY NEAR FIELD ACOUSTIC HOLOGRAPHY</b> .....	337
<i>Haibin Zhang, Weikang Jiang, Quan Wan</i>	
<b>THREE-DIMENSIONAL ACOUSTIC DISPLAYS IN A MUSEUM EMPLOYING WFS (WAVE FIELD SYNTHESIS) AND HOA (HIGH ORDER AMBISONICS)</b> .....	345
<i>Angelo Farina, Andrea Capra, Paolo Martignon, Simone Fontana, Fons Adriaensen, Paolo Galaverna, Dave Malham</i>	

<b>BEHAVIOUR OF ULTRASONIC WAVE VELOCITIES IN MATERIALS UNDER ELASTIC THERMO MECHANICAL EFFECT .....</b>	<b>353</b>
<i>Med. O. Si-Chaib, H. Djelouah, A. Nour</i>	
<b>AN ANALYTICAL MODEL FOR DRILLSTRING AXIAL VIBRATION .....</b>	<b>361</b>
<i>Gholamreza Rashed, Rahmatolah Ghajar, Seyed Jelaladdin Hashemi</i>	
<b>AMBISONIC LOCALISATION - PART 2 .....</b>	<b>369</b>
<i>Richard Lee, Aaron Heller</i>	
<b>ANALYSIS OF VIBRATORY RESPONSE AND NOISE RADIATION OF ENGINE BLOCK COUPLED WITH THE ROTATING CRANKSHAFT AND GEAR TRAIN SYSTEM .....</b>	<b>377</b>
<i>Kazuhide Ohta, Takahiro Okimoto, Iwao Honda, Kazuhiro Yoshizumi</i>	
<b>PHASE CHANGE ANALYSIS OF PLANAR AND NONPLANAR VIBRATION IN ONE-TO-ONE RESONANCE OF NONLINEAR CANTILEVER BEAM .....</b>	<b>385</b>
<i>Myoung-Gu Kim, Chongdu Cho, Chang-Boo Kim, Heung-Shik Lee</i>	
<b>DYNAMIC ANALYSIS OF VEHICLES WITH UNCERTAIN PARAMETERS .....</b>	<b>393</b>
<i>Wei Gao, Nong Zhang</i>	
<b>SONOBUOY DISPLAY INTEGRATION .....</b>	<b>401</b>
<i>Jimmy Wang, Simon Lourey, Richard Ellem</i>	
<b>CHAIN FAULT DETECTION OF ESCALATOR USING HANDRAIL VIBRATION .....</b>	<b>409</b>
<i>Hiroyuki Tsutada, Takashi Hirai, Yutaka Itoh, Satoshi Shiga</i>	
<b>PRACTICAL EXPERIENCE IN ENGAGING THE PUBLIC THROUGH INTERACTIVE 3D TECHNOLOGY IN RETROFITTING BARRIER PROJECTS ON EXISTING ROADS .....</b>	<b>416</b>
<i>C. W. Law, C. K. Lee, Aaron S. W. Lui, Maurice K. L. Yeung</i>	
<b>HOW TERRITORY-WIDE GIS-BASED ROAD TRAFFIC NOISE ASSESSMENT TOOLS FACILITATE DECISION MAKING IN STRATEGIC LEVEL ENVIRONMENTAL ASSESSMENT .....</b>	<b>424</b>
<i>C. K. Lee, C. W. Law, Aaron S. W. Lui, Maurice K. L. Yeung</i>	
<b>VIBRODIAGNOSTIC METHOD FOR DETERMINATION OF THE STATE OF WEAR OF HCR GEAR SETS .....</b>	<b>431</b>
<i>Stanislav Ziaran</i>	
<b>ON REDUCING THE SHOCK RESPONSE OF A SINGLE DEGREE OF FREEDOM VEHICLE MODEL BY SWITCHING THE DAMPING COEFFICIENT .....</b>	<b>437</b>
<i>Tim Waters, Youngjin Hyun, Michael Brennan</i>	
<b>THE USE OF THE PROPAGATION EQUATION FOR THE CASE OF PLANE LONGITUDINAL WAVES THROUGH BARS WITH VARIABLE SECTION, TO STUDY THE IMPEDANCE TRANSFORMERS UTILIZED FOR ULTRASONIC WELDING .....</b>	<b>445</b>
<i>Grigore Liviu Odobescu, Rares Alexandru Odobescu</i>	
<b>PARTITION HOLE DESIGN FOR MAXIMIZING OR MINIMIZING THE FUNDAMENTAL EIGENFREQUENCY OF A DOUBLE CAVITY BY TOPOLOGY OPTIMIZATION .....</b>	<b>453</b>
<i>Jin Woo Lee, Yoon Young Kim</i>	
<b>GAUGE INVARIANCE APPROACH TO ACOUSTIC FIELDS .....</b>	<b>461</b>
<i>W. S. Gan</i>	
<b>VECTOR THEORY OF ULTRASONIC IMAGING .....</b>	<b>468</b>
<i>W. S. Gan</i>	
<b>NOISE CONTROL PROJECTS: THE EUROPEAN EXPERIENCE .....</b>	<b>475</b>
<i>Marc Asselineau</i>	
<b>THEORETICAL RESEARCH REGARDING ANY STABILITY THEOREMS WITH APPLICATIONS .....</b>	<b>483</b>
<i>Marcel Migdalovici, Daniela Baran</i>	
<b>ZERO-POLE ANALYSIS OF A TENSIONED STRING WITH PERIODIC STIFFENERS .....</b>	<b>489</b>
<i>Benjamin A. Cray, Andrew J. Hull, Albert H. Nuttall</i>	
<b>INFLUENCES OF COMPRESSION EFFECT ON SOUND ABSORPTION CHARACTERISTICS .....</b>	<b>497</b>
<i>Chao-Nan Wang, Ya- Jung Lee, Yan-Min Kuo, Shih-Kai Chen</i>	
<b>MODAL ANALYSIS OF LARGE STRUCTURES SUBMERGED IN A FLUID .....</b>	<b>505</b>
<i>John Marco, Ian MacGillivray</i>	
<b>ACOUSTICAL TREATMENT OF EMERGENCY POWER GENERATOR .....</b>	<b>513</b>
<i>M. Abd El Gawad Saif</i>	
<b>A NON-LINEAR MODEL FOR STUDYING THE MOTION OF A HUMAN BODY .....</b>	<b>521</b>
<i>Nicolae-Doru Stanescu, Marina Pandrea, Dinel Popa, Sorin Ilie, Stefan-Lucian Tabacu</i>	
<b>NON-LINEAR ASPECTS OF HUMAN BODY'S MOTION IN CAR CRASH .....</b>	<b>528</b>
<i>Nicolae-Doru Stanescu, Marina Pandrea, Dinel Popa, Sorin Ilie, Stefan-Lucian Tabacu</i>	
<b>FREE VIBRATIONS OF THE SYSTEMS OF RIGID BODIES COUPLED BY ELASTIC BARS .....</b>	<b>534</b>
<i>Marina Pandrea, Nicolae-Doru Stanescu, Nicolae Pandrea</i>	

<b>DYNAMIC RESPONSE ANALYSIS OF RECTANGULAR PERFORATED PLATES WITH VARYING SIZES OF CIRCULAR PERFORATION HOLES .....</b>	<b>542</b>
<i>Deepak C. Patil, S. Gawade, Mali Kiran</i>	
<b>ROBUST STABILITY IN FEEDBACK ACTIVE NOISE CONTROL .....</b>	<b>548</b>
<i>Damien Leclercq, Mike Kidner, Colin Hansen</i>	
<b>DEVELOPMENT AND VALIDATION OF A SMALL-SCALE ANECHOIC WIND TUNNEL.....</b>	<b>556</b>
<i>Damien Leclercq, Con Doolan, Jochen Reichl</i>	
<b>DEVELOPMENT OF AN IN-SERVICE DYNAMIC MODEL OF A DOUBLE DECK PASSENGER TRAIN .....</b>	<b>564</b>
<i>David Hanson, Mark Winton, Ross Emslie, Graham Brown, Bob Randall</i>	
<b>EXPERIMENTAL STUDY OF THE FLAME CONE KINEMATICS OF ACOUSTICALLY PERTURBED PREMIXED LAMINAR BUNSEN FLAMES .....</b>	<b>571</b>
<i>V. N. Kornilov, K.R.A.M. Schreel, L. P. H. de Goey</i>	
<b>EFFECTS OF REVERBERATION TIME AND SOUND SOURCE CHARACTERISTIC TO AUDITORY LOCALIZATION IN AN INDOOR SOUND FIELD .....</b>	<b>577</b>
<i>Chiung Yao Chen</i>	
<b>THE MECHANISM OF NOISE FORMATION AND CALCULATION OF NOISE CHARACTERISTICS OF UNDEREXPANDED STEAM JETS.....</b>	<b>583</b>
<i>Vladimir Tupov, Dmitri Chugunkov</i>	
<b>SHOCK ANALYSIS OF PROPULSION SHAFT OF THE SHIP WITH CONSIDERATION OF THE OIL FILM FORCE .....</b>	<b>591</b>
<i>Xiaoping Zhu, Qi Feng</i>	
<b>COMPUTATION OF INDIRECT COMBUSTION NOISE BY A CAA-METHOD.....</b>	<b>599</b>
<i>Christoph Richter, Frank Thiele</i>	
<b>A MODEL FOR CALCULATING VIBRATION FROM A RAILWAY TUNNEL BURIED IN A FULL-SPACE INCLUDING RIGID BEDROCK .....</b>	<b>607</b>
<i>L. Rikse, H.E.M Hunt, M.F.M Hussein, G. Degrande, S. Gupta</i>	
<b>INVESTIGATION OF THE DYNAMIC PROPERTIES OF A BORING BAR CONCERNING DIFFERENT BOUNDARY CONDITIONS.....</b>	<b>615</b>
<i>Henrik Akesson, Tatiana Smirnova, Lars Hakansson, Ingvar Cleasson, Thomas Lago</i>	
<b>AN ASYMPTOTICALLY MOTIVATED HYDRODYNAMIC-ACOUSTIC TWO-WAY COUPLING FOR MODELING THERMOACOUSTIC INSTABILITIES IN A RIJKE TUBE .....</b>	<b>623</b>
<i>Jonas P. Moeck, Heiko Schmidt, Michael Oevermann, Christian Oliver Paschereit, Rupert Klein</i>	
<b>LARGE EDDY SIMULATION OF JET NOISE.....</b>	<b>632</b>
<i>X. Wu, G. J. Page, J. K. Luff, J. J. McGuirk, W. A. McMullan</i>	
<b>VIBROACOUSTIC RESPONSE OF THE NASA ACTS SPACECRAFT ANTENNA TO LAUNCH ACOUSTIC EXCITATION.....</b>	<b>640</b>
<i>Jeffrey M. Larko, Vincent Cotoni</i>	
<b>SOME OF THE NEW APPROACHES TO THE THEORY OF DESIGNING ACOUSTIC THICKENERS.....</b>	<b>648</b>
<i>Valentin Abakumov, Kirill Trapezon</i>	
<b>BOUNDARY ELEMENT MODELS OF HORN LOADED LOUDSPEAKERS.....</b>	<b>655</b>
<i>Rick C. Morgans, Anthony C. Zander, Colin H. Hansen, David J. Murphy</i>	
<b>DERIVATIVE FREE OPTIMISATION IN ENGINEERING ACOUSTICS .....</b>	<b>663</b>
<i>Rick C. Morgans, Carl Q. Howard, Anthony C. Zander, Colin H. Hansen, David J. Murphy</i>	
<b>OBSERVATION OF PURE FREQUENCIES IN BIORESONANCE VOCAL SOUNDS .....</b>	<b>671</b>
<i>Anna Bacchia, Giovanna Fiore, Melisa Rossi</i>	
<b>OPTIMIZATION OF SOUND INSULATION IN THE NEW GENERATION OF WASHING MACHINES .....</b>	<b>679</b>
<i>Nikola Holecek, Marjan Semprimožnik</i>	
<b>INTERNAL ACOUSTIC EXCITATION TO ENHANCE THE AIRFOIL PERFORMANCE AT HIGH REYNOLDS NUMBER.....</b>	<b>687</b>
<i>Benjamin Ahn, N.A. Ahmed</i>	
<b>THE ACOUSTIC CHARACTERIZATION OF THE URBAN TERRITORY WITH CONTINUOUS CYCLE PRODUCING SETTLEMENTS .....</b>	<b>695</b>
<i>Massimo Coppi, Stefano Grignaffini</i>	
<b>A SOURCE TERM FORMULATION FOR THE NON LINEAR EULER EQUATIONS IN A CONSERVATIVE AND PERTURBATION FORM.....</b>	<b>700</b>
<i>Stephane Redonnet, Daniel Mincu, Marc Terracol, Eric Manoha</i>	
<b>NON LINEAR RESPONSE OF BEAMS USING FINITE ELEMENT METHOD WITH SYMPLECTIC INTEGRATION SCHEME .....</b>	<b>708</b>
<i>R.R. Dash, T. Rout, B.B. Maharathi</i>	

<b>OPTIMIZATION IN ACTIVE NON-STATIONARY RANDOM VIBRATION CONTROL FOR SMART TRUSS STRUCTURES WITH UNCERTAINTY</b> .....	716
<i>Wei Gao, Liyong Tong</i>	
<b>MULTIDELAY ADAPTIVE FILTERS FOR ACTIVE NOISE CONTROL</b> .....	724
<i>Xiaojun Qiu, Colin H. Hansen</i>	
<b>EXPERIMENTAL VALIDATION OF LINEAR STABILITY ANALYSIS IN PREMIXED COMBUSTORS SUPPORTED BY ACTIVE CONTROL</b> .....	732
<i>Mirko R. Bothien, Jonas P. Moeck, Christian Oliver Paschereit</i>	
<b>ACTIVE NOISE CONTROL ON HIGH FREQUENCY NARROW BAND DENTAL DRILL NOISE: PRELIMINARY RESULTS</b> .....	741
<i>Erkan Kaymak, Mark Atherton, Ken Rotter, Brian Millar</i>	
<b>ROBUST FEEDBACK DISTURBANCE REJECTION FOR SOUNDSTRUCTURE INTERACTION SYSTEMS USING OPTIMAL SENSOR – ACTUATOR LOCATION</b> .....	748
<i>Suwit Pulthasthan, Hemanshu Pota</i>	
<b>DEVELOPMENT AND APPLICATION OF HIGH DAMPING ALLOYS FOR NOISE AND VIBRATION CONTROL</b> .....	757
<i>Fuxing Yin</i>	
<b>THE DYNAMIC ANALYSIS OF A BUILDING STRUCTURE – ACOUSTIC VOLUME INTERACTION SYSTEM EXCITED BY HUMAN FOOTFALL IMPACTS</b> .....	765
<i>Jing Tang Xing, Ye Ping Xiong, Mingyi Tan</i>	
<b>VIBRATION OF ELASTIC RINGS EXCITED BY PERIODICALLY-SPACED MOVING SPRINGS</b> .....	773
<i>Sripathi Vangipuram Canchi, Robert G. Parker</i>	
<b>PHYSICS-BASED NUMERICAL METHOD FOR ANALYZING MID-FREQUENCY ACOUSTIC RADIATION</b> .....	781
<i>Stephen D. O'Regan</i>	
<b>MODIFIED GENERAL TRANSFER MATRIX METHOD FOR LINEAR ROTOR BEARING SYSTEMS</b> .....	787
<i>B. B. Maharathi, R. R. Dash, T. Rout</i>	
<b>NUMERICAL STUDY OF STRUCTURAL VIBRATION INDUCED BY COMBUSTION NOISE – ONE WAY INTERACTION</b> .....	795
<i>Artur K. Pozarlik, Jim B.W. Kok</i>	
<b>PSYCHOACOUSTIC EVALUATION OF A NEW EARPIECE FOR AUGMENTED-REALITY AUDIO</b> .....	803
<i>Craig T. Jin, Aengus Martin, André van Schaik</i>	
<b>SOME STUDY OF DYNAMIC AND ACOUSTIC CHARACTER OF STEERABLE STREAMERS FOR OCEAN EXPLORATION</b> .....	811
<i>Zhiping Zhao, Yaoqiang Zhu, Weikang Jiang</i>	
<b>STANDARDIZATION OF ROAD TRAFFIC NOISE MAP IN KOREA</b> .....	818
<i>In-Sun Park, Sang-Kyu Park, Daejoon Kang</i>	
<b>MOMENT CONTROL OF THE SOUND RADIATED FROM AN AXIALLY EXCITED CYLINDRICAL SHELL</b> .....	825
<i>James A. Forrest</i>	
<b>NOISE IN HIGHWAYS: DEVELOPMENT OF A STATISTICAL PREDICTION MODEL</b> .....	833
<i>Frederico Rodrigues, Marco Antonio M. Vecci, Frederico Luiz C. Moura</i>	
<b>DETERMINATION OF ACOUSTIC PROPERTIES FOR OPEN DUCT TERMINATION IN HOT JET CONDITIONS USING FEM SIMULATION</b> .....	840
<i>Hans Rammal, Juri Lavrentjev</i>	
<b>THE ROLE OF THE INFLOWMOMENTUM THICKNESS IN SUBSONIC CYLINDRICAL CAVITY NOISE GENERATION</b> .....	848
<i>Marco Grottaurea, Aldo Rona</i>	
<b>NOISE IN HOSPITAL AREAS – MEASURE AND EVALUATION</b> .....	856
<i>Salvatore Barbaro, Rosario Caracausi</i>	
<b>SUCCESSFUL TEACHING OF EXPERIMENTAL VIBRATION RESEARCH</b> .....	862
<i>A.G.M. Wolbert, P.J.M. van der Hoogt, Z.A.J. Lok, A. de Boer</i>	
<b>STATIC OUTPUT FEEDBACK CONTROL FOR NON-LINEAR FLUTTER AND LIMIT CYCLE OSCILLATION</b> .....	868
<i>Morteza Dardel, Firooz Bakhtiari-Nejad</i>	
<b>A CENTER MANIFOLD ALGORITHM FOR NONLINEAR DYNAMIC SYSTEMS WITH TIME-DELAY AND PARAMETRIC EXCITATION</b> .....	876
<i>Eric A. Butcher, Venkatesh Deshmukh, Ed Bueler</i>	
<b>MODIFIED TIRE-PAVEMENT NOISE MEASUREMENT TECHNIQUES FOR NOISE ASSESSMENT ON ASPHALT-RUBBER ROADS</b> .....	884
<i>Huay Seen Lee, Liming Dai</i>	

<b>A STUDY ON RESPONSE ANALYSIS OF PNEUMATIC VIBRATION ISOLATION TABLE LOADED BY TRANSIENT MOVEMENTS OF CARRIAGE ON IT .....</b>	<b>892</b>
<i>Yun-ho Shin, Jong-oh Sun, Kwang-joon Kim</i>	
<b>LINEAR SOURCES WITH NON-LINEAR DISTRIBUTION OF SOUND ENERGY .....</b>	<b>900</b>
<i>Miroslav Kucera, Richard Novy, Jiri Basta</i>	
<b>INITIAL ASSESSMENT OF THE ARES I-X LAUNCH VEHICLE UPPER STAGE TO VIBROACOUSTIC FLIGHT ENVIRONMENTS .....</b>	<b>908</b>
<i>Jeffrey M. Larko, William O. Hughes</i>	

## VOLUME 2

<b>COMPARISON OF TRANSMISSION LOSS MODELS AT MID-FREQUENCY AGAINST SHALLOW WATER DATA .....</b>	<b>916</b>
<i>Adrian D. Jones, Janice Sendt, Alec J. Duncan, Paul A. Clarke, Z. Y. Zhang, Amos L. Maggi</i>	
<b>FRACTIONAL FOURIER TRANSFORMS FOR SPECTRAL ANALYSIS OF MUSIC SIGNALS .....</b>	<b>924</b>
<i>V.G. Das Charu, V. Prem Pyara, V. Prem Kumari</i>	
<b>ANALYSIS OF HIGH LONGITUDINAL VIBRATION ON A DIESEL GENERATOR USING MODERN ANALYSIS TOOLS .....</b>	<b>936</b>
<i>Ben Kidd, Stewart Kanev</i>	
<b>A MODEL OF THE WEAR DUE TO THE ROLLING CONTACT OF A WHEEL OVER A GENERAL RAIL PROFILE .....</b>	<b>944</b>
<i>P. A. Bellette, P. A. Meehan, W. J. T. Daniel</i>	
<b>A CASE STUDY ON THE EFFECT OF SPEED VARIATION ON THE GROWTH OF WEAR-TYPE RAIL CORRUGATION .....</b>	<b>952</b>
<i>P. A. Meehan, P. A. Bellette, W. J. T. Daniel, R. J. Horwood</i>	
<b>CRITICAL ISSUES IN EXPERIMENTAL JET AEROACOUSTICS .....</b>	<b>960</b>
<i>K. Viswanathan</i>	
<b>ACCURATE MEASUREMENT OF SMALL ABSORPTION COEFFICIENTS.....</b>	<b>968</b>
<i>A. F. Seybert, J. Han, D. W. Herrin</i>	
<b>RIVER PUMP ROOM ISOLATION FROM STATE LIBRARY .....</b>	<b>976</b>
<i>David Borgeaud, Michael Plumb</i>	
<b>EXPERIMENTAL STUDY OF THE AIRCRAFT ENGINE DUCT COMBINED LINERS .....</b>	<b>984</b>
<i>Yuri Khaletskiy, Vjacheslav Povarkov, Rollan Shipov, Galina Shul</i>	
<b>EIGENFREQUENCY COMPUTATION BY THE FINITE SINE TRANSFORM METHOD ON A RECTANGULAR PLATE CARRYING ARBITRARY NUMBER OF CONCENTRATED MASSES AND SPRINGS .....</b>	<b>991</b>
<i>Yin Zhang</i>	
<b>CLOSED-LOOP FEEDBACK MODEL OF CHATTER IN A SHAPING OPERATION .....</b>	<b>998</b>
<i>Ayman El-Badawy, Tarek Nasr El-Deen</i>	
<b>ACTIVE CONTROL OF FREE BEAM VIBRATIONS UTILIZING ACTUATOR OPTIMIZATION .....</b>	<b>1006</b>
<i>Ayman El-Badawy</i>	
<b>CHARACTERIZATION OF VARIABLE MATERIAL PROPERTIES BY NONLINEAR ACOUSTIC TECHNIQUES.....</b>	<b>1014</b>
<i>Arvi Ravasoo</i>	
<b>PERFORMANCE OF PERFORATED FACING ABSORBERS.....</b>	<b>1021</b>
<i>Robert Hooker</i>	
<b>ONE-DIMENSIONAL TOPOLOGY OPTIMIZATION FOR TRANSMISSION LOSS MAXIMIZATION OF MULTI-LAYERED ACOUSTICAL FOAMS .....</b>	<b>1029</b>
<i>Eun Il Kim, Joong Seok Lee, Yoon Young Kim, Jung Soo Kim, Yeon June Kang</i>	
<b>ANALYSIS, DESIGN, FABRICATION AND OF MEMS CAPACITIVE MICROPHONES .....</b>	<b>1035</b>
<i>Hong-Ching Her, Chuan-Hsien Cheng, Hsien-Kuang Liu, Jin H. Huang</i>	
<b>EFFECT OF ARTIFICIAL MOUTH SIZE ON SPEECH TRANSMISSION INDEX.....</b>	<b>1043</b>
<i>Ken Stewart, Densil Cabrera</i>	
<b>DESIGN OF COMMAND SHAPER USING GAIN-DELAY UNITS AND PARTICLE SWARM OPTIMISATION FOR VIBRATION CONTROL OF A FLEXIBLE SYSTEM .....</b>	<b>1050</b>
<i>M. S. Alam, M. A. Hossain, M. O. Tokhi</i>	
<b>OPTIMUM DESIGN OF VIBRATION ABSORBER WITH VARIABLE POSITION FOR AN EULER-BERNOULLI BEAM UNDER MOVING POINT EXCITATION .....</b>	<b>1058</b>
<i>Firooz Bakhtiari-nejad, Hamed Moradi</i>	
<b>EXPERIMENTAL IDENTIFICATION OF FRACTIONAL-DRAIVATIVE PARAMETERS OF A DAMPING MATERIAL USING THE OPTIMIZATION TECHNIQUE .....</b>	<b>1066</b>
<i>Sun-Yong Kim, Doo-Ho Lee</i>	



<b>PROPAGATION PHASE REPRESENTATION IN 3D SPACE USING POLES AND ZEROS IN COMPLEX FREQUENCY PLANE .....</b>	<b>1073</b>
<i>Yoshinori Takahashi, Mikio Tohyama, Kazunori Miyoshi</i>	
<b>RECENT ADVANCES IN IC-ENGINE ACOUSTIC SOURCE CHARACTERISATION .....</b>	<b>1081</b>
<i>Hans Bodén</i>	
<b>A REVIEW OF RESIDENTIAL BALCONIES WITH ROAD TRAFFIC NOISE .....</b>	<b>1089</b>
<i>Daniel Naish, Andy Tan</i>	
<b>NOISE REDUCTION OF HANDHELD VACUUM CLEANERS ACCORDING TO GEOMETRIC OPTIMIZATION OF AIR PASSAGES .....</b>	<b>1097</b>
<i>M. J. Mahjoob, H. Ashrafi</i>	
<b>A PROPOSAL TO HI-TECH POLLUTION BASED ON THE CRITERION OF "RELATIONISM-FIRST": A PRINCIPLE EXPERIMENT FOR THE RELATION BETWEEN ACOUSTIC AND EM FIELDS AROUND VDT .....</b>	<b>1106</b>
<i>Yoshifumi Fujita, Mitsuo Ohta</i>	
<b>SPECTRAL ANALYSIS OF TAPERED ROLLER BEARING VIBRATION USING INDUCTIVE MODELING .....</b>	<b>1114</b>
<i>Adam Docekal, Marcel Kreidl, Radislav Smid, Lubomir Riha</i>	
<b>FEEDBACK SUPERVISING FEEDFORWARD MINIMUM-VARIANCE CONTROL OF ACOUSTIC NOISE.....</b>	<b>1122</b>
<i>Marek Pawelczyk</i>	
<b>DISC BRAKE SQUEAL: PROGRESS AND CHALLENGES.....</b>	<b>1130</b>
<i>Antti Papinniemi, Joseph C.S. Lai, Jiye Zhao</i>	
<b>ANALYSIS AND PERFORMANCE MONITORING OF ELECTRO ACOUSTIC SYSTEMS.....</b>	<b>1138</b>
<i>Frantisek Kadlec</i>	
<b>THE ACOUSTIC WAVE PROPAGATION EQUATION IN A TURBULENT COMBUSTING FLOW.....</b>	<b>1146</b>
<i>Jim B.W. Kok, Bram de Jager</i>	
<b>OVERVIEW OF DIFFERENT APPROACHES FOR ACTIVE CONTROL OF COMBUSTION INSTABILITIES .....</b>	<b>1154</b>
<i>Ben T. Zinn, Eugene Lubarsky, Yedidia Neumeier</i>	
<b>THE EFFECT OF BOUNDARY CONDITIONS ON ACTIVE CONTROL OF SOUND RADIATION FROM A RECTANGULAR PLATE.....</b>	<b>1162</b>
<i>Jingtao Du, Guoyong Jin, Tiejun Yang, Zhigang Liu, Wanyou Li</i>	
<b>VIBROACOUSTIC CONTROL OF HONEYCOMB SANDWICH PANELS USING MFC ACTUATORS .....</b>	<b>1170</b>
<i>Jeng-Jong Ro, Hong-Yi Chou, Shuh-Jang Sun</i>	
<b>STUDY ON THE SIMULATION DESIGN METHOD ABOUT EXHAUST MUFFLER OF VEHICLE.....</b>	<b>1178</b>
<i>Yuan Zhaocheng, Ma Jiayi, Li Shengcheng, Fang Hua</i>	
<b>THE IMPROVED ACTIVE CONTROL ALGORITHM FOR MARINE DIESEL TWO-STAGE VIBRATION ISOLATION SYSTEM .....</b>	<b>1186</b>
<i>Xiao Bin, Liu Zhi-gang, Li Wan-you, Liu Xue-guang, Gao Zhong-feng, Yang Tie-jun</i>	
<b>DIVER DETECTION SONARS AND TARGET STRENGTH: REVIEW AND DISCUSSIONS.....</b>	<b>1194</b>
<i>Z. Y. Zhang</i>	
<b>ROTOR CRACK DETECTION FROM VIBRATION MONITORING USING A NARMAX MODELLING APPROACH .....</b>	<b>1202</b>
<i>Yongxin Luo, Steve Daley</i>	
<b>A GEOMETRIC APPROACH TO THE OPTIMAL DESIGN OF REMOTELY LOCATED BROADBAND VIBRATION CONTROL SYSTEMS .....</b>	<b>1210</b>
<i>Jiqiang Wang, Steve Daley</i>	
<b>ACTIVE CONTROL OF CHATTER VIBRATIONS IN A TURNING PROCESS USING AN ADAPTIVE FXLMS ALGORITHM .....</b>	<b>1218</b>
<i>O. R. Hashemi, A. R. Ohadi</i>	
<b>SIMULATION OF ENGINE VIBRATION ON NONLINEAR HYDRAULIC ENGINE MOUNTS THROUGH FULL-VEHICLE MODEL .....</b>	<b>1226</b>
<i>A. R. Ohadi, G Maghsoodi, V. Fakhari</i>	
<b>DYNAMIC STRUCTURE MODIFICATION USING DENTS .....</b>	<b>1234</b>
<i>Wen Nan Cheng, Chih Chun Cheng, Gary H. Koopmann</i>	
<b>VIBRATION ANALYSIS OF A CRACKED BEAM SUBJECTED TO A TRAVELING VEHICLE .....</b>	<b>1242</b>
<i>Hai-Ping Lin</i>	
<b>DETERMINATION OF MECHANICAL PROPERTIES OF A NONUNIFORM BEAM USING THE MEASUREMENT OF THE EXCITED LONGITUDINAL ELASTIC VIBRATIONS.....</b>	<b>1250</b>
<i>Pavel Anokhin, Vladimir Gordon</i>	

<b>THE ANALYTICAL CALCULATIONS OF THE PARAMETERS OF THE FLUCTUATIONS OF THE BALLISTIC MISSILES</b> .....	1258
<i>Vladimir Gordon, Svetlana Ovsyannikova, Yury Stepanov</i>	
<b>OPTIMAL CONTROL OF A PRETWISTED TAPERED ROTATING BEAM WITH TIP ROTOR</b> .....	1266
<i>Naresh K. Chandiramani, Liviu Librescu</i>	
<b>APPLICATION OF DUAL RECIPROCITY BOUNDARY ELEMENT METHOD TO PREDICT ACOUSTIC ATTENUATION CHARACTERISTICS OF SILENCERS WITH COMPLEX FLOW</b> .....	1275
<i>Zhenlin Ji, Xueren Wang</i>	
<b>ACTIVE CONTROL OF COMBUSTION INSTABILITY USING PILOT AND PREMIX FUEL MODULATION</b> .....	1283
<i>Daniel Guyot, Matthias Robler, Mirko R. Bothien, Christian O. Paschereit</i>	
<b>A REVIEW OF SELECTED EXPERIMENTAL INVESTIGATIONS OF CURLE'S THEORY</b> .....	1293
<i>David Alan Bies, Alexei Zinoviev</i>	
<b>COCHLEAR MECHANICS, THE ACOUSTIC REFLEX AND NOISE INDUCED HEARING LOSS</b> .....	1301
<i>David Alan Bies</i>	
<b>AN ACCURATE METHOD OF KNOCK DETECTION USING WAVELET TRANSFORM FOR SPARK-IGNITION (SI) ENGINE</b> .....	1310
<i>Nobuo Kurihara, Junichi Suzuki, Yuuya Shirayama, Jonathan Borg, Shigeru Oho</i>	
<b>ANALYSIS OF GOLF BALL SPIN MECHANISM AT IMPACT BY FEM</b> .....	1318
<i>Woo-Jin Roh, Chong-Won Lee</i>	
<b>TRANSMISSION PATH CHARACTERIZATION FOR PASSIVE VIBRATION CONTROL</b> .....	1326
<i>Per Sjoval, Thomas Abrahamsson</i>	
<b>AN ALGORITHM FOR STUDYING WAVE PROPAGATION IN PHONONIC CRYSTALS COMPOSED OF VISCOELASTIC MATERIAL</b> .....	1334
<i>Yaozong Liu, Honggang Zhao, Dianlong Yu, Wen Jihong, Xisen Wen</i>	
<b>LINEAR MODELLING OF MAGNETO-RHEOLOGICAL DAMPERS USING HYBRID INTELLIGENCE TECHNIQUE</b> .....	1342
<i>Haiping Du, Nong Zhang</i>	
<b>THEORETICAL AND EXPERIMENTAL INVESTIGATION ON POWER FLOW OF A RAFT VIBRATION ISOLATION SYSTEM</b> .....	1350
<i>Guangming Wu, Qiang Wang, Rongying Shen</i>	
<b>NONLINEAR EFFECTS IN AIRBORNE SOUND INSULATION MEASUREMENT</b> .....	1358
<i>Doheon Lee, Densil Cabrera</i>	
<b>GEOMETRIC SHAPE IDENTIFICATION FOR MULTI-MODE TUNING OF PERCUSSION INSTRUMENT BARS</b> .....	1365
<i>Rodney D. Entwistle, Stephen R. McGrechan</i>	
<b>ROLLING ELEMENT BEARING FAULT DIAGNOSIS BASED ON GENETIC ALGORITHMS</b> .....	1373
<i>Yongxiang Zhang, R. B. Randall</i>	
<b>ACOUSTIC WAVE PROPAGATION MODELING FOR PERIODIC STRUCTURES AS APPLIED TO ANECHOIC COATING DESIGN</b> .....	1381
<i>Sven Ivansson</i>	
<b>THEORETICAL AND NUMERICAL STUDY ON HYDROELASTIC VIBRATION OF PLATE FOR VARIOUS BOUNDED FLUID FIELD</b> .....	1389
<i>Kuksu Kim, Suhyun Choi, Hyundong Cho</i>	
<b>INITIAL EXPERIMENTS WITH A FINITE ELEMENT MODEL OF AN ACTIVE BORING BAR</b> .....	1397
<i>Tatiana Smirnova, Henrik Akesson, Lars Hakansson, Ingvar Claesson, Thomas Lago</i>	
<b>FLEXURAL VIBRATION BAND GAPS IN PERIODIC PIPE SYSTEM CONVEYING FLUID</b> .....	1405
<i>Dianlong Yu, Jihong Wen, Yaozong Liu, Jing Qiu</i>	
<b>DIRECTIONAL PROPAGATION CHARACTERISTICS OF FLEXURAL WAVE IN TWO-DIMENSIONAL PERIODIC GRID-LIKE PLATE STRUCTURES</b> .....	1412
<i>Jihong Wen, Dianlong Yu, Yaozong Liu</i>	
<b>VALIDATION OF AN INNOVATIVE HYBRID METHOD FOR THE PREDICTION OF NOISE GENERATED BY CONFINED FLOWS</b> .....	1418
<i>Christophe Schram, Michel Tournour</i>	
<b>IDENTIFICATION OF MACHINE TOOL CHATTER FOR MILLING OPERATIONS WITH RUNOUT</b> .....	1426
<i>Tamas Insperger, Brian P. Mann, Tobias Surmann, Gabor Stepan</i>	
<b>BEARING PROFILE AND MISALIGNMENT EFFECTS ON THE VIBRATION BEHAVIOUR OF ROTATING MACHINERY</b> .....	1434
<i>Ningsheng Feng, Eric Hahn</i>	
<b>SYMMETRY METHODS APPLIED TO THE CONDITION MONITORING OF SLOW SPEED SLEW BEARINGS</b> .....	1442
<i>Craig Moodie, A.K. Tieu, Simon Biddle</i>	

<b>DE-CONVOLUTION OF TIME-SERIES DATA USING TRANSLATIONAL SYMMETRY AND EIGENSTATE ANALYSIS .....</b>	<b>1450</b>
<i>Craig Moodie, A.K. Tieu, Simon Biddle</i>	
<b>SYMMETRIC WAVE DECOMPOSITION AS A MEANS OF IDENTIFYING THE NUMBER OF DAMAGED ELEMENTS IN A SLOW SPEED BEARING .....</b>	<b>1458</b>
<i>Craig Moodie, A.K. Tieu, Simon Biddle</i>	
<b>VIBRATION EVENT DETECTION: A MONITORING METHOD FOR SLOW SPEED BEARINGS .....</b>	<b>1466</b>
<i>Craig Moodie, A.K. Tieu, Simon Biddle</i>	
<b>APPLICATION OF RATIONAL ORTHOGONAL WAVELETS TO ACTIVE SONAR DETECTION OF HIGH VELOCITY TARGETS .....</b>	<b>1474</b>
<i>David Bartel, Limin Yu, Lang White</i>	
<b>FRITAMUFF: A COMPREHENSIVE PLATFORM FOR PREDICTION OF UN-MUFFLED AND MUFFLED EXHAUST NOISE OF IC ENGINES .....</b>	<b>1482</b>
<i>M. L. Munjal, S. N. Panigrahi, R. N. Hota</i>	
<b>EXPERIMENTAL VERIFICATION OF FULL VEHICLE SEA MODEL .....</b>	<b>1490</b>
<i>Yong Jai Park, Ri Guang Nan, Yeon June Kang, Chul Min Park, Ki Sang Chae</i>	
<b>NOISE SOURCE IDENTIFICATION OF KOREAN HIGH SPEED TRAIN .....</b>	<b>1498</b>
<i>Hyoin Koh, Wonhee You, Hyukbin Kwon, Donghyung Lee</i>	
<b>LOCALIZATION AND IDENTIFICATION OF PERSONS AND AMBIENT NOISE SOURCES VIA ACOUSTIC SCENE ANALYSIS .....</b>	<b>1504</b>
<i>Alexej Swerdlow, Kristian Kroschel, Timo Machmer, Dirk Bechler</i>	
<b>STOCHASTIC AND CHAOTIC ANALYSIS OF SUBHARMONIC RESPONSE OF A SHALLOW CABLE .....</b>	<b>1512</b>
<i>S.R.K. Nielsen, J.W. Staerdaahl</i>	
<b>SYSTEM REDUCTION IN NONLINEAR MULTIBODY DYNAMICS OF WIND TURBINES .....</b>	<b>1519</b>
<i>Kristian Holm-Jorgensen, Soren R.K. Nielsen, Rune Rubak</i>	
<b>AN ASYMPTOTIC APPROACH FOR THE COUPLED DISPERSION CHARACTERISTICS OF A FLUID-FILLED CYLINDRICAL SHELL .....</b>	<b>1527</b>
<i>Abhijit Sarkar, Venkata R. Sonti</i>	
<b>ENERGETIC CHARACTERISTICS OF VIBRATION LOADS ON A MECHANICAL OBJECT .....</b>	<b>1535</b>
<i>Henryk Kazmierczak, Jacek Kromulski, Tadeusz Pawlowski</i>	
<b>AN ANALYSIS OF THE CHANGES TO THE MECHANICAL AND ACOUSTICAL PROPERTIES OF PAPER CAUSED BY THE DAMAGE MECHANISMS PRESENT IN THE FIBRE STRUCTURE .....</b>	<b>1543</b>
<i>David Kao, Deryn Graham, Koulis Pericleous</i>	
<b>LOCAL SHIP VIBRATIONS – A METHODOLOGY FOR THEIR EVALUATION AND CONTROL FROM THE EARLY DESIGN PHASE .....</b>	<b>1551</b>
<i>Ottavio Pinto, Cesare Tarditi</i>	
<b>EFFECT OF BOUNDARY CONDITIONS AND SOURCE TRUNCATION IN THE PREDICTION OF FLOW-GENERATED SOUND .....</b>	<b>1559</b>
<i>Paula Martinez-Lera, Julien Christophe, Christophe Schram, Jerome Anthoine</i>	
<b>ACTIVE CONTROL OF INTERIOR NOISE IN A RECTANGULAR CAVITY WITH TWO FLEXIBLE PANELS .....</b>	<b>1567</b>
<i>Mohamed Gharib, Mohammad Tawfik</i>	
<b>THE COUPLING OF A HEARING AID LOUDSPEAKER MEMBRANE TO VISCO-THERMAL AIR LAYERS .....</b>	<b>1575</b>
<i>W.R. Kampinga, C. Bosschaart, Y.H. Wijnant, A. de Boer</i>	
<b>COMFORT ANALYSIS OF LIGHTWEIGHT FLOOR SYSTEM .....</b>	<b>1583</b>
<i>Sander Zegers, Frans van Herwijnen</i>	
<b>AN ACOUSTIC FINITE ELEMENT INCLUDING VISCOTHERMAL EFFECTS .....</b>	<b>1591</b>
<i>M.J.J. Nijhof, Y.H. Wijnant, A. de Boer</i>	
<b>THREE-DIMENSIONAL PREDICTIONS OF THE ROD WAKE-AIRFOIL INTERACTION NOISE BY HYBRID METHODS .....</b>	<b>1599</b>
<i>Björn Greschner, Sven Peth, Young J. Moon, Jung H. Seo, Marc C. Jacob, Frank Thiele</i>	
<b>EXPERIMENTAL EVALUATION OF THE MODAL DAMPING OF AUTOMOTIVE COMPONENTS WITH DIFFERENT BOUNDARY CONDITIONS .....</b>	<b>1611</b>
<i>Giorgio Dalpiaz, Emiliano Mucchi, Stefano Mischiari</i>	
<b>INFLUENCE OF DESIGN AND OPERATIONAL PARAMETERS ON THE DYNAMIC BEHAVIOUR OF GEAR PUMPS .....</b>	<b>1619</b>
<i>Emiliano Mucchi, Alessandro Rivola</i>	
<b>COMPARISON OF SPEECH INTELLIGIBILITY MEASUREMENTS IN A DIFFUSE SPACE .....</b>	<b>1627</b>
<i>L. Gomez, C. Nestoras, S. Dance, S. Murano</i>	

<b>WHICH ARE THE MOST IMPORTANT PRESSURE EFFECTS IN DYNAMIC ANALYSIS OF GEAR PUMPS?</b> .....	1635
<i>Emiliano Mucchi, Alfonso Fernandez del Rincon</i>	
<b>STOCHASTIC FINITE ELEMENT ANALYSIS OF THE FREE VIBRATION OF FUNCTIONALLY GRADED MATERIAL PLATES</b> .....	1643
<i>Afeefa Shaker, Wael Abdelrahman, Mohammad Tawfik, Edward Sadek</i>	
<b>OCEAN ACOUSTIC INTERFEROMETRY EXPERIMENT</b> .....	1651
<i>Laura A. Brooks, Peter Gerstoft</i>	
<b>NODALIZATION OF ISOLATOR FOR FLOATING FLOOR DESIGN</b> .....	1659
<i>C. K. Hui, C. F. Ng</i>	
<b>THE EFFECTS OF LOCAL MODES ON VIBRATION REDUCTION OF BUILDING ISOLATION</b> .....	1667
<i>C. K. Hui, Y. Y. Lee, C. F. Ng</i>	
<b>PASSIVE CONTROL OF COMBUSTION INDUCED NOISE IN AN AUXILIARY BUS HEATING SYSTEM</b> .....	1675
<i>Jonas P. Moeck, Robert Engel, Christian Oliver Paschereit</i>	
<b>AN ASSESSMENT OF ALTERNATIVE SENSOR TECHNOLOGY FOR TRANSFER MATRIX MEASUREMENTS IN COMBUSTORS</b> .....	1683
<i>Jonas P. Moeck, Holger J. Konle, Christian Oliver Paschereit</i>	
<b>EFFECTS OF LANDING GEAR NONLINEARITIES ON GROUND RESONANCE OF HELICOPTER</b> .....	1693
<i>Yoon-kyu Lee, Kwang-joon Kim</i>	
<b>PROMOTION OF EXTRACTION OF GREEN TEA CATECHINS IN WATER EXTRACTION AT LOW TEMPERATURE USING ULTRASOUND</b> .....	1700
<i>Hitoshi Koiwai, Nobuyoshi Masuzawa</i>	
<b>THE STUDY ON THE EFFECT OF THE LATERAL VIBRATION OF SHAFTING ON UNDERWATER STRUCTURAL ACOUSTIC RADIATION</b> .....	1706
<i>Cao Yipeng, Zhang Wenping</i>	
<b>EXPERIMENTAL STUDIES ON TWO-DIMENSIONAL ACOUSTIC DEFECT-MODEWAVEGUIDES IN A SONIC/PHONONIC CRYSTAL</b> .....	1713
<i>Toyokatsu Miyashita</i>	
<b>THE APPLICATION STUDY OF FORCE LIMITED METHOD IN VIBRATION TESTS</b> .....	1721
<i>Zhi-yong Yue, Jun-gang Zhang, Yao-qi Feng</i>	
<b>MICROPHONE ARRAY BEAMFORMING AND INVERSE METHODS FOR THE RECONSTRUCTION OF DUCTED ACOUSTIC SOURCES</b> .....	1729
<i>Teresa Bravo, Cedric Maury</i>	
<b>DYNAMIC RESPONSE OF BOX-TYPE SONAR STRUCTURE</b> .....	1737
<i>Sameer Abdul Azeez, O.R. Nandagopan</i>	
<b>DEVELOPMENT OF A SEMI-EMPIRICAL MODEL OF MECHANICAL HYSTERESIS FOR SANDWICH COMPOSITE MATERIALS, AND SYSTEM IDENTIFICATION USING HEURISTIC OPTIMIZATION METHODS</b> .....	1745
<i>Klaus H. Hornig, George T. Flowers</i>	
<b>WAVELET ANALYSIS OF THE POWER TRANSFORMER TUB VIBRATIONS</b> .....	1753
<i>Tomasz Boczar, Marcin Lorenc, Dariusz Zmarzly</i>	
<b>THE RESULT ANALYSIS OF THE SOUND INTENSITY LEVEL GENERATED BY A HIGH POWER TRANSFORMER</b> .....	1761
<i>Tomasz Boczar, Marcin Lorenc, Dariusz Zmarzly</i>	
<b>EVALUATION METHODOLOGY OF THE TECHNICAL CONDITION OF A POWER TRANSFORMER BASED ON THE MEASUREMENT RESULTS OF MECHANICAL VIBRATIONS OF ITS TUB</b> .....	1768
<i>Tomasz Boczar, Marcin Lorenc, Dariusz Zmarzly</i>	
<b>MINIMISATION OF NOISE AND VIBRATION LEVEL FROM A STEEL PANEL</b> .....	1776
<i>A. Shen, R.B. Randall</i>	
<b>NUMERICAL SIMULATION OF NONLINEAR SOUND WAVE PROPAGATION USING CIP METHOD</b> .....	1784
<i>Takao Tsuchiya, Kan Okubo, Nobunao Takeuchi</i>	
<b>RIDE COMFORT EVALUATION FOR THE KOREAN EXPERIMENTAL HIGH-SPEED TRAIN</b> .....	1792
<i>Young-Guk Kim, Sunghoon Choi, Seog-Won Kim, Ki-Hwan Kim</i>	
<b>CHARACTERISTICS OF AERODYNAMIC NOISE FROM THE INTER-COACH SPACING OF A HIGH-SPEED TRAIN</b> .....	1800
<i>Sunghoon Choi, Hyoin Koh, Chan-Kyung Park, Junhong Park</i>	
<b>SOUND PROPAGATION THROUGH A HEAT-EXCHANGER TUBES ARRAY IN POWER BOILES</b> .....	1807
<i>G.S. Jiang, L.S. An, J. Tian, G.Q. Shen, B. Jiang</i>	

<b>THE DYNAMIC CHARACTERISTICS OF SMA HELICAL SPRING IN AXIAL VIBRATORY MOTION</b> .....	1814
<i>Chun-Ying Lee, Chia-Wei Hsu</i>	
<b>VIBRATION SUPPRESSION PERFORMANCES OF POWER HARVESTING SYSTEMS USING PIEZOELECTRIC TRANSDUCERS</b> .....	1822
<i>Kimihiko Nakano, Tsuyoshi Arinaga</i>	

### VOLUME 3

<b>ACOUSTIC CLARITY AND AUDITORY ROOM SIZE PERCEPTION</b> .....	1830
<i>Densil Cabrera</i>	
<b>WAVE PROPAGATION IN THIN ORTHOTROPIC MEDIA</b> .....	1838
<i>Jan Cerv, Frantisek Vales, Pavla Dvorakova, Tomas Kroupa</i>	
<b>NOISE PREDICTION OF A SERRATED NOZZLE USING A HYBRID APPROACH</b> .....	1846
<i>Dandy Eschricht, Lukasz Panek, Jianping Yan, Frank Thiele, Marc Jacob</i>	
<b>INVESTIGATING THE EFFECTS OF THE STATIC CUTTING FORCE ON THE CHATTER VIBRATIONS OF MILLING PROCESS</b> .....	1853
<i>M. Saeidifar, A.R. Ohadi</i>	
<b>INTELLEGT TWO WIRE VIBRATION SWITCH – NEW CLASS OF MONITORING DEVICE</b> .....	1861
<i>George Zusman</i>	
<b>INVESTIGATION OF TORSIONAL VIBRATION CHARACTERISTICS OF MARINE DIESEL ENGINE</b> .....	1869
<i>Won-Hyun Kim, Soo-Mok Lee</i>	
<b>CONTROL OF RADIATED NOISE FROM SHIP’S CABIN FLOOR</b> .....	1877
<i>Won-Ho Joo, Sung-Hoon Kim, Jong-Gug Bae, Suk-Yoon Hong</i>	
<b>NOISE IN THE INTENSIVE CARE UNIT (ICU)</b> .....	1884
<i>Daniela T. Cianci, S. Kanapathipillai</i>	
<b>ROBUST POLE PLACEMENT FOR ACTIVE VIBRATION CONTROL OF SEISMIC-EXCITED BUILDINGS</b> .....	1892
<i>Haiping Du, Nong Zhang</i>	
<b>EXPERIMENTAL APPLICATION OF HIGH PRECISION K-SPACE FILTERS AND STOPPING RULES FOR FULLY AUTOMATED PNAH</b> .....	1900
<i>Rick Scholte, Ines Lopez, Bert Roozen, Henk Nijmeijer</i>	
<b>ASSESSING THE IMPACT OF UNDERWATER NOISE ON MARINE FAUNA: A SOFTWARE TOOL</b> .....	1908
<i>Christine Erbe, Scott Carr</i>	
<b>NEW STRATEGIES FOR MODEL VALIDATION USING MODAL TEST DATA</b> .....	1916
<i>David Ewins</i>	
<b>ACOUSTIC BARRIER FOR TRANSFORMER NOISE</b> .....	1924
<i>Ruisen Ming</i>	
<b>INVESTIGATION OF STL MEASUREMENT METHOD AT THE VEHICLE COMPONENT LEVEL AND CORRELATION BETWEEN MEASUREMENT AND PREDICTION</b> .....	1932
<i>Ri Guang Nan, Yong Jai Park, Yeon June Kang, Chul Min Park, Ki Sang Chae</i>	
<b>DESIGN CHART OF SOUND INSULATION FOR MULTIPLE PANELS</b> .....	1939
<i>Hyun-Ju Kang, Bong-Ki Kim, Jae-Seung Kim, Sang-Ryul Kim</i>	
<b>BRAKE NOISE IN PRACTICE</b> .....	1942
<i>Antti Papinniemi, Daniel Stanef, Stephen Moore, Said Hamdi</i>	
<b>DESIGN SENSITIVITY ANALYSIS OF ZWICKER’S LOUDNESS USING THE ADJOINT VARIABLE METHOD</b> .....	1950
<i>Kunmo Koo, Semyung Wang, Daesung Kim, Chwail Kim, Daeil Kwon</i>	
<b>SHIMMY EVALUATION USING THEORETICAL MULTIBODY MODEL AND EXPERIMENTAL TECHNIQUES</b> .....	1958
<i>Jung Hoon Kim, Yeon June Kang, Ho Won Lee, Dong Ho Yoo</i>	
<b>NON-PERIODIC LOCALLY RESONANT SONIC MATERIALS</b> .....	1966
<i>H. M. Dai, Kin Ming Ho, Z. Yang, P. Sheng</i>	
<b>REGULATING THE RAPIDLY DEVELOPING OIL SANDS INDUSTRY IN ALBERTA AND ITS IMPLICATIONS ON ENVIRONMENTAL NOISE MONITORING AND ASSESSMENT</b> .....	1974
<i>Carolyn Decock, Teresa Drew, Roger Treagus</i>	
<b>DETECTION OF DAMAGE LOCATION IN STRUCTURES USING OPERATING DEFLECTION SHAPE</b> .....	1982
<i>Wonki Bae, Yongsoo Kyong, Semyung Wang, Kyi-hwan Park</i>	

<b>BINAURAL DIRECTIVITY PATTERN MEASUREMENTS AND SIMULATION OF THE KEMAR HEAD MODEL</b> .....	1990
<i>Soon Suck Jarng</i>	
<b>DIGITAL HEARING AID DSP CHIP PARAMETER FITTING OPTIMIZATION</b> .....	1998
<i>Soon Suck Jarng</i>	
<b>THE HEAD RELATED TRANSFER FUNCTION SIMULATION BY FEM/IEM AND RECIPROCAL THEOREM</b> .....	2006
<i>Hiroshi Muraoka, Yuta Takahashi, Tubagus Haedar, Makoto Otani, Tatsuya Hirahara</i>	
<b>NUMERICAL INVESTIGATION OF AERODYNAMIC SOUND RADIATED FROM A BLUFF BODY USING Lighthill Tensor</b> .....	2014
<i>Shoji Kato, Hiroshi Muraoka, Yuta Takahashi, Tubagus Haedar, Akiyoshi Iida</i>	
<b>STATE ESTIMATION METHOD FOR SOUND ENVIRONMENT SYSTEM WITH UNKNOWN STRUCTURE AND ITS APPLICATION TO EVALUATION OF ROAD TRAFFIC NOISE</b> .....	2022
<i>Akira Ikuta, Mitsuo Ohta, Hisako Masuike</i>	
<b>REDUCING THE HEAVYWEIGHT IMPACT SOUND LEVELS IN REINFORCED CONCRETE STRUCTURES USING VISCOELASTIC DAMPING MATERIALS</b> .....	2030
<i>Jin Yong Jeon, Seung Yup Yoo, Pyoung Jik Lee, Young Jeong</i>	
<b>PARAMETRIC VIBRATIONS OF THE ROTOR</b> .....	2035
<i>Livija Cveticanin</i>	
<b>ACTIVE VIBRATION CONTROL OF HARD-DISK DRIVES USING PZT ACTUATED SUSPENSION SYSTEMS</b> .....	2042
<i>Meng-Shiun Tsai, Wei-Hsiung Yuan, Jia-Ming Chang</i>	
<b>SUBJECTIVE EVALUATION OF HEAVY-WEIGHT IMPACT SOUNDS GENERATED BY AN IMPACT BALL</b> .....	2049
<i>Jin Yong Jeon, Pyoung Jik Lee, Jae Ho Kim</i>	
<b>MEASUREMENTS OF VISCOELASTIC PROPERTIES OF CONCRETE STRUCTURE USING BEAM TRANSFER FUNCTION METHOD</b> .....	2056
<i>Junhong Park, Seung Joon Kim, Young Jeong, Jin Yong Jeon</i>	
<b>DIAGNOSTICS OF AERO-ACOUSTIC PERFORMANCE OF FORWARD SLANTED PERFORATED TUBE</b> .....	2063
<i>Kunisato Seto, Tawhidul Islam Khan, Kenbu Teramoto, Hiromiostu Ohta</i>	
<b>EFFECT OF AXIAL FORCE, UNBALANCE AND COUPLING MISALIGNMENT ON VIBRATION OF A ROTOR GAS TURBINE</b> .....	2070
<i>Abdolreza Askarian, S.M.Reza Hashemi</i>	
<b>ADAPTIVE CONTROL OF AN MR MOUNT FOR VIBRATION ATTENUATION</b> .....	2078
<i>R. Pan, Y.C. Chang, J. Shaw</i>	
<b>A MODIFIED GREEN'S FUNCTION FOR A DUCT AND ITS APPLICATION TO THE CALCULATION OF THE SOUND FIELD GENERATED BY A PISTON</b> .....	2086
<i>Alex Zinoviev</i>	
<b>RANKING OF PARTIAL NOISE SOURCES AND NOISE CONTROL MEASURES</b> .....	2094
<i>Matias Aura, Lasse Lamula, Kari Saarinen, Kari Saine</i>	
<b>ACTIVE VIBRATION CLAMPING ABSORBER DESIGN</b> .....	2102
<i>Ley Chen, Fangpo He, Karl Sammut</i>	
<b>ACOUSTIC PERFORMANCE OF FIRST GENERATION APARTMENT HOUSES IN KOREA</b> .....	2110
<i>Yang Ki Oh, Seong Il Hwang, Mun Ki Chu</i>	
<b>STUDY ON CALCULATING ACOUSTIC SENSITIVITY OF CAR CAB BASED ON FINITE ELEMENT METHOD</b> .....	2118
<i>Fangli Ning, Geng Liu, Juan Wei</i>	
<b>IMPACT PROPERTY AND POST IMPACT VIBRATION BETWEEN TWO IDENTICAL SPHERES</b> .....	2124
<i>Hirofumi Minamoto, Keisuke Saitoh, Shozo Kawamura</i>	
<b>FREQUENCY DEPENDENT TORTUOSITY MEASUREMENT BY MEANS OF ULTRASONIC TESTS</b> .....	2132
<i>Paolo Bonfiglio, Francesco Pompoli</i>	
<b>ACOUSTICAL PROPERTIES OF POLYURETHANE OPEN CELLS MATERIALS: EXPERIMENTAL INVESTIGATION AND THEORETICAL MODELS</b> .....	2140
<i>Francesco Pompoli, Paolo Bonfiglio</i>	
<b>ONLINE NON-CONTACT TORSION SENSING METHOD USING FIBER BRAGG GRATING SENSORS AND OPTICAL COUPLING METHOD</b> .....	2148
<i>Yoha Hwang, Jong Min Lee</i>	
<b>RESPONSE OF HULL PLATES DUE TO TURBULENT BOUNDARY LAYERS</b> .....	2154
<i>Anders Nilsson, Fredrik Birgersson</i>	

<b>AURAL CHARACTERISTIC OF THE BONE CONDUCTION SPEAKER ON THE CHEEK BONE</b> .....	2162
<i>Kenji Muto, Kunihiro Takano, Guoyue Chen, Kikuo Asai, Kimio Kondo</i>	
<b>ROBUST CONTROL DESIGN FOR ACTIVE NOISE CONTROL SYSTEMS OF DUCTSWITH A VENTILATION SYSTEM USING A PAIR OF LOUDSPEAKERS</b> .....	2167
<i>Yasuhide Kobayashi, Hisaya Fujioka</i>	
<b>QUIET CITY – A EUROPEAN PROJECT TO SUPPORT CITIES IN NOISE MITIGATION</b> .....	2175
<i>Wolfgang Probst, Markus Petz</i>	
<b>STUDY ON NUMERICAL VIBRO-ACOUSTIC ANALYSIS OF SPACECRAFTS</b> .....	2181
<i>Takashi Takahashi, Keiichi Murakami, Takashi Aoyama, Hideaki Aiso</i>	
<b>VIBRO-ACOUSTIC CHARACTERISATION OF A D.I. DIESEL ENGINE BY THE USE OF THE SCANNING LASER VIBROMETER TECHNIQUE</b> .....	2189
<i>Daniela Siano</i>	
<b>SOUND REDUCTION BY USING ACOUSTIC RESONATORS FOR PAYLOAD FAIRING OF SMALL LAUNCH VEHICLE</b> .....	2197
<i>Sang-Hyeon Seo, Ho-Kyeong Jeong, Soon-Hong Park, Young-Soon Jang, Yeong-Moo Yi, Gwang-Rae Cho</i>	
<b>NOISE MAPPING – WHAT FOR AND HOW TO BE MORE EFFECTIVE?</b> .....	2204
<i>Kin-che Lam</i>	
<b>WAVE-BASED DISCONTINUOUS GALERKIN METHODS IN THE FREQUENCY DOMAIN WITH APPLICATION TO FLOW ACOUSTICS</b> .....	2212
<i>G. Gabard</i>	
<b>MODAL PROBABILISTIC ANALYSIS: THEORY AND APPLICATION</b> .....	2220
<i>Christophe Heinkélé, Stéphane Pernot, Franck Sgard, Claude-henri Lamarque</i>	
<b>ACTIVE CONTROL OF VIBRATION AND RADIATED SOUND OF A SUBMERGED CIRCULAR PLATE</b> .....	2228
<i>Jerzy Wiciak</i>	
<b>COMPARISON OF NUMERICAL APPROACHES FOR THE SIMULATION OF SOUND RADIATION FROM A SCARFED INLET</b> .....	2236
<i>Lukasz Panek, Norbert Schönwald, Frank Thiele, Michael Dumbser, Claus-Dieter Munz</i>	
<b>NOISE TRANSMISSION CONTROL OF DOUBLE PARTITION WINDOWS USING T-SHAPED ACOUSTIC RESONATORS</b> .....	2244
<i>Deyu Li, Ganghua Yu, Li Cheng</i>	
<b>INTERNAL RESISTANCE OPTIMIZATION OF A HELMHOLTZ RESONATOR IN NOISE CONTROL OF SMALL ENCLOSURES</b> .....	2252
<i>Ganghua Yu, Deyu Li, Li Cheng</i>	
<b>APPLICATIONS OF A FINITE-ELEMENT MODE-MATCHING METHOD TO ACOUSTIC DESIGN OF THE BYPASS DUCT OF TURBOFAN ENGINES</b> .....	2260
<i>G. Gabard, R.J. Astley</i>	
<b>A STUDY OF THE DESIGN OF A CANTILEVER TYPE MULTI-D.O.F. DYNAMIC VIBRATION ABSORBER FOR MICRO MACHINE TOOLS</b> .....	2268
<i>Sung-Hyun Jang, Sung-Min Kim, Shil-Geun Kim, Young-Hyu Choi, Jong-Kwon Park</i>	
<b>REDUCTION OF GROUND VIBRATION BY MEANS OF GROUND IMPROVEMENT ALONG A RAILWAY TRACK</b> .....	2276
<i>Jin-Ho Kim, Hyo-Jung Cha</i>	
<b>MODELING THE INTERACTION OF GUIDED WAVE WITH THE WELDED SUPPORT IN PIPES</b> .....	2283
<i>Shiuh-Kuang Yang, Ping-Hung Lee, Jin-Jhy Jeng, Jyin Wen Cheng</i>	
<b>VIBRATION ANALYSIS OF A BEAM CARRYING A MOVING MASS</b> .....	2290
<i>Rabindra Kumar Behera, Dayal R. Parhi</i>	
<b>USING STATISTICAL METHODS TO PREDICT TURBULENCE INDUCED SOUND AND VIBRATION IN AEROSPACE AND AUTOMOTIVE APPLICATIONS</b> .....	2298
<i>Patrik Ragnarsson, Christophe Schram, Michel Tournour, David Freed, Sivapalan Senthoooran, Fongloon Pan</i>	
<b>A NUMERICAL STUDY ON PRACTICAL MEASUREMENT METHOD OF VIBRATION INTENSITY IN A PLATE WITH STANDING WAVE</b> .....	2306
<i>Manabu Yahara, Taito Ogushi, Masato Mikami, Naoya Kojima</i>	
<b>PREDICTIONS OF FAN BROADBAND NOISE DUE TO ROTOR-STATOR INTERACTION</b> .....	2314
<i>Vincent Jurdic, Phillip Joseph, Antoine Moreau, Lars Enghardt</i>	
<b>APPLICATION OF MODAL PARAMETER DERIVATION IN ACTIVE SUPPRESSION OF THERMO ACOUSTIC INSTABILITIES</b> .....	2322
<i>J.D.B.J. van den Boom, I. Lopez, V.N. Kornilov, L.P.H. de Goey, H. Nijmeijer</i>	
<b>A PRELIMINARY STUDY OF NOISE IN A TUNNEL DUE TO A MOVING TRAIN</b> .....	2330
<i>W. S. Fung, T. L. Yip, S. T. So, G. H. Frommer, K. M. Li</i>	

<b>NUMERICAL/EXPERIMENTAL CHARACTERIZATION OF A PIEZOELECTRIC DRIVEN ELECTROMEDICAL DEVICE .....</b>	<b>2338</b>
<i>Massimo Viscardi, Michele Iadevaia, Leonardo Lecce</i>	
<b>A SIMPLE FORMULA FOR PREDICTING THE REVERBERATION TIME IN LONG ENCLOSURES .....</b>	<b>2346</b>
<i>C. Y. C. Lai, K. M. Li</i>	
<b>MONITORING AND ASSESSMENT OF AIRCRAFT NOISE IN AN AIRPORT'S NEIGHBORHOOD .....</b>	<b>2354</b>
<i>M. K. Law, K. M. Li</i>	
<b>TRANSMISSION OF SOUND IN A LONG ENCLOSURE WITH A "T" INTERSECTION .....</b>	<b>2362</b>
<i>S. T. So, W. S. Fung, C. W. Leung, K. M. Li</i>	
<b>ON THE USE OF A HIGH-ORDER FINITE ELEMENT -WAVE BASED METHOD FOR INTERIOR ACOUSTIC CAVITY ANALYSIS.....</b>	<b>2370</b>
<i>Bert Pluymers, Dirk Vandepitte, Paul Sas, Wim Desmet</i>	
<b>SOMETIMES DIGITAL CONTROL LEADS TO CHAOS.....</b>	<b>2378</b>
<i>Gabor Csernak, Gábor Stepan</i>	
<b>FREQUENCY-DOMAIN PREDICTION OF SOUND PROPAGATION THROUGH AXISYMMETRIC FLOW DUCTS .....</b>	<b>2386</b>
<i>X. D. Li, X.Y. Li, F. Thiele</i>	
<b>AFT FAN NOISE REDUCTION WITH A LINED AFTERBODY .....</b>	<b>2394</b>
<i>L. De Mercato, B. J. Tester, K. Holland</i>	
<b>A SELECTIVE OVERVIEW OF HIGH-ORDER FINITE DIFFERENCE SCHEMES FOR AEROACOUSTIC APPLICATIONS.....</b>	<b>2402</b>
<i>I. Spisso, A. Rona</i>	
<b>BENCHMARK TESTS TO RANK SOFTWARE FOR NOISE PREDICTION .....</b>	<b>2410</b>
<i>Wolfgang Probst</i>	
<b>VIBRATION CONTROL METHOD OF SPEAKER ENCLOSURE AND ITS EFFECT ON REPLAY SOUND QUALITY AND SUMMING LOCALIZATION .....</b>	<b>2418</b>
<i>Kiminobu Nishimura, Ryuhkei Ina</i>	
<b>BEAMFORMING IN HIGHLY REVERBERANT WIND TUNNELS POSSIBILITIES AND LIMITATIONS.....</b>	<b>2426</b>
<i>Benjamin Fenech, Kenji Takeda</i>	
<b>DYNAMICS OF PIEZOCERAMICS-BASED MASS AND FORCE ACTUATORS FOR ROTATING MACHINES .....</b>	<b>2434</b>
<i>Peter Sloetjes, Andre de Boer, Peter van der Hoogt</i>	
<b>TIME DOMAIN LARGE-SCALE FINITE ELEMENT SOUND FIELD ANALYSIS OF A MULTI-PURPOSE HALL .....</b>	<b>2442</b>
<i>Toru Otsuru, Takeshi Okuzono, Noriko Okamoto, Kota Isobe, Hiroshi Furuya</i>	
<b>CORRELATION BETWEEN SIL AND SII IN A LIGHT AIRCRAFT CABIN DURING FLIGHT.....</b>	<b>2450</b>
<i>Tino Bucak, Ernest Bazijanac, Biljana Juricic</i>	
<b>INFLUENCE OF TRAFFIC SOUND PARAMETERS ON THE READING PERFORMANCE IN ELEMENTARY SCHOOL CHILDREN .....</b>	<b>2458</b>
<i>Helga Sukowski, August Schick</i>	
<b>OPERATIONAL STRUCTURAL TRANSFER PATH ANALYSIS.....</b>	<b>2466</b>
<i>Gert De Sitter, Patrick Guillaume, Christof Devriendt</i>	
<b>NONLINEAR SECONDARY PATH MODEL IDENTIFICATION .....</b>	<b>2473</b>
<i>Jaroslav Figwer</i>	
<b>SOME NEW GENERAL RESULTS ON THE FLUID-STRUCTURE INTERACTION PROBLEM.....</b>	<b>2481</b>
<i>Yuri Bobrovnskii</i>	
<b>SOUND RADIATION FROM A BURIED NOZZLE WITH JET AND BYPASS FLOW .....</b>	<b>2489</b>
<i>A. Demir, S.W. Rienstra</i>	
<b>CONTRAST FUNCTION BASED FOURTH-ORDER STATISTICS AND WIENER FILTERING FOR SEPARATION OF CONVOLUTIVE MIXTURES .....</b>	<b>2497</b>
<i>Moussa Akil, Christine Serviere, Robert B. Randall</i>	
<b>COMPARISON OF HIGHER-ORDER NUMERICAL SCHEMES AND SEVERAL FILTERING METHODS APPLIED TO NAVIER-STOKES EQUATIONS WITH APPLICATIONS TO COMPUTATIONAL ACOUSTICS.....</b>	<b>2505</b>
<i>Liang S. Lai, Georgi S. Djambazov, Choi-Hong. Lai, Koulis A. Pericleous</i>	
<b>STRONG COUPLING OF THE FAST MULTILEVEL MULTIPOLE BOUNDARY ELEMENT METHOD WITH THE FINITE ELEMENT METHOD FOR VIBRO-ACOUSTIC PROBLEMS.....</b>	<b>2513</b>
<i>Dominik Brunner, Michael Junge, Lothar Gaul</i>	
<b>REASSIGNMENT VECTOR FIELD FOR TIME-FREQUENCY SEGMENTATION .....</b>	<b>2521</b>
<i>Fabien Millioz, Nadine Martin</i>	



<b>CHANGE IN QUALITY OF ENVIRONMENTAL SOUND IN THE AUTUMN</b> .....	2529
<i>Hideo Shibayama</i>	
<b>COMPARATIVE ANALYSIS OF RETROFIT WINDOWS FOR NOISE CONTROL AT A HOTEL</b> .....	2537
<i>Chad Himmel</i>	
<b>SUBOPTIMAL MULTICHANNEL ADAPTIVE ANC SYSTEM</b> .....	2545
<i>Krzysztof Czyz, Jaroslaw Figwer</i>	
<b>POSITION DEPENDENT LINEARIZED ELASTIC MODELS OF PARALLEL ROBOT SYSTEMS WITH EMBEDDED SMART DEVICES FOR VIBRATION SUPPRESSION CONTROL ALGORITHMS</b> .....	2552
<i>Michael Rose, Stephan Algermissen, Ralf Keimer, Christoph Budde</i>	
<b>TURBOMACHINERY NOISE RADIATION THROUGH THE ENGINE EXHAUST (TURNEX)</b> .....	2560
<i>B. J. Tester</i>	
<b>EFFICIENT NUMERICAL MODELS FOR INVESTIGATING THE STATISTICS OF RANDOM DYNAMIC SYSTEMS</b> .....	2568
<i>Julio A. Cordioli, Robin S. Langley, Vincent Cotoni, Samir N. Y. Gerges</i>	
<b>ACOUSTIC HOLOGRAPHY AND COMPLEMENTARY BOUNDARY CONDITIONS</b> .....	2576
<i>Vincent Martin, Thibault Le Bourdon</i>	
<b>NOISE EVALUATION IN A RACE-TRACK: MEASUREMENTS, SOFTWARE ANALYSES AND NEED OF CONTINUOUS MONITORING: COMPARISON AMONG THE RESULTS</b> .....	2584
<i>Anna Magrini, Andrea Cerniglia, Mariagiovanna Lenti, Lucia Cattani</i>	
<b>GUIDE FOR FLANKING SOUND TRANSMISSION IN WOOD FRAMED CONSTRUCTION – AIRBORNE SOURCES</b> .....	2590
<i>T.R.T. Nightingale, J.D. Quirt, F. King</i>	
<b>OPERATIONAL MODAL ANALYSIS BY USING TRANSMISSIBILITY MEASUREMENTS WITH CHANGING DISTRIBUTED LOADS</b> .....	2596
<i>Christof Devriendt, Patrick Guillaume, Gert De Sitter, Steve Vanlanduit</i>	
<b>INVESTIGATION OF QUANTUM AND CLASSICAL MODELS FOR MOLECULAR RELAXATION USING THE DIRECT SIMULATION MONTE CARLO METHOD</b> .....	2604
<i>Amanda D. Hanford, Patrick D. O'Connor, Lyle N. Long, James B. Anderson</i>	
<b>INVESTIGATION OF A TWO-PARAMETER SYSTEM OF EVALUATING IMPACT NOISE INSULATION</b> .....	2612
<i>John J. LoVerde, Wayland Dong</i>	
<b>GRAFT OF THE BOUNDARY INTEGRAL METHOD ONTO THE IMAGE-SOURCE METHOD FOR VEHICLE ACOUSTICS</b> .....	2619
<i>Vincent Martin, Thomas Guignard</i>	
<b>THE PiP MODEL, A SOFTWARE APPLICATION FOR CALCULATING VIBRATION FROM UNDERGROUND RAILWAYS</b> .....	2627
<i>Mohammed Hussein, Hugh Hunt</i>	
<b>SOUND PROPAGATION IN NARROW CHANNELS WITH ARBITRARY CROSS SECTIONS AND SUPERIMPOSED MEAN FLOW WITH APPLICATION TO CHARGE AIR COOLERS</b> .....	2633
<i>Magnus Knutsson, Mats Abom</i>	
<b>ANALYSIS AND EVALUATION OF ENVIRONMENTAL NOISE CONDITIONS IN TWO DIFFERENT AREAS IN MEXICO CITY</b> .....	2641
<i>Miriam German Gonzalez, Fernando Greene Castillo, Arturo O. Santillan</i>	
<b>APPLICATION OF MODAL MODEL REDUCTION FOR HYBRID STRUCTURAL FINITE ELEMENT - ACOUSTIC WAVE BASED MODELS</b> .....	2649
<i>Bert Van Genechten, Bert Pluymers, Caroline Vanmaele, Dirk Vandepitte, Wim Desmet</i>	
<b>TWO MODELLING APPROACHES FOR PERIODIC RIB-STIFFENED PLATES TYPICAL OF FLOOR ASSEMBLIES</b> .....	2658
<i>Trevor R.T. Nightingale, Ivan Bosmans</i>	
<b>ADVANCES IN MONITORING AND MITIGATION OF SHIP SIGNATURES</b> .....	2666
<i>D. Hutt, M. L. Seto, L. Gilroy</i>	
<b>A FEEDFORWARD ACTIVE NOISE CONTROL SYSTEM FOR DUCTS USING A PASSIVE SILENCER TO REDUCE ACOUSTIC FEEDBACK</b> .....	2674
<i>M. Larsson, S. Johansson, L. Hakansson, I. Claesson</i>	
<b>MANAGEMENT OF ENVIRONMENTAL NOISE – CRACOW EXAMPLE</b> .....	2682
<i>Wojciech Ciesielka, Andrzej Golas</i>	
<b>DEPENDENCE OF OSCILLATIONAL INSTABILITIES ON THE AMPLITUDE OF THE ACOUSTIC WAVE IN SINGLE-AXIS LEVITATORS</b> .....	2690
<i>Arturo O. Santillan, Ricardo R. Boullosa, Vicente Cutanda-Henriquez, Antonio Perez Lopez</i>	
<b>HOW TO PREDICT THE VIBRATION EFFECT DUE TO MACHINE OPERATION ON ITS SURROUNDINGS</b> .....	2697
<i>Alexandre Augusto Simoes, Marcio Tadeu de Almeida, Fabiano Ribeiro do Vale Almeida</i>	

<b>ESTIMATION OF THE ACTIVE AND REACTIVE SOUND POWER USING HYPER-MATRICES OF IMPEDANCE</b> .....	2705
<i>John P. Arenas, Cristobal Albarracin</i>	
<b>EXPERIMENTAL COMPARISON OF PU PROBES AND MICROPHONE ARRAYS USED IN IMPULSE ACOUSTIC HOLOGRAPHY</b> .....	2713
<i>Francois Ollivier, Sylvie Le Moyne, Christophe Picard</i>	
<b>REPEATABILITY OF CPX TYRE/ROAD NOISE MEASUREMENTS</b> .....	2721
<i>Gillian Adams, Frits Kamst, Stephen Pugh</i>	
<b>SOUND SOURCE LOCALIZATION WITH BIO-MIMICKING PARASITOID FLY</b> .....	2727
<i>Na Ta, Zhushi Rao, Qingsheng Wang</i>	
<b>SYSTEM IDENTIFICATION IN STOCHASTIC DOMAIN USING SYSTEM OUTPUT ONLY</b> .....	2735
<i>Sung-Man Park, Woon-Kyung Yeo, Dong-Hee Lee, Kyo-Soon Chae, Jong-Bok Lee, Hoon Heo</i>	

## VOLUME 4

<b>NOISE SOURCE IDENTIFICATION IN MAGNETIC FIELD USING SVDD (SUPPORT VECTOR DATA DESCRIPTION)</b> .....	2741
<i>Dong-Chul Kwon, Jong-Bok Lee, Il-Kwan Ko, Dae-Sung Kang, Kyoung-Kook Kim, Hoon Heo</i>	
<b>NOVELTY DETECTION OF RADAR SIGNAL USING SUPPORT VECTOR DATA DESCRIPTION</b> .....	2748
<i>Jong-Bok Lee, Dae-Sung Kang, Yun-Hyun Cho, In-Beom Yang, Hoon Heo</i>	
<b>EXPOSURE OF TIMBER TRUCK DRIVERS TO WHOLE-BODY VIBRATION AND NOISE</b> .....	2755
<i>Esko Sorainen, Marko Oksanen, Aki Vahanikkila, Esko Rytkönen</i>	
<b>STUDY ON THE DYNAMIC TILT CHARACTERISTICS OF OPTICAL PICKUP ACTUATORS CONSIDERING ELECTROMAGNETIC NONLINEARITIES USING COUPLED-FIELD ANALYSIS</b> .....	2762
<i>Jong-Jin Lee, Jae Eun Kim, Sam-Nyol Hong, Eui-Seok Ko, Byung-Hoon Min</i>	
<b>RESPONSE ANALYSIS OF SHIP STRUCTURES SUBJECTED TO A CLUSTER OF IMPULSIVE EXCITATIONS</b> .....	2770
<i>Elena Ciappi, Daniele Dessi</i>	
<b>MODAL IDENTIFICATION OF THE WET MODES OF A MARINE STRUCTURE</b> .....	2778
<i>Daniele Dessi, Riccardo Mariani</i>	
<b>NON-UNIFORM, HARMONIC, EDGE EXCITATION OF A WAVEGUIDE</b> .....	2786
<i>Baruch Karp</i>	
<b>BINAURAL AND MONAURAL HELMET SYSTEMS: NOISE CONSIDERATIONS</b> .....	2794
<i>Tomasz Letowski, Larry Ferguson</i>	
<b>DEVELOPMENT OF A SILENCER FOR ACOUSTIC ENCLOSURES</b> .....	2802
<i>Jun-Shin Lee, Wook-Ryun Lee, Seok-Man Shon, Hong-Jun Ahn, Young-Dal Kim, Jae-Myung Shim</i>	
<b>ONE SENSOR MICROPHONE ARRAY APPLICATION IN SOURCE LOCALIZATION</b> .....	2809
<i>Percy F. Wang, Mingsian R. Bai</i>	
<b>STIFFENERS EFFECT ON SOUND TRANSMISSION THROUGH A THIN PLATE EXCITED BY A TURBULENT BOUNDARY LAYER (CORCOS MODEL) – COMPARISON WITH A DIFFUSE SOUND FIELD</b> .....	2817
<i>Pascale Neple, Julien Manera, Nathalie Pellegrin, Jean-Pierre Coyette</i>	
<b>TIME-DOMAIN ACOUSTIC SIMULATION OF 3D LINED DUCTS WITH FLOW USING AN UNSTRUCTURED DISCONTINUOUS GALERKIN METHOD</b> .....	2824
<i>Yves Reymen, Martine Baelmans, Wim Desmet</i>	
<b>DESIGN ANALYSIS OF A RUBBER MOUNT SYSTEM FOR A PUSHTYPE CENTRIFUGE</b> .....	2834
<i>Carl Nel</i>	
<b>A TEMPUS EXPERIENCE: NEW CURRICULUM IN SOUND AND VIBRATION CONTROL IN EGYPT</b> .....	2842
<i>Tamer Elnady, Hans Boden</i>	
<b>MULTI-CHANNEL ADAPTIVE VIBRATION CONTROL OF SMART PLATE USING HYBRID ALGORITHM</b> .....	2850
<i>Seyyed M.R. Hashemi, A.R. Ohadi</i>	
<b>STRUCTURE-BORNE NOISE GENERATED BY VACUUM CLEANER SUCTION UNITS</b> .....	2858
<i>Mirko Cudina, Jurij Prezelj</i>	
<b>LIMITATIONS AND ERROR ANALYSIS OF SPHERICAL MICROPHONE ARRAYS</b> .....	2866
<i>Thushara D. Abhayapala, Michael C. T. Chan</i>	
<b>AEROACOUSTIC INVESTIGATION OF A TIP CLEARANCE FLOW</b> .....	2874
<i>Marc C. Jacob, Julien Grilliat, Michel Roger, Roberto Camussi</i>	

<b>SOME RESULTS ON CONTROL OF SOUND RADIATION USING SHUNT PIEZOELECTRIC MATERIALS</b> .....	2882
<i>Stanislaw J. Pietrzko, Qibo Mao</i>	
<b>OPERATIONAL MODAL ANALYSIS IN PRESENCE OF UNKNOWN VARYING HARMONIC FORCES</b> .....	2890
<i>Patrick Guillaume, Christof Devriendt, Steve Vanlanduit</i>	
<b>INTEGRATION OF SUB-SYSTEMS ON VEHICLES</b> .....	2898
<i>Vincent Martin, Saul Mapagha</i>	
<b>DEVELOPMENT OF A GENERAL PERIODIC SEA SUBSYSTEM FOR MODELING THE VIBRO-ACOUSTIC RESPONSE OF COMPLEX STRUCTURES</b> .....	2906
<i>V. Cotoni, R. Langley</i>	
<b>USING THE HYBRID FE-SEA METHOD TO PREDICT STRUCTURE-BORNE NOISE TRANSMISSION IN A TRIMMED AUTOMOTIVE VEHICLE</b> .....	2914
<i>A. Charpentier, V. Cotoni, K. Fukui</i>	
<b>MODELING METHODS FOR VIBRO-ACOUSTIC ANALYSIS OF COMMERCIAL AIRCRAFTS</b> .....	2922
<i>V. Cotoni, B. Gardner, J. Carneal, C. Fuller</i>	
<b>MSL PYROSHOCK DEVELOPMENT TEST PROGRAM FOR SHOCK MITIGATION</b> .....	2930
<i>Juan Pablo Fernandez</i>	
<b>SEPARATING GEAR AND BEARING SIGNALS FOR BEARING FAULT DETECTION</b> .....	2938
<i>Wenyi Wang</i>	
<b>ACOUSTIC DETECTION OF TENSION WOOD IN EUCALYPTS</b> .....	2946
<i>Jun Li Yang, Voichita Bucur, Dung Ngo</i>	
<b>DISSEMINATION OF PREDICTED NOISE LEVELS IN A 3D VISUALISED INTERACTIVE ENVIRONMENT THROUGH THE INTERNET FOR 3D EIA AND PLANNING PROJECTS (HONG KONG)</b> .....	2954
<i>Andy W. L. Chung, W. M. To, James P. S. Choi</i>	
<b>MODELLING OF FLOATING-SLAB TRACKS WITH DISCONTINUOUS SLABS IN UNDERGROUND RAILWAY TUNNELS</b> .....	2961
<i>Mohammed Hussein, Hugh Hunt</i>	
<b>STABILITY OF SOUND SPEED AND ATTENUATION IDENTIFIED IN MATERIAL SAMPLES</b> .....	2969
<i>Vincent Martin, Vanessa Martin, Philippe Poullain</i>	
<b>THE EFFECTS OF LOW-FREQUENCY VIBRATIONS ON CONTROL PROFILE OF BLOOD</b> .....	2977
<i>Zbigniew Damijan</i>	
<b>VIBRATION CONTROL OF BUILDINGS: CASE STUDIES</b> .....	2985
<i>Maud Serra</i>	
<b>ACUTE EFFECT OF A HELICOPTER FLIGHT ON CELLULAR TISSUE BIOCHEMICAL MARKERS</b> .....	2993
<i>Jan Ivar Kasin, John Kjekshus, Anthony Wagstaff</i>	
<b>A 3D NUMERICAL METHOD TO STUDY POROELASTIC LINERS WITH MEAN FLOW</b> .....	2999
<i>Benoit Nennig, Mabrouk Ben Tahar, Emmanuel Perrey-Debain</i>	
<b>MEASURING WAVE FRONTS OF INFLATING AIRBAGS</b> .....	3007
<i>Per Rasmussen, Kim M. Nielsen</i>	
<b>GAUGING OF HYDROACOUSTIC TRANSDUCERS IN SMALL-SCALE MEASUREMENT POOLS USING CONTINUOUS SIGNALS</b> .....	3015
<i>Igor Silvestrov</i>	
<b>THE DESIGN OF MOTOR BRACKETS FOR THE REDUCTION OF STRUCTURE-BORNE NOISE IN PACKAGE AIR-CONDITIONERS</b> .....	3023
<i>Sang-Gil Park, Hyun-Jin Sim, Hae-Jin Lee</i>	
<b>EXPERIMENTAL STUDY OF THE FLOW-EXCITED ACOUSTICAL LOCK-IN IN A CORRUGATED PIPE</b> .....	3031
<i>Vincent Debut, Jose Antunes, Miguel Moreira</i>	
<b>TRANSIENT DYNAMIC RESPONSES OF AN INTERNAL LIQUID-LNG TANK-SEA WATER INTERACTION SYSTEM EXCITED BY WAVES AND EARTHQUAKE LOADS</b> .....	3039
<i>Y. P. Xiong, J. T. Xing, M. Tan</i>	
<b>SOUND PROPAGATION IN A REGION OF HOT GAS USING THE DRBEM</b> .....	3047
<i>Rafael Piscoya, Martin Ochmann</i>	
<b>STUDY THE PANEL AND HELMHOLTZ RESONANCES OF A MICRO-PERFORATED ABSORBER</b> .....	3054
<i>Y. Y. Lee, C. F. Ng, C. K. Hui</i>	
<b>LOUD: A 1020-NODE MICROPHONE ARRAY AND ACOUSTIC BEAMFORMER</b> .....	3059
<i>Eugene Weinstein, Kenneth Steele, Anant Agarwal, James Glass</i>	
<b>TRANSIENT VIBRATION ANALYSIS FOR GENERATING LOW ELECTRICAL POWER</b> .....	3067
<i>Mikail F. Lumentut, Kian K. Teh, Ian M. Howard</i>	

<b>THE ROAD TRAFFIC NOISE ATTENUATION BY EXTERNAL WALL OF OFFICE BUILDING IN STANDARD WORK CONDITIONS .....</b>	<b>3075</b>
<i>Witold Mikulski</i>	
<b>IMPLEMENTATION OF A HYBRID MODEL FOR PREDICTION OF SOUND INSULATION OF FINITE-SIZE MULTILAYERED BUILDING ELEMENTS .....</b>	<b>3083</b>
<i>Selma Kurra</i>	
<b>COMPARISON OF EXPERIMENT, FINITE ELEMENT AND WAVE BASED MODELS FOR MASS INCLUSIONS IN PORO-ELASTIC LAYERS .....</b>	<b>3091</b>
<i>M. R. F. Kidner, K. Idrisi, J. P. Carneal, M. E. Johnson</i>	
<b>ENVIRONMENTAL EFFECTS FROM VIBRATION EMITTED FROM THE OPERATION OF URBAN HIGHWAYS: A MEASUREMENT CAMPAIGN AT ATHENS RING MOTORWAY NETWORK.....</b>	<b>3099</b>
<i>Konstantinos Vogiatzis</i>	
<b>OCCUPATIONAL NOISE VIBRATION &amp; AIR POLLUTANTS FLUCTUATION INSIDE THE TOLL BOOTHS IN THE ATHENS RING MOTORWAY NETWORK: “ATTIKI ODOS” .....</b>	<b>3105</b>
<i>Konstantinos Vogiatzis, Nikolaos Elio</i>	
<b>STRUCTURE-BORNE SOUND CONTRIBUTION INTO EARTH-MOVING MACHINE CABS .....</b>	<b>3112</b>
<i>Nickolay Ivanov, David Copley, Natalia Tyurina</i>	
<b>EXPERIMENTAL OUTDOOR SOUND PROPAGATION AND ENM .....</b>	<b>3118</b>
<i>Najah Ishac</i>	
<b>CONDITION MONITORING AND VIBRATION TESTING OF CENTRIFUGAL PUMPS .....</b>	<b>3126</b>
<i>Ravindra S. Birajdar, S. M. Ballullaya</i>	
<b>ONE DESIGN OF A SILENCER FOR ATTENUATING FAN NOISE.....</b>	<b>3132</b>
<i>Tian Qi, Yafeng Wu, Ye Li</i>	
<b>RESEARCH ON DUAL-SHAKER SINE VIBRATION CONTROL .....</b>	<b>3138</b>
<i>Yaoqi Feng, Hanping Qiu</i>	
<b>STEPWISE AIR FLOW IN THE GRAVITY DRAUGHT AEROACOUSTIC TUNNEL .....</b>	<b>3146</b>
<i>Radu Dan Rugescu</i>	
<b>NONLINEAR CONTROL OF A ONE AXIS MAGNETIC SPRING .....</b>	<b>3154</b>
<i>Will S. Robertson, Ben S. Cazzolato, Anthony C. Zander</i>	
<b>EVALUATION OF ENHANCEMENT OF SOUND QUALITY OF AXLE GEAR BASED ON ARTIFICIAL NEURAL NETWORK .....</b>	<b>3162</b>
<i>Tae-Gyu Kim , Sang Kwon Lee, Sung-Jong Kim</i>	
<b>A CEPSTRUM-BASED METHOD FOR REMOTE TRAIN DETECTION .....</b>	<b>3168</b>
<i>Carlos F. Carvalho</i>	
<b>HIGH QUALITY RECORDING THROUGH MICROPHONE ARRAY IN NOISY AND REVERBERANT ENVIRONMENT .....</b>	<b>3176</b>
<i>Hideo Tsuru, Hirofumi Nakajima, Yusaku Fujita</i>	
<b>STUDIES ON INSERTION LOSS EXPERIMENT OF CRACKED PLATES .....</b>	<b>3184</b>
<i>Jiang Lin</i>	
<b>STUDY ON ACOUSTIC SCATTERING BY HARD PLANE AND SOFT SURFACE MULTI- CRACKED PLATE.....</b>	<b>3189</b>
<i>Jiang Lin, Zhao De-You</i>	
<b>SPECIAL ISSUES RELATED TO DETECTION OF CIRCUMFERENTIAL CRACK AT DIFFERENT ORIENTATIONS IN PIPES BY VIBRATION METHOD.....</b>	<b>3196</b>
<i>Sachin S. Naik, Surjya K. Maiti</i>	
<b>STUDY ON USING NOISE FOR ADHESION CONTROL SYSTEM OF RAILWAY VEHICLE .....</b>	<b>3204</b>
<i>Maksym Spiriyagin, Kwan Soo Lee, Hong Hee Yoo</i>	
<b>VIBRATION FROM RAILWAYS: CAN WE ACHIEVE BETTER THAN +/-10dB PREDICTION ACCURACY? .....</b>	<b>3212</b>
<i>Hugh Hunt, Mohammed Hussein</i>	
<b>PROTECTION AGAINST NOISE ON A6 HIGHWAY RIJEKAZAGREB, KARLOVAC – NOVIGRAD SECTION .....</b>	<b>3220</b>
<i>Vesna Dragcevic, Ivica Stanceric, Marko Vajdic</i>	
<b>ASSESSMENT OF THE SMOOTHNESS OF SURFACES WITH AN ACOUSTICAL PROBE .....</b>	<b>3228</b>
<i>A. Le Bot, H. Zahouani, R. Vargiolu, A. Mavon</i>	
<b>TOWARDS A MUSIC SYNTHESIZER CONTROLLED BY TIMBRAL ADJECTIVES .....</b>	<b>3234</b>
<i>David M. Howard, Alastair C. Disley, Andy D. Hunt</i>	
<b>RECENT APPROACHES TO ENVIRONMENTAL NOISE MONITORING AND ESTIMATION OF ITS INFLUENCE TO THE HEALTH OF INHABITANTS.....</b>	<b>3242</b>
<i>Andrei V. Vassiliev</i>	

<b>SYSTEMATIZATION OF THE PRINCIPLES OF CLASSIFICATION OF ACTIVE NOISE AND VIBRATION CONTROL METHODS .....</b>	<b>3250</b>
<i>Andrei V. Vassiliev</i>	
<b>VIRTUAL VIBRATION TEST AND VERIFICATION FOR THE SATELLITE.....</b>	<b>3258</b>
<i>Shu-hong Xiang , Chuang Liu , Yan Tingfei</i>	
<b>EXCITATION OF A SUBMARINE HULL BY PROPELLER FORCES .....</b>	<b>3265</b>
<i>Sascha Merz, Nicole Kessissoglou, Roger Kinns</i>	
<b>DIRECT ALGEBRAIC METHOD FOR SOUND SOURCE LOCALIZATION WITH FINEST RESOLUTION BOTH IN TIME AND FREQUENCY .....</b>	<b>3273</b>
<i>Shigeru Ando, Nobutaka Ono, Takaaki Nara</i>	
<b>CONTROL OF VEHICLE SUSPENSION USING NONLINEAR ENERGY SINK CONTROLLER .....</b>	<b>3281</b>
<i>Ling Zheng, Yinong Li, Amr Baz</i>	
<b>GENERALISATION OF VESELAGO'S NEGATIVE REFRACTION THEORY USING SYMMETRIES.....</b>	<b>3289</b>
<i>W. S. Gan</i>	
<b>A BOUNDARY ELEMENT PACKAGE CONTAINING APPROXIMATE SOLVERS FOR TREATING HIGH FREQUENCY ACOUSTIC SCATTERING .....</b>	<b>3292</b>
<i>Ralf Burgschweiger, Martin Ochmann, Bodo Nolte, Ingo Schafer</i>	
<b>ACOUSTIC TESTS ON ORIGINAL CONCRETE AND INERT MIXTURE MATERIALS .....</b>	<b>3300</b>
<i>Franco Cotana, Federico Rossi, Andrea Nicolini, Sofia Simoni</i>	
<b>ACOUSTIC SIGNATURE OF A SUBMARINE HULL .....</b>	<b>3306</b>
<i>Mauro Caresta, Nicole Kessissoglou</i>	
<b>HOW TERMITES USE VIBRATION TO ASSESS POTENTIAL FOOD STRUCTURES .....</b>	<b>3314</b>
<i>Ra Inta, Joseph C.S. Lai, Theo A. Evans</i>	
<b>EXTRACTION OF WAVENUMBERS AND AMPLITUDES FROM PLATE VIBRATION MEASUREMENTS.....</b>	<b>3322</b>
<i>Michael Skeen, Nicole Kessissoglou</i>	
<b>RESEARCH OF AURALIZATION IN SMALL ENCLOSURES .....</b>	<b>3330</b>
<i>Fangli Ning, Geng Liu, Juan Wei</i>	
<b>STATISTICAL ENERGY ANALYSIS USING TRANSMISSION COEFFICIENTS DERIVED FOR FINITE COUPLED PLATES.....</b>	<b>3336</b>
<i>Michael Skeen, Nicole Kessissoglou</i>	
<b>THE 'DIDJERIDUO': MUSICAL IMPLICATIONS OF A THREEPORT BRANCHED DUCT .....</b>	<b>3344</b>
<i>Markus Schneider, John Smith, Joe Wolfe</i>	
<b>LAMINAR BOUNDARY LAYER INSTABILITY NOISE PRODUCED BY AN AEROFOIL .....</b>	<b>3352</b>
<i>Michael Kingan, John Pearse</i>	
<b>IMPLEMENTATION OF THE UNIFORM THEORY OF DIFFRACTION IN THE PHASED BEAM TRACING METHOD .....</b>	<b>3360</b>
<i>Cheol-Ho Jeong, Jeong-Guon Ih</i>	
<b>AN INVESTIGATION ON THE SENSOR PROXIMITY EFFECT IN THE BEM-BASED NAH .....</b>	<b>3367</b>
<i>Agustinus Oey, Jeong-Guon Ih, Hae-Won Jang, Bong-Ki Kim</i>	
<b>SPECTRUM ENHANCEMENT OF LASER VIBROMETER SIGNALS USING A NEW SPECKLE NOISE REDUCTION TECHNIQUE AND ANGULAR RESAMPLING .....</b>	<b>3375</b>
<i>Jiri Vass, Robert B. Randall, Cristina Cristalli, Barbara Torcianti, Pavel Sovka, Radislav Smid</i>	
<b>PREDICTION OF BREAKOUT NOISE FROM END PLATE OF AN EXPANSION CHAMBER USING COUPLED FE/BE ANALYSIS.....</b>	<b>3383</b>
<i>Deepak W. Pande, Dhanesh N. Manik</i>	
<b>ENVIRONMENTAL NOISE INVESTIGATION PROCEDURE IN THE URBAN ROAD NETWORK IN MALTA.....</b>	<b>3390</b>
<i>Constantinos Vogiatzis, Vasilis Vasiliadis</i>	
<b>THE AFFECT OF THE THESSALONIKI RING ROAD TRAFFIC NOISE EMISSION ON HOSPITALIZED PATIENTS IN PAPAGEORGIOU HOSPITAL.....</b>	<b>3398</b>
<i>Emmanuel Tzekakis, Venetia Tsara, Vasilis Vasiliadis</i>	
<b>A SPECTRAL FINITE ELEMENT MODEL FOR THIN PLATE VIBRATION .....</b>	<b>3405</b>
<i>Mohammad Tawfik</i>	
<b>NOISE REDUCTION OF A RECIPROCATING COMPRESSOR BY ADDING A RESONATOR IN SUCTION PATH OF REFRIGERANT .....</b>	<b>3419</b>
<i>Yogesh V. Birari, Mayur M. Nadgouda</i>	
<b>ULTRASOUND PIEZOCERAMIC TRANSDUCER FOR UNDERWATER ACOUSTICS IN SONOCHEMISTRY .....</b>	<b>3427</b>
<i>Irinela Chilibon, Mihaela Mocioi, Carmencita Mateescu</i>	
<b>NOISE CONTROL IN HYDROELECTRIC STATIONS.....</b>	<b>3434</b>
<i>Silviu Platon</i>	

<b>TWO- AND THREE-DIMENSIONAL COUPLING IN THE NOISE PREDICTION OF THE EDGE TONE</b> .....	3438
<i>Istvan Vaik, Irfan Ali, Max Escobar, Manfred Kaltenbacher, Stefan Becker, Gyorgy Paal</i>	
<b>USING HYSTERESIS LOOP AND TORSIONAL SHOCK LOADING TO ASSES DAMPING AND EFFICIENCY OF CYCLODRIVES</b> .....	3446
<i>Vladis Kosse</i>	
<b>COMPARING WEEKLY AND WEEKDAY AVERAGED TRAFFIC DATA WHEN MODELLING TRAFFIC NOISE</b> .....	3454
<i>Peter Karantonis, David Gonzaga</i>	
<b>STUDY ON MECHANIZED MATHEMATICS MODELLING FOR 200MW TURBO-GENERATOR SYSTEM</b> .....	3462
<i>Li-guo Wang, Fang Bo, Li Fengming, Xu Dianguo, Huang Wenhui</i>	
<b>THE CONTRIBUTION OF THE INDIVIDUAL SOUND SOURCE GENERATED FROM SHINKANSEN VEHICLES</b> .....	3469
<i>Kaoru Murata, Kiyoshi Nagakura, Toshiki Kitagawa, Akio Sagawa</i>	
<b>VIBRATION BASED MODELLING OF THREE POINT BEND SPECIMEN FOR EVALUATION OF DYNAMIC STRESS INTENSITY FACTOR</b> .....	3477
<i>V. M. Chavan, S. K. Maiti, B. K. Dutta</i>	
<b>GIS FOR THE EVALUATION OF ROAD TRAFFIC NOISE AT AREAS FACING ROADS IN JAPAN: KEY FUNCTIONS INCLUDING ESTIMATION OF THE NUMBERS OF RESIDENTS IN BUILDINGS</b> .....	3485
<i>Hiroyuki Imaizumi, Kazutoshi Fujimoto, Yasumori Takahashi, Ken Anai, Yasuhiro Hiraguri</i>	
<b>NOISE SUPPRESSION USING ACTIVE NOISE CONTROL AND MASKING</b> .....	3492
<i>Amit Rajora, Woon-Seng Gan, Sen M. Kuo, Yong-Kim Chong</i>	
<b>PASSIVE NOISE CONTROL OF A BURNER-COMBUSTOR SYSTEM OF A TURBO-FAN ENGINE</b> .....	3502
<i>Ayman El-Badawy, Wael EL-Arna'outy</i>	
<b>OPTIMAL CIRCULAR ARRAY CONFIGURATION</b> .....	3510
<i>S.K. Lau</i>	
<b>A NUMERICAL STUDY OF FLUID FLOW PAST A CIRCULAR CYLINDER AT RE=3900 AND A PRACTICAL APPROACH TO NOISE PREDICTION</b> .....	3518
<i>A. Pradera, G. Keith, F. Jacobsen, N. Gil-Negrete, A. Rivas</i>	
<b>VIBRATION ANALYSIS OF MINDLIN'S SANDWICH PLATE (FSDT) UNDER RANDOM EXCITATION</b> .....	3526
<i>Vedat Dogan, Yeliz Erkal</i>	
<b>MEASUREMENT OF THE UNDERWATER SHIP NOISE BY MEANS OF THE SOUND INTENSITY METHOD</b> .....	3534
<i>Eugeniusz Kozaczka, Ignacy Gloza</i>	
<b>THE STUDY OF VERTICAL DISTRIBUTION OF URBAN ROAD TRAFFIC NOISE</b> .....	3540
<i>Wei Zhiyong, Zhu Yanyan, Song Ruixiang, Zhang Bin</i>	
<b>HIGH FREQUENCY APPROXIMATIONS FOR TREATING ACOUSTIC RADIATION OR SCATTERING PROBLEMS WITH THE BOUNDARY ELEMENT METHOD</b> .....	3548
<i>Martin Ochmann, Bodo Nolte, Ralf Burgschweiger, Ingo Schafer</i>	
<b>GENERATION AND VALIDATION OF ACOUSTIC 3D WBT MODELS OF A SUV DRIVER COMPARTMENT FROM SEA MODELS</b> .....	3556
<i>Thorsten Bartosch, Gregor Muller</i>	
<b>FREQUENCY DEPENDENCE IN TYRE-ROAD EMISSIONS USING THE CLOSE PROXIMITY METHOD</b> .....	3564
<i>Gaetano Licitra, Mauro Cerchiai, Luca Teti, Luca Nencini</i>	
<b>COMPARISON OF FE AND MODAL MODELS IN MODEL UPDATING METHODS</b> .....	3571
<i>M. Reza Ashory, Ehsan Jamshidi</i>	
<b>AN OVERVIEW OF THE IMPACT OF SOURCE DATA ACCURACY VARIATIONS ON THE OVERALL ACCURACY OF NOISE MAPS</b> .....	3579
<i>Peter Hepworth</i>	
<b>GENERATING A "SILENT" FLOW OF AIR TO MEASURE THE AERODYNAMIC AND ACOUSTICAL PERFORMANCE OF A LOUVRE UNDER ACOUSTICAL LABORATORY CONDITIONS</b> .....	3584
<i>Matthew Fishburn, Geoff Colin-Thome, Peter Alway</i>	
<b>A SURVEY ON THE CONTROL OF ENVIRONMENTAL NOISE INGRESS INTO RESIDENTIAL APARTMENT BUILDINGS</b> .....	3592
<i>Gayle Greer, Matthew Stead</i>	

<b>DOLLARS AND DB. THE COST OF CONSERVATIVE ACOUSTICS IN INDUSTRIAL NOISE CONTROL</b> .....	3600
<i>Colin Speakman</i>	
<b>RECENT DEVELOPMENTS IN FIBRE OPTIC HYDROPHONE TECHNOLOGY</b> .....	3608
<i>Scott Foster, Steven Goodman, Alexei Tikhomirov, Mark Milnes, John van Velzen</i>	
<b>DYNAMIC MODELLING AND INPUT SHAPING CONTROL FOR POSITIONING STAGE</b> .....	3617
<i>Sang-Won Park, Jun-Won Jang, Hun-Suk Choi, Seong-Wook Hong, William Singhose</i>	
<b>NOISE AND VIBRATION OF POSITIVE DISPLACEMENT COMPRESSORS – A REVIEW</b> .....	3625
<i>Malcolm J. Crocker</i>	
<b>NATURAL FREQUENCY STATISTICS OF PLATES WITH BOUNDED UNCERTAIN PROPERTIES USING INTERVAL ANALYSIS</b> .....	3633
<i>Geoffrey Lucas, Nicole Kessissoglou, Wei Gao</i>	
<b>A STUDY OF INPUT MOBILITY FUNCTIONS AT A VIOLIN'S BRIDGE</b> .....	3641
<i>Jie Pan, Robert Wilkins</i>	

## VOLUME 5

<b>LIGHTWEIGHT TIMBER FLOORS: A SIMPLE GUIDE TO LOW FREQUENCY IMPACT INSULATION</b> .....	3649
<i>Grant Emms, Warwick Banks, Ken McGunnigle</i>	
<b>STUDY ON THE CHARACTERISTICS OF VIBRATION AND ACOUSTIC RADIATION OF DAMAGED STIFFENED PANELS</b> .....	3657
<i>Hong Ming, Guo Xin-yi, Liu Lian-hai, Li Gen-tian</i>	
<b>OPTIMUM QUASI-ADAPTIVE RESONANCE CHANGER FOR SUBMERGED VESSEL SIGNATURE REDUCTION</b> .....	3662
<i>Paul Dylejko, Nicole Kessissoglou, Yan Tso, Chris Norwood</i>	
<b>CORRELATION OF IMPACT ISOLATION TEST RESULTS USING STANDARD TAPPING MACHINE AND HEAVY/SOFT IMPACT SOURCE</b> .....	3670
<i>Nicholas Tselios, Tony Wong, Mathew Simon</i>	
<b>THE CASE FOR SPECTRAL BASELINE NOISE MONITORING FOR ENVIRONMENTAL NOISE ASSESSMENT</b> .....	3678
<i>Michael Caley, John Savery</i>	
<b>SMART CONDITION MONITORING BY INTEGRATION OF VIBRATION, OIL AND WEAR PARTICLE ANALYSIS</b> .....	3685
<i>Stephan Ebersbach, Zhongxiao Peng, Nicole Kessissoglou</i>	
<b>DESIGN OF SEMI-ACTIVE TUNED MASS DAMPER FOR CONTROLLING SEISMICALLY INDUCED RESPONSES OF ELASTIC AND INELASTIC STRUCTURES</b> .....	3694
<i>Sang-Hyun Lee, Sung-Sik Woo, Seung-Ho Cho, Lan Chung</i>	
<b>WEAR ORIENTED STRATEGY FOR GEARBOX REMAINING LIFETIME ESTIMATION</b> .....	3702
<i>Stephan Ebersbach, Zhongxiao Peng</i>	
<b>SPLIT REGION ACOUSTICAL WAVE PROPAGATOR AND ITS APPLICATIONS</b> .....	3710
<i>Bradley McGrath, Hongmei Sun, Jingbo Wang, Jie Pan</i>	
<b>APPROACHES FOR AUTOMATING UNDERWATER SIMULATIONS BY PE METHOD</b> .....	3718
<i>Dmitry Yu. Mikhin</i>	
<b>THE SAFEGUARDING OF MARINE MAMMALS DEVELOPMENT OF DETECTION METHODS IN A BLAST ENVIRONMENT</b> .....	3726
<i>Vincent Capizzi, Thomas Boxoen, Mark Blake, Anne Shen</i>	
<b>MEASURED PERFORMANCE OF A DIRECTIONAL NOISE MONITORING SYSTEM</b> .....	3734
<i>Robert Bullen, Ben Lawrence</i>	
<b>A BRIEF REVIEW OF ACTIVE CONTROL OF ENVIRONMENTAL NOISE AND ITS APPLICATIONS</b> .....	3742
<i>Jingnan Guo, Jie Pan, Murray Hodgson</i>	
<b>VIBRATION FATIGUE DESIGN METHODOLOGY OF A LARGE SCALE HEAVY DUTY ROBOT</b> .....	3750
<i>Jong Hwi Seo, Jae Chul Hwang, Yong Won Choi, Dong Il Kim, Hong Jae Yim</i>	
<b>SIMPLIFICATIONS AND SOLUTIONS OF DIFFRACTION FUNCTIONS IN NONLINEAR ACOUSTIC PARAMETER MEASUREMENT</b> .....	3758
<i>Djilali Kourtiche, Laurent Allies, Rachid Guelaz, Mustapha Nadi</i>	
<b>NEURAL TECHNIQUES FOR SOURCE IDENTIFICATION</b> .....	3766
<i>Neil Mc Lachlan, Marco Paviotti, Stylianos Kephelopoulos, Dinesh Kant Kumar</i>	
<b>WAVE PROPAGATION, REFLECTION AND TRANSMISSION IN CURVED BEAMS</b> .....	3774
<i>Seung-Kyu Lee, Brian Mace, Michael Brennan</i>	

<b>RADIATION EFFICIENCY OF ACOUSTIC-EXCITED PLATES WITH STRINGER ATTACHMENTS</b> .....	3782
<i>Bilong Liu, Leping Feng</i>	
<b>LOCALISATION OF COHERENT SOUND SOURCES USING A MICROPHONE ARRAY</b> .....	3790
<i>Chaoying Bao, Hayden Albrey, Jie Pan</i>	
<b>URBAN TRANSPORT AND NOISE IMPACT: A PREVENTIVE APPLIED RESEARCH TO CONTROL NOISE IMPACT OF NEW ROAD TO BE BUILT IN CATANIA PROVINCE</b> .....	3798
<i>Francesco Patania, Antonio Gagliano, Francesco Nocera, Aldo Galesi, Antonio D'Amico</i>	
<b>THE RIJKE TUBE: GREEN'S FUNCTION APPROACH IN THE TIME AND FREQUENCY DOMAIN</b> .....	3806
<i>Maria A. Heckl, Michael Howe</i>	
<b>CORRELATION OF RURAL HIGHWAY ROAD TRAFFIC NOISE WITH VEHICLE SPEED AND COMMERCIAL VEHICLE PERCENTAGES FOR THE DAY AND NIGHT TIME PERIODS</b> .....	3814
<i>Matthew Stead, Darren Jurevicius, Philip Agnew</i>	
<b>FREE VIBRATION OF VERTICAL PUMP</b> .....	3821
<i>Chun Hee Bae, Yeon Whan Kim, Hun Lee, Cheul Whan Cho</i>	
<b>GEARBOX FAULT DETECTION BY MOTOR CURRENT SIGNATURE ANALYSIS</b> .....	3830
<i>A. R. Mohanty</i>	
<b>USING VIBRATIONAL PROPERTIES OF THE WHEEL TO IDENTIFY TYRE – ROAD FRICTION</b> .....	3838
<i>Edwin de Vries, Daniel Rixen, Hiroyuki Katsuno, Thijs van Keulen</i>	
<b>IMPROVED STRUCTURE-ACOUSTIC INTERACTION MODELS, PART I: MODEL DEVELOPMENT</b> .....	3847
<i>K.C. Park, Moonseok Lee, Youn-Sik Park, Youngjin Park</i>	
<b>IMPROVED STRUCTURE-ACOUSTIC INTERACTION MODELS, PART II: MODEL EVALUATION</b> .....	3855
<i>Moonseok Lee, Youn-Sik Park, Youngjin Park, K.C. Park</i>	
<b>VIBRATION ATTENUATION IN A PERIODIC ROTATING TIMOSHENKO BEAM</b> .....	3863
<i>Maged Alaa El-Din, Mohammad Tawfik</i>	
<b>REGULATION OF HEAVY VEHICLE ENGINE BRAKE NOISE IN AUSTRALIA</b> .....	3871
<i>Jeffrey Parnell, Bruce Dowdell</i>	
<b>SOUND ABSORPTION OF A VIBRATING PLATE WITH PIEZOELECTRIC MATERIALS AND PASSIVE ELECTRICAL NETWORKS</b> .....	3879
<i>Daoqing Chang, Bilong Liu, Xiaodong Li, Jing Tian</i>	
<b>MODELLING AND SIMULATION OF ULTRASOUND NON LINEARITIES MEASUREMENT FOR BIOLOGICAL MEDIUMS</b> .....	3886
<i>Djilali Kourtiche, Rachid Guelaz, Mustapha Nadi</i>	
<b>EXTENDING THE USABILITY OF NEAR-FIELD ACOUSTIC HOLOGRAPHY AND BEAMFORMING BY USING FOCALIZATION</b> .....	3894
<i>Filip Deblauwe, Karl Jansen, Maxime Robin</i>	
<b>BINAURAL CEPSTRUM COEFFICIENT AND ITS APPLICATION TO GROUND TARGET RECOGNITION</b> .....	3902
<i>Guan Luyang, Bao Ming, Li Xiaodong, Tian Jing</i>	
<b>A METHOD FOR OPTIMAL RECONSTRUCTION OF VELOCITY RESPONSE USING EXPERIMENTAL DISPLACEMENT AND ACCELERATION SIGNALS</b> .....	3908
<i>Gareth J. Bennett, Jose Antunes, John A. Fitzpatrick, Vincent Debut</i>	
<b>SPECTRAL CHARACTERISTICS OF WALL PRESSURE FLUCTUATIONS FOR SURFACE SHIPS</b> .....	3916
<i>Riccardo Brogna, Elena Ciappi, Andrea Di Mascio, Francesca Magionesi</i>	
<b>NOISE CHARACTERISTICS OF AN EXPOSED AGGREGATE CEMENT CONCRETE SURFACE</b> .....	3924
<i>Ulf Sandberg</i>	
<b>ANALYSIS OF 1/2-ORDER SUBHARMONIC RESONANCE IN A HORIZONTALLY SUPPORTED JEFFCOTT ROTO</b> .....	3932
<i>Takuma Kahimura, Hiroshi Yabuno, Tsuyoshi Inoue, Yukio Ishida</i>	
<b>MODELLING COMPLICATED SYSTEMS WITH PARTLY UNKNOWN DYNAMIC PROPERTIES AS “STRUCTURAL FUZZY”</b> .....	3938
<i>Lars Friis, Mogens Ohlrich</i>	
<b>REMOVAL OF DUST ON FLAT BOARD BY DEVICE OF FOCUSING ULTRASONIC WAVES</b> .....	3946
<i>Noritoshi Nakagawa, Yusuke Konishi</i>	
<b>NOISE REDUCTION OF PERSONAL COLOR LASER PRINTER</b> .....	3954
<i>Hyoung Gil Choi, Jae Rack Choi, Sangyup Oh, Jong Woo Kim, Jin Young Jeon, Hyun Ki Cho</i>	



<b>WEIGHTED STATISTICALLY OPTIMISED NEAR FIELD ACOUSTIC HOLOGRAPHY WITH PRESSURE-VELOCITY PROBES .....</b>	<b>3960</b>
<i>Finn Jacobsen, Xinyi Chen, Virginie Jaud</i>	
<b>MILLING CUTTING TOOLS DIAGNOSIS WITH HIGHER ORDER CYCLIC SPECTRA .....</b>	<b>3968</b>
<i>Khalid Ait Sghir, Mohamed El badaoui, Bakrim M'hamad, Francois Guillet, Driss Aboutajdine</i>	
<b>ESTIMATION OF SOUND ABSORPTION COEFFICIENTS OF POROUS MATERIALS .....</b>	<b>3976</b>
<i>Marianna Mirowska, Kazimierz Czyzewski</i>	
<b>APPLICATION OF DIAGNOSTIC TECHNIQUES IN IMPROVING VIBRATION AND ACOUSTIC PREDICTION .....</b>	<b>3983</b>
<i>F. Martinus, P. Mehta, D. W. Herrin, A. F. Seybert</i>	
<b>DYNAMIC RESPONSE OF A STRUCTURE WITH UNCERTAINTY IN ITS PARAMETERS AND APPLIED FORCES USING THE INTERVAL FACTOR METHOD .....</b>	<b>3991</b>
<i>Wei Gao</i>	
<b>HEALTH AND SAFETY EFFECTS OF VIBRATIONS IN HELICOPTERS .....</b>	<b>3999</b>
<i>Anthony Wagstaff, Jan Ivar Kasin</i>	
<b>ACOUSTICALLY CONTROLLED ROTATIONS OF A DISK IN FREE FIELD .....</b>	<b>4003</b>
<i>Arturo O. Santillan, Karen Volke-Sepulveda, Ricardo R. Boullosa</i>	
<b>ATTENUATION OF SHOCK TRANSMISSION THROUGH A LAUNCH VEHICLE PAYLOAD ADAPTOR .....</b>	<b>4011</b>
<i>Haisam Osman, Marty Johnson, Chris Fuller</i>	
<b>AN INVESTIGATION INTO THE LINEARITY OF THE SYDNEY OLYMPIC STADIUM .....</b>	<b>4019</b>
<i>David Hanson, Graham Brown, Ross Emslie, Gary Caldarola</i>	
<b>DESIGN OF SYDNEY OLYMPIC STADIUM FOR MITIGATION OF CROWD-INDUCED VIBRATION .....</b>	<b>4027</b>
<i>Graham Brown, Peter Erdmanis, Ross Emslie, David Hanson</i>	
<b>NONLINEAR VIBRATION ANALYSIS IN ACOUSTICS .....</b>	<b>4035</b>
<i>J. Petrolito, K.A. Legge, M.T. Harrison</i>	
<b>REDUCTION OF NOISE AND VIBRATION OF FRONT LOADING WASHING MACHINE IN SPIN-CYCLE .....</b>	<b>4042</b>
<i>Young-hyun Kim, Seoung-jin Seo, Hong-seok Ko, Hyung-gyoon Kim</i>	
<b>FEEDBACK CONTROL OF PIEZO-LAMINATE COMPOSITE PLATE .....</b>	<b>4049</b>
<i>A. Yeilaghi Tamijani, M. Abouhamze, R. Mirzaeifar, A.R. Ohadi, M.R. Eslami</i>	
<b>DEMONSTRATION OF INADEQUACY OF FFWCS WILLIAMS AND HAWKINGS EQUATION OF AEROACOUSTICS BY THOUGHT EXPERIMENTS .....</b>	<b>4057</b>
<i>Alex Zinoviev</i>	
<b>FREE VIBRATION ANALYSIS OF SANDWICH HEMISPHERICAL SHELLS WITH CONSTRAINED ELECTORRHEOLOGICAL FLUID DAMPING .....</b>	<b>4065</b>
<i>S. Sharnappa, N.Ganesan, Raju Sethuraman</i>	
<b>BUCKLING AND VIBRATION ANALYSIS OF MULTIPHASE MAGNETOELECTROELASTIC BEAM .....</b>	<b>4073</b>
<i>A. Kumaravel, N. Ganesan, Raju Sethuraman</i>	
<b>SHOCK SPECTRUM CALCULATION OF STRUCTURAL RESPONSE TO UNDEX .....</b>	<b>4081</b>
<i>Wang Yu, Fan Jianglin, Zhiyi Zhang, Shen Rongying, Hua Hongxing</i>	
<b>STRUCTURAL STRESS ANALYSIS UNDERGOING HARMONIC EXCITATION USING MODAL THEORY .....</b>	<b>4086</b>
<i>Liu Dongyue, L. J. Liu, Shen Rongying, Hua Hongxing</i>	
<b>AN ON-LINE MONITORING TECHNIQUE FOR A PIPE THINNING .....</b>	<b>4095</b>
<i>Jin-Ho Park, Doo-Byung Yoon, Young-Chul Choi</i>	
<b>IMPACT MASS ESTIMATION FOR A PLATE TYPE STRUCTURE BY USING SMOOTHED WIGNER-VILLE DISTRIBUTION .....</b>	<b>4104</b>
<i>Doo-Byung Yoon, Jin-Ho Park, Young-Chul Choi</i>	
<b>ON ANNOYING SOUNDS GENERATED AS BYPRODUCTS OF 'GOOD INTENTIONS' .....</b>	<b>4112</b>
<i>Ricardo E. Musafir</i>	
<b>UPDATING AN ELASTODYNAMIC MODEL OF GEAR PUMPS TO HELICAL GEAR PROTOTYPES .....</b>	<b>4117</b>
<i>Emiliano Mucchi, Giorgio Dalpiaz, Simone Pizzotti</i>	
<b>ABNORMAL RESONANCE NOISE OF EXHAUST GAS PASSAGE IN URBAN COMBINED POWER PLANT .....</b>	<b>4125</b>
<i>Yeon Whan Kim, Chun Hee Bae, Hyun Lee, Young-Shin Lee</i>	
<b>STATIONARY RESPONSE OF A MILITARY TRACKED VEHICLE .....</b>	<b>4133</b>
<i>M. K. Ravishankar, C. Sujatha</i>	
<b>APPLICATION OF CEPSTRUM ANALYSIS IN SPEECH CODING .....</b>	<b>4141</b>
<i>Vahid Abolghasemi, Hossein Marvi</i>	

<b>A STUDY ON THE MEASUREMENT OF SOUND INSULATION OF A SMALL-SIZE WINDOW</b> .....	4149
<i>Sang Ryul Kim, Hyun-Ju Kang, Jae-Seung Kim, Hyun-Sil Kim, Bong-Ki Kim</i>	
<b>TRAFFIC NOISE ABATEMENT BY MEANS OF ACOUSTICAL BARRIERS: AN EXAMPLE OF RELIABILITY OF PREDICTION MODELS WITH DIFFERENT KIND OF BARRIERS AND DIFFERENT CONTEXT</b> .....	4156
<i>Franca Conti</i>	
<b>LASER DOPPLER VIBROMETER FOR MEASURING SMALL AMPLITUDE OF VIBRATION USING SYNTHETIC HETERODYNE INTERFEROMETRY</b> .....	4164
<i>Seonggu Kang, Jongpil La, Heesun Yoon, Kyihwan Park</i>	
<b>ACOUSTIC ANTENNA DESIGN GENERAL GUIDELINES FOR BEAMFORMING NOISE SOURCE LOCALIZATION</b> .....	4172
<i>Vincenzo Quaranta, Ignazio Dimino, Gaetano D'Altrui</i>	
<b>PLATE MODULI ESTIMATION USING NEARFIELD ACOUSTIC HOLOGRAPHY TECHNIQUES</b> .....	4180
<i>Jean Claude Carmona, Daniel Mazzoni, Julien Caillet</i>	
<b>SIMULTANEOUS OPTIMIZATION OF STRUCTURE AND CONTROL OF SMART TENSEGRITY STRUCTURES</b> .....	4190
<i>M. Ganesh Raja, S. Narayanan</i>	
<b>EFFICIENT WAVE BASED MODELS FOR ACOUSTIC SCATTERING AND TRANSMISSION PROBLEMS USING POINT SOURCE AND PLANEWAVE EXCITATION</b> .....	4198
<i>Bart Bergen, Bert Van Genechten, Bert Pluymers, Dirk Vandepitte, Wim Desmet</i>	
<b>ACOUSTIC MODELLING OF MACHINES USING THE INVERSION METHOD</b> .....	4206
<i>Dariusz Pleban</i>	
<b>SIMULATION OF A COMBINED SWITCHED AND INDUCTIVE SHUNT CONTROL ACTING ON A 2D STRUCTURE</b> .....	4213
<i>Salvatore Ameduri, Monica Ciminello, Antonio Concilio</i>	
<b>TECHNOLOGY DRIVEN SOLUTIONS FOR THE QUANTIFICATION OF URBAN ROAD NOISE</b> .....	4221
<i>Christopher Hoar, Jonathan Pyke, Hartmut Stapelfeldt, Simon Shilton</i>	
<b>FREQUENCY RESPONSE OF FLAT POST-TENSIONED CONCRETE FLOORS: FREQUENCY COEFFICIENT-ROOT FUNCTION METHOD</b> .....	4229
<i>Charles Jetann, David Thambiratnam, Stephen Kajewski, Anrew Farr</i>	
<b>TRANSFER MATRIX METHOD FOR DUAL-CHAMBER MUFFLERS</b> .....	4237
<i>Mihai Bugaru, Ovidiu Vasile</i>	
<b>ACOUSTIC PROPERTIES OF SOUND BARRIERS</b> .....	4244
<i>Mihai Bugaru, Raluca Dale</i>	
<b>STANDARDIZATION OF ROAD TRAFFIC NOISE MAP IN KOREA</b> .....	4251
<i>In-Sun Park, Sang-Kyu Park, Daejoon Kang</i>	
<b>FINITE ELEMENT MODELING OF MULTI-LAYER COMPOSITE PLATES WITH INTERNAL DELAMINATION</b> .....	4258
<i>K. Anefaie, M. Abd-Rabou, N. Bajaba</i>	
<b>MODAL ANALYSIS OF ASYNCHRONOUS MOTOR VIBRATION</b> .....	4266
<i>Jiri Vondrich</i>	
<b>AN INVESTIGATION INTO THE FAULT DETECTION OF MACHINES BASED ON ACOUSTIC ARRAY SYSTEMS</b> .....	4272
<i>J. Jiang, F. Gu, D. J. Moore, A. D. Ball, K. Liu</i>	
<b>TIME-FREQUENCY ANALYSIS OF ACOUSTIC SIGNALS FOR CONDITION MONITORING OF FLUID-FILLED PIPELINES</b> .....	4280
<i>Wenbo Duan, Fengshou Gu, Andrew Ball, Fenglei Jiao, Ke Liu</i>	
<b>THE INVESTIGATION OF SUBMERGED VERTICAL PUMPS IN A POWER PLANT USING VIBRATION BASED CONDITION MONITORING TECHNIQUE</b> .....	4288
<i>Yuk Choi Lee, Mirfaizal B. Chuchu, Chek Zin Tan</i>	
<b>EXPERIMENTAL MODAL ANALYSIS OF AN ACTIVELY CONTROLLED SCALED METRO VEHICLE CAR BODY</b> .....	4296
<i>S. Popprath, A. Schirrer, C. Benatzky, M. Kozek, J. Wassermann</i>	
<b>RECTIFICATIONS OF PARAMETRIC INSTABILITY DUE TO ASYMMETRY OF ROTATING SHAFT</b> .....	4304
<i>Malik M. Nazeer, M. Suleman, A. F. Khan, W. Hussain, K. Ahmed</i>	
<b>EXPERIMENTAL IDENTIFICATION OF THE TRANSFER MATRIX OF THE MUFFLER</b> .....	4311
<i>Ke Liu, Tao Feng, Rui Wu, Qijun Zhou, Lijian Ye</i>	
<b>A COMPARISON OF STRUCTURAL-ACOUSTIC COUPLED REDUCED ORDER MODELS (ROMS): MODAL COUPLING AND IMPLICIT MOMENT MATCHING VIA ARNOLDI</b> .....	4318
<i>R. Srinivasan Puri, Denise Morrey, John F. Durodola, Rick C. Morgans, Carl Q. Howard</i>	

<b>OPTIMISATION OF ACTIVE AND SEMI-ACTIVE NOISE AND VIBRATION CONTROL SYSTEMS</b> .....	4326
<i>Colin H. Hansen, Xiaojun Qiu, Guillaume Barrault, Carl Q. Howard, Cornelis D. Petersen, Sarabjeet Singh</i>	
<b>THE CHALLENGES OF NOISE CONTROL IN HOSPITALS</b> .....	4356
<i>Ilene J. Busch-Vishniac, James E. West, Phillip Kwon, Jeffrey Dunn</i>	
<b>MACHINERY VIBRATION ANALYSIS AND CONDITION MONITORING: A COLLABORATIVE APPROACH</b> .....	4369
<i>Prasad Mandava, Craig Outland, Ravi Margasahayam</i>	
<b>ACOUSTIC HOLOGRAPHY BASED ON THE INVERSE-BEM FOR THE SOURCE IDENTIFICATION OF MACHINERY NOISE</b> .....	4377
<i>Jeong-Guon Ih</i>	
<b>BUT ARE THE TRAINS GETTING ANY QUIETER?</b> .....	4392
<i>David Thompson</i>	
<b>INFLUENCE OF STIFFNESS AND MASS CHANGES ON EIGEN FREQUENCIES OF BEAM WITH PIEZO ELECTRIC PATCH</b> .....	4412
<i>D. Mallikarjuna Reddy, S. Swarnamani</i>	
<b>SIMULATION OF MECHANICAL SYSTEMS IN LOADING WITH BROADBAND RANDOM AXITATION</b> .....	4420
<i>Igor N. Ovchinnikov</i>	
<b>PREDICTING AND REDUCING AIRCRAFT NOISE</b> .....	4426
<i>R. J. Astley, A. Agarwal, K. R. Holland, P. F. Joseph, R. H. Self, M. G. Smith, R. Sugimoto, B. J. Tester</i>	
<b>THE MASS-LOADING EFFECT OF ACCELEROMETERS ON MAC CRITERION</b> .....	4460
<i>M. Reza Ashory, Hamid Daiyan</i>	
<b>RECENT DEVELOPMENTS IN APPLICATIONS OF MICROPERFORATED PANEL ABSORBERS</b> .....	4465
<i>Kimihiro Sakagami, Masayuki Morimoto, Motoki Yairi</i>	
<b>TWO OBSERVATIONS ON THE WAVE APPROACH TO SEA</b> .....	4483
<i>Svante Finnveden</i>	
<b>EIGENVALUE VARIATION OF FUEL ROD EXPOSED TO UNIFORM AXIAL FLOW</b> .....	4502
<i>Nam-Gyu Park, Joon-Kyu Park, Jung-Min Suh, Kyu-Tae Kim</i>	
<b>FFT BASED COMPLEX CRITICAL BAND FILTER BANK AND TIME-VARYING LOUDNESS, FLUCTUATION STRENGTH AND ROUGHNESS</b> .....	4510
<i>Lingsong He, Malcolm J. Crocker, Zhou Ran</i>	
<b>EFFECTIVENESS OF NOISE BARRIERS TILTED TOWARDS THE TRAFFIC WAY OVER BRIDGES</b> .....	4518
<i>M. EL Gawad Saif, A.A. Mahmoud</i>	
<b>NO WORRIES – HOW TO HANDLE ACOUSTICAL PLANNING PROBLEMS WITH NOISE CALCULATION SOFTWARE</b> .....	4526
<i>Wolfgang Probst</i>	
<b>OPTIMIZING THE APPLICATION OF EUROPEAN DIRECTIVE 2003/10/CE PERFORMING SIMPLE WED007 DOSIMETRY</b> .....	4532
<i>Christine Aujard, Laurent Faiget, Fernand Dupont, Patrice Pischedda</i>	
<b>Author Index</b>	