

19th International Congress on Sound and Vibration 2012

(ICSV 19)

**Vilnius, Lithuania
8-12 July 2012**

Volume 1 of 4

ISBN: 978-1-62276-465-5

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© (2012) by the International Institute of Acoustics & Vibration
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the International Institute of Acoustics & Vibration
at the address below.

International Institute of Acoustics & Vibration
c/o Dr. Malcolm J. Crocker
PO Box 13
Auburn, Alabama 36831

Phone: (334) 844-3248
Fax: (334) 844-3306

www.iiav.org

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
Web: www.proceedings.com

TABLE OF CONTENTS

Volume 1

KEYNOTES

BINAURAL MODELS AND THEIR TECHNOLOGICAL APPLICATION	1
<i>Jens Blauert</i>	
ULTRASONIC MEASUREMENTS AND IMAGING IN EXTREME CONDITIONS	5
<i>Rymantas Kažys</i>	

ARCHITECTURAL ACOUSTICS

ACOUSTIC REHABILITATION OF MIDDLE TWENTIETH CENTURY PORTUGUESE CHURCHES	12
<i>António P. O. Carvalho, Marlene T. Cruz, Glória C. G. Pereira</i>	
ACOUSTICS OF CHURCHES FROM PORTUGAL AND PERU WHEN THEY WERE ONCE THE SAME COUNTRY	20
<i>Carlos Jiménez Dianderas, António P. O. Carvalho</i>	
3D COMPUTER MODELING ON BALCONIES IN AUDITORIUM	26
<i>L. Y. Cheung, S. K. Tang</i>	
LARGE-SCALE FINITE ELEMENT SOUND FIELD ANALYSIS OF ROOMS USING A PRACTICAL BOUNDARY MODELING TECHNIQUE	33
<i>Toru Otsuru, Takeshi Okuzono, Reiji Tomiku, Kusno Asniawaty, Noriko Okamoto</i>	
ACOUSTIC AND NOISE EFFECTS IN CLASSROOMS	41
<i>Rosario Caracausi, Gaetano Cognata</i>	
ACOUSTICAL PROPERTIES OF FOUR BAROQUE THEATRES	49
<i>Jan Dolejší, František Dolejší, Monika Rychtáriková, Ladislav Pouzar, Iveta Šturmová</i>	

GENERAL VIBRATIONS

CHALLENGES OF MODAL TESTING AND MODELLING OF AXIAL-FLUX PERMANENT-MAGNET MACHINE	57
<i>Gabriela Simbierowicz, Vesa Nieminen</i>	
SHAFT VIBRATIONS IN INDUCTION MACHINES CAUSED BY 2X EXCITATION DUE TO ELLIPTICAL FORM DEVIATIONS OF THE SHAFT JOURNALS	65
<i>Ulrich Werner</i>	
ON GRAMMIAN-BASED REDUCTION METHODS FOR MODERATE SIZE SYSTEMS	73
<i>S. Rahrovani, M. Khorsand Vakilzadeh, T. Abrahamsson</i>	
DYNAMIC ANALYSIS OF A CANTILEVER BEAM WITH DEPLOYING AND RETRIEVAL MOTIONS	81
<i>Jintai Chung, Sungpil Park</i>	
ACTIVE DISK BREAK SQUEAL SUPPRESSION USING PIEZOELECTRIC ACTUATOR	87
<i>Yutaka Nakano, Hiroki Takahara, Ryohei Tanaka, Ryo Iyoda</i>	
THE FREQUENCY ANALYSIS OF DOUBLE-END TUNING FORK QUARTZ RESONATORS	94
<i>Bo-Shiun Huang, Wen-Tien Chang Chien, Chia-Ou Chang, Chan-Shin Chou, Fa-Hwa Shieh</i>	

ACTIVE CONTROL OF SOUND

SPATIAL AND TEMPORAL FILTERING FOR FEEDBACK CONTROL OF ROAD NOISE IN CARS	102
<i>Jordan Cheer, Stephen J. Elliott</i>	
FEEDBACK ACTIVE NOISE CONTROL WITH A FILTERED-ERROR ALGORITHM	110
<i>José A. De Dios, Oliver Pabst, Delf Sachau</i>	
EXPERIMENT ON THE GENERATION OF A QUIET SPACE IN A RECTANGULAR CAVITY USING WAVE FILTERS	117
<i>Hiroyuki Iwamoto, Nobuo Tanaka, Akira Sanada</i>	
STABILITY OF FX-LMS ALGORITHM FOR SHORT ADAPTIVE FILTERS	125
<i>Dariusz Bismor</i>	
EFFECT OF A LOW MACH NUMBER FLOW ON A SEMI ACTIVE HELMHOLTZ RESONATOR	133
<i>Xiaofeng Shi, Cheuk Ming Mak, Junfang Wang</i>	
ACTIVE NOISE CONTROL USING GRAPHICS PROCESSING UNITS	138
<i>Jorge Lorente, Alberto Gonzalez, Miguel Ferrer, Jose A. Belloch, Maria De Diego, Gema Piñero, Antonio Vidal</i>	
WAVELET SPEECH ENHANCEMENT WITH REFERENCE SIGNAL BASED INFERENCE IN APPLICATION TO PERSONAL ACTIVE NOISE CONTROL SYSTEMS	146
<i>Marek Pawelczyk, Aleksandra Mielcarek</i>	

A PRIMARY PATH LENGTH REDUCTION METHOD FOR ACTIVE NOISE CONTROL SYSTEMS WITH NONMINIMUM PHASE SECONDARY PATH	153
<i>Kensaku Fujii, Kenji Kashiwara, Isao Wakabayashi, Mitsuji Muneyasu, Masakazu Morimoto</i>	

STRUCTURAL ACOUSTICS AND VIBRATION

THE MODES OF A TETHERED, SPHERICAL BALLOON	161
<i>Kirsty Kuo, Jim Woodhouse, Hugh Hunt</i>	
CONCEPTUAL AND MECHANICAL RIG DESIGN FOR HYDRAULIC SELF-BALANCER	169
<i>Alfonso Thompson-Salinas, Marcelo Lopez-Parra, Victor J. Gonzalez-Villela, Miguel Gonzalez-Valdez, Benjamin Cruz-Cruz, Jose. J. B. Perez-Moreno, Alfredo Chavez-Luna</i>	
SIMULATING VIBRATIONS OF A DOUBLE-LEAF PLATE WITH UNCERTAINTIES IN MATERIAL PROPERTIES AND INTERACTION BETWEEN COMPONENTS	177
<i>Hyuck Chung</i>	
CORRELATION ANALYSIS OF AN AXISYMETRIC STRUCTURE USING ZERNIKE MOMENT DESCRIPTORS	185
<i>Chaoping Zang, Yinchao Liu</i>	
VIBRATION REDUCTION OF A LINEAR COMPRESSOR BY DESIGNING A LOOP PIPE USING THE TOPOLOGY OPTIMIZATION METHOD	193
<i>Jongsuh Lee, Semyung Wang, Sunghyun Ki, Hyuk Lee</i>	
DETECTION OF BURIED PIPES USING A SHEAR WAVE GROUND SURFACE VIBRATION TECHNIQUE	198
<i>J. M. Muggleton, B. D. Papandreou, M. J. Brennan</i>	
RECOVERING THE UNCONSTRAINED MODES OF AXISYMMETRIC STRUCTURES FROM MEASUREMENTS UNDER CONSTRAINED CONDITIONS	206
<i>Vincent Debut, Miguel Carvalho, Jose Antunes</i>	
A POWER TRANSMISSIBILITY APPROACH FOR EVALUATING THE PERFORMANCE OF TRANSIENT VIBRATION ISOLATION	214
<i>Junfang Wang, Cheuk Ming Mak</i>	

MACHINERY HEALTH MONITORING

VACUUM PUMP DIGNOSTIC ALGORITHM WITH LATENT VARIABLES	221
<i>Kyuhoo Lee, Wan-Sup Cheung, Jong-Yeun Lim, Byunghak Kong, Soogab Lee</i>	
ANALYSES OF MEASUREMENT DATA FROM BLADE ROOTS OF 3MW WIND TURBINE BY USING OPTIC SENSORS	229
<i>Ki-Yong Oh, Jaekyung Lee, Joon-Young Park, Jun-Shin Lee</i>	
SIMULATING FAULTS IN IC ENGINES	237
<i>Jian Chen, Robert B. Randall, Bart Peeters, Herman Van Der Auweraer</i>	

NOISE SOURCE IDENTIFICATION

IDENTIFICATION OF DOMINANT INTERIOR NOISE SOURCES IN MICRO COMMERCIAL VEHICLE BASED ON SOUND QUALITY ANALYZING	246
<i>Li Yan, Weikang Jiang, Mingfa Zhang</i>	
ACOUSTIC ERASER USED WITH THE ACOUSTIC CAMERA ON DISTURBING SOURCES	253
<i>Torbjörn Kloow</i>	
CHARACTERIZATION OF WATER PUMP FOR DRUMTYPE WASHING MACHINE BY VIBRATION POWER APPROACH	261
<i>Yonghwa Heo, Young-Woo Park, Kwang-Joon Kim</i>	

DAMPING TECHNOLOGY AND MATERIALS

OPTIMIZATION OF THE INJECTION MOLDING PROCESS OF PASSIVE VIBRATION ISOLATORS	269
<i>Emmanuelle Sommier, Jean Michel Attendu, Annie Ross, Martine Lavoie</i>	

STRUCTURE-BORNE SOUND IN BUILDINGS

COMPARISON OF STRUCTURE-BORNE SOUND POWER INJECTED TO HEAVYWEIGHT AND LIGHTWEIGHT CONSTRUCTIONS	277
<i>Simon Bailhache, Michel Villot</i>	
PREDICTION OF STRUCTURE BORNE NOISE IN HEAVYWEIGT AND LIGHTWEIGHT CONSTRUCTIONS	285
<i>Michel Villot, Simon Bailhache</i>	
STRUCTURE-BORNE SOUND TRANSMISSION ON LIGHTWEIGHT INSTALLATION WALLS	293
<i>Andreas Ruff, Heinz-Martin Fischer</i>	
ACOUSTICAL BEHAVIOUR OF FLOATING FLOORS AT LOW FREQUENCIES	300
<i>Martin Schneider, Heinz-Martin Fischer</i>	

PREDICTION OF MAXIMUM SOUND PRESSURE AND VIBRATION LEVELS FROM THE IMPACT SOURCE OF THE ISO RUBBER BALL USING TRANSIENT STATISTICAL ENERGY ANALYSIS	308
<i>Matthew Robinson, Carl Hopkins</i>	
ON THE MEASUREMENT OF SOUND POWER ON RECEPTION PLATES	316
<i>Albert Vogel, Oliver Kornadt, Volker Wittstock, Werner Scholl</i>	
USING TRANSIENT AND STEADY-STATE SEA TO QUANTIFY ERRORS IN THE MEASURED STRUCTURE-BORNE SOUND POWER INPUT FROM MACHINERY WITH COUPLED RECEPTION PLATES	324
<i>Carl Hopkins, Matthew Robinson</i>	

UNDERWATER AND SHIP ACOUSTICS

COMPARISON OF MODELLING TECHNIQUES TO PREDICT THE STRUCTURAL RESPONSES OF A SUBMERGED HULL	332
<i>Nicole Kessissoglou, Cong Zhang, Herwig Peters, Mauro Caresta, Meixia Chen, Steffen Marburg</i>	
INVESTIGATION OF THE POTENTIAL ACCURACY OF SOURCE LOCALIZATION USING A MOVING HORIZONTAL ARRAY	340
<i>Alexey S. Ivanenkov, Pavel I. Korotin, Denis A. Orlov, Alexander A. Rodionov, Victor I. Turchin</i>	

UNDERWATER ACOUSTICS

A SIMPLIFIED APPROACH FOR EVALUATING THE EFFECT OF AIRGUN BLAST UNDERWATER NOISE ON MARINE WILD LIFE	348
<i>Federico Rossi, Andrea Nicolini, Mirko Filippini</i>	
A MEDIUM FREQUENCY AMBIENT NOISE MODEL	356
<i>Adrian Brown, Andrew Holden, Tim Clarke</i>	
MULTI-CHANNEL UNDERWATER ACOUSTIC COMMUNICATION USING ORTHOGONAL SIGNAL DIVISION MULTIPLEXING ON MOVING PLATFORM	364
<i>Tadashi Ebihara</i>	
PREDICTION OF PILE DRIVING INDUCED UNDERWATER NOISE	372
<i>Tristan Lippert, Stephan Lippert, Otto Von Estorff, Marius Milatz, Katja Reimann</i>	

WAVE PROPAGATION IN FLUIDS

VORTEX FLOW CAUSED BY PERIODIC AND APERIODIC SOUND IN A RELAXING MAXWELL FLUID	379
<i>Pawel Wojda</i>	

ENVIRONMENTAL NOISE & VIBRATION FROM URBAN TRANSPORTATION NETWORKS

NOISE AND ANNOYANCE FROM MOTORBIKES, SCOOTERS AND MOPEDS IN URBAN AREAS	387
<i>Kostantinos Vogiatzis, Marco Paviotti</i>	
EFFECT OF THE TRACK/SOIL COUPLING ON THE RAILWAY-INDUCED GROUND VIBRATIONS	395
<i>Georges Kouroussis, Ioannis Anastasopoulos, George Gazetas, Calogero Conti, Olivier Verlinden</i>	
STRUCTURAL RESPONSE OF A BUILDING GENERATED BY THE RAILWAY TRAFFIC	403
<i>Georges Kouroussis, Laurent Van Parys, Calogero Conti, Olivier Verlinden</i>	
UNATTENDED NOISE MEASUREMENTS WITH A SOUND LEVEL METER BASED ON INNOVATIVE FEATURES	411
<i>Daniel Vaucher De La Croix, Erik Aflalo</i>	
INNOVATIVE ASPECTS IN NOISE MAPPING AND DISSEMINATION ACTIVITIES WITHIN LIFE+ "NADIA" PROJECT	420
<i>Francesco Asdrubali, Samuele Schiavoni, Francesco D'Alessandro, Corrado Schenone, Ilaria Pittaluga</i>	
ECONOMIC ACCEPTABILITY OF NOISE ABATEMENT MEASURES	428
<i>Vasilis Vasiliadis, Emmanuel Tzekakis</i>	
PAVEMENT NOISE ABSORPTION & SURFACE CHARACTERISTICS IN ATHENS RING TOLLWAY	435
<i>Konstantinos Vogiatzis, Charalampos Antoniadis</i>	

ACOUSTICAL HOLOGRAPHY

RESEARCH ON SPATIAL WINDOW FUNCTION FOR ACOUSTICAL HOLOGRAPHY	443
<i>Dian-Ge Yang, Zi-Teng Wang, Jun-Hui Zhou, Xiao-Min Lian</i>	
LOW FREQUENCY SOUND LOCALIZATION BY ACOUSTIC DOUBLE HOLOGRAPHY METHOD	450
<i>Masao Nagamatsu, Mistuo Iwahara, Gaku Minorikawa, Mao Takamatsu</i>	
IDENTIFICATION OF A ROTATING SOUND SOURCE USING THE ACOUSTICAL HOLOGRAPHY BASED ON INVERSE BEM	457
<i>Jeong-Guon Ih, Agustinus Oey</i>	

SOURCE IDENTIFICATION ON A REDUCTION GEAR-BOX USING ACOUSTICAL MEASUREMENTS IN A NON-ANECHOIC ENVIRONMENT	463
<i>Nicolas Totaro, Céline Sandier, Quentin Leclère, Didier Rémond, Matthieu Boucaud, Joël Perret-Liaudet</i>	
INDEPENDENT POSITIONING OF ACTUATORS IN THE ACOUSTIC INVERSE DESIGN PROBLEMS	469
<i>Jeong-Guon Ih, Wan-Ho Cho</i>	
NEAR-FIELD STRUCTURE-BORNE SOUND HOLOGRAPHY FOR FINITE PLATES	475
<i>Dietmar Greussing</i>	
NOISE SOURCE IDENTIFICATION WITH INCREASED SPATIAL RESOLUTION	481
<i>Svend Gade, Jørgen Hald, Bernard Ginn</i>	
ENHANCING SOUND SOURCE LOCALIZATION WITH NOISE SEPARATION METHODS	487
<i>F. Deblauwe, K. Janssens, J. Lanslots, L. Lamotte, S. Paillasseur, O. Minck</i>	

COMBUSTION NOISE AND THERMO-ACOUSTICS

EXPERIMENTAL INVESTIGATION OF DYNAMIC RESPONSE OF ACOUSTICALLY FORCED TURBULENT PREMIXED CH₄/CO₂/AIR FLAMES	498
<i>Aadil I. G. H. Dowlut, Taaha Hussain, Ramanarayanan Balachandran, Nedunchezian Swaminathan</i>	
INVESTIGATION IN TO THE EFFECT OF HYDROGEN ENRICHMENT ON THE RESPONSE OF TURBULENT PREMIXED FLAMES SUBJECTED TO ACOUSTIC EXCITATION	506
<i>Taaha Hussain, Aadil I. G. H. Dowlut, Ramanarayanan Balachandran</i>	
STABILITY LIMITS AND NON-LINEAR CHARACTERISTICS OF A SELF-EXCITED COMBUSTION INSTABILITY	514
<i>Roel A. J. Müller, Jakob Hermann, Wolfgang Polifke</i>	
AZIMUTHAL THERMOACOUSTIC MODES IN ANNULAR GAS TURBINE COMBUSTION CHAMBERS	522
<i>Nicolas Noiray, Bruno Schuermans</i>	
ACCURACY OF A LINEAR THERMOACOUSTIC MODEL FOR (IN)STABILITY PREDICTION OF A LARGE EXPERIMENTAL DATASET	534
<i>P. G. M. Hoeijmakers, I. Lopez, V. Kornilov, H. Nijmeijer, L. P. H. De Goey</i>	
A LINEAR 1D MODEL FOR THE THERMOACOUSTIC EFFECT IN THE PRESENCE OF MEAN FLOW	542
<i>Tobias Holzinger, Armin Baumgartner, Wolfgang Polifke</i>	

NUMERICAL METHODS FOR ACOUSTICS AND VIBRATION

A MODIFIED IEM APPROACH TO THE DYNAMIC PROBLEM OF CRACKED PLATES	550
<i>C. C. Cheng, D. S. Liu, K. L. Cheng, W. N. Cheng</i>	
HIGH COMPLEXITY VEHICLE MODELS ANALYSIS & SIMULATION METHODS	558
<i>Giuseppe Miccoli, Tommaso Nizzoli, Giorgio Parise, Claudio Bertolini, Nicolas Totaro</i>	
THE USE OF AN ALTERNATIVE BEM ANSATZ FUNCTION FOR SCATTERING PROBLEMS	566
<i>Ralf Burgschweiger, Martin Ochmann, Ingo Schäfer, Bodo Nolte</i>	
BOUNDARY ELEMENT SIMULATIONS OF TWO OPPOSITE NOISE BARRIERS	574
<i>S. Gasparoni, M. Haider, R. Wehr, M. Conter</i>	
FREE VIBRATION ANALYSIS OF PLAIN AND PERFORATED PLATES SUBMERGED IN WATER	581
<i>O. R. Nandagopan, S. Ranjith Kumar, C. G. Nandakumar</i>	
PML ABSORBING BOUNDARY CONDITIONS FOR THE AEROACOUSTIC GALBRUN EQUATION IN THE TIME DOMAIN	589
<i>Mabrouk Ben Tahar, Xue Feng</i>	
VIBRATION ANALYSIS OF VISCOELASTICALLY DAMPED COMPOSITE SANDWICH PLATES	597
<i>Samir Assaf</i>	
FREE VIBRATION OF SYMMETRIC ANGLE-PLY LAYERED CONICAL SHELL FRUSTA OF VARIABLE THICKNESS UNDER SHEAR DEFORMATION THEORY USING SPLINE APPROXIMATION	605
<i>K. K. Viswanathan, Saira Javed, Zainal Abdul Aziz</i>	

MEASUREMENT TECHNIQUES AND SENSORS

EXTERNAL ON BOARD MEASUREMENTS MICROPHONES INSTALLATION DEVICES	613
<i>Rogério Pirk, Carlos D'Andrade Souto</i>	
DESIGN OF AN OPTICAL-FIBER ACCELEROMETER BASED ON STRESS-INDUCED BIREFRINGENCE : INFLUENCE OF DIFFERENT EXCITATIONS	621
<i>Tihon Pierre, Olivier Verlinden, Nicolas Linze, Patrice Mégret, Marc Wuilpart</i>	
A NEW METHOD FOR MEASURING ACOUSTICAL TRANSFER MATRIXES WITH USE OF CALIBRATION	627
<i>Benoît Rousselet, Alain Lefebvre, Vincent Gibiat</i>	
EFFECT OF LEAKAGE ON THE ACOUSTIC CHARACTERISTICS OF ARTIFICIAL EARS FOR TESTING THE MOBILE PHONE SOUND	635
<i>Yong-Ho Heo, Jeong-Guon Ih</i>	
MEASURING LOW-FREQUENCY VIBRATION OPTICALLY	640
<i>Richard Shaw</i>	

COMPARISON OF MEASUREMENT TECHNIQUES FOR TORSIONAL VIBRATION ANALYSIS	648
<i>Karl Janssens, Laurent Britte</i>	
PROGRAMMABLE SENSOR - BEARING CONDITION TRANSMITTER	656
<i>George Zusman</i>	
AN ACOUSTIC APPROACH TO THE NONINVASIVE TEMPORARY BLOOD VOLUME MEASUREMENTS IN THE PNEUMATIC PULSATILE HEART ASSIST DEVICES	662
<i>Grzegorz Konieczny, Zbigniew Opilski, Tadeusz Pustelny</i>	

KEYNOTE

VIBRATION OF A HIGH-ALTITUDE TETHERED BALLOON WITH APPLICATION TO CLIMATE ENGINEERING	670
<i>Hugh Hunt, Kirsty Kuo, Hilary Costello, Richard Shaw</i>	

ENGINEERING ACOUSTICS

THE TONAL NOISE REDUCTION OF THE PROPORTIONAL PILOT-OPERATED PNEUMATIC VALVE	689
<i>Georgy M. Makaryants, Viktor Ya. Sverbilov, Andrey B. Prokofiev, Mikhail V. Makaryants, Evgeny V. Shakhmatov</i>	
ACOUSTICAL SIMULATION OF POWER UNIT ENCAPSULATIONS FOR CONSTRUCTION AND MINING APPLICATIONS	697
<i>Anton Golota, Renny Rantakokko, Samuel Enblom</i>	
SOUND QUALITY EVALUATION FOR LAUNDRY NOISE OF A DRUM WASHING MACHINE BY CONSIDERING VARIOUS NOISE SOURCES	705
<i>Jae-Eun Jeong, Un-Chang Jeong, In-Hyung Yang, Ji-Hyun Yoon, Jae-Eung Oh</i>	
EFFECT OF CAVITY ACOUSTIC MODES ON PERCEIVED SOUND QUALITY – APPLICATION TO A DOMESTIC APPLIANCE	711
<i>Ashley Symes, Ludovic Desvard, Robert Streeter</i>	
CUSTOMIZING AN INSERT EARPHONE FREQUENCY RESPONSE PERFORMANCE BY USING POROUS MATERIALS	719
<i>Yu T. Tsai, Jin H. Huang</i>	

GENERAL VIBRATIONS

AUTHENTICITY OF THE EQUIVALENT VIBRATION TESTS	727
<i>Igor Ovchinnikov, Vladimir Stepnev, Peter Brancevich</i>	
STABILITY ANALYSIS OF A HAND-MOTION CRANE CONTROLLER USING DESCRIBING FUNCTIONS: AN INITIAL INVESTIGATION	734
<i>Kelvin Chen-Chih Peng, William Singhose</i>	
DYNAMICS AND CONTROL OF MULTIPLE CRANES WITH A CONNECTED PAYLOAD	742
<i>Joshua Vaughan, Jieun Yoo, Nathan Knight, William Singhose</i>	
VIBRATION CHARACTERISTICS OF A FUEL ROD DEPENDING ON SPRING STIFFNESS VARIATIONS OF SPACER GRIDS	750
<i>Bong-Jo Ryu, Youngshik Kim, Kyeong-Rok Ha, Nam-Kyu Park, Kyeong-Lak Jeon</i>	
SEISMIC ANALYSIS OF QUAYSIDE CONTAINER CRANE	758
<i>Yulong Jin, Tianxing Wu</i>	

ACTIVE NOISE AND VIBRATION CONTROL IN PRACTICAL SYSTEM IMPLEMENTATIONS

ACTIVE SUPPRESSION OF PNEUMATIC VIBRATION ISOLATORS USING ADAPTIVE SLIDING CONTROLLER WITH SELF-TUNING FUZZY COMPENSATION	766
<i>Jin-Wei Liang, Hung-Yi Chen, Quen-Wei Wu</i>	
ACTIVE VIBRATION CONTROL OF A SHAFT-HULL SYSTEM - EXPERIMENT	774
<i>Zhiyi Zhang, Yong Chen, Fang Hu, Rongying Shen</i>	

STRUCTURAL ACOUSTICS AND VIBRATION

REMOTELY CONTROLLED ACTIVE NOISE CONTROL LABORATORIES	782
<i>Imran Khan, Dineshkumar Muthusamy, Waqas Ahmad, Ingvar Gustavsson, Johan Zackrisson, Kristian Nilsson, Sven Johansson, Lars Håkansson</i>	
ANALYSIS OF THE FORCED VIBRATION OF A CYLINDRICAL SHELL FROM A WAVE VIEWPOINT AND ITS EXPERIMENTAL VERIFICATION	790
<i>Hyun-Gwon Kil, Chan Lee</i>	
REDUCED ORDER FINITE ELEMENT MODEL FOR NOISE AND VIBRATION REDUCTION USING PIEZOELECTRIC SHUNT DAMPING SYSTEMS	800
<i>Walid Larbi, Jean-François Deü, Roger Ohayon</i>	

DIFFERENCE IN DYNAMIC PROPERTIES OF DUALCOOLED ANNULAR FUEL AND RELATED DESIGN ISSUE	812
<i>Kang-Hee Lee, Heung-Seok Kang, Yang-Hyun Koo</i>	

RAILWAY NOISE AND VIBRATION

OPTIMIZATION OF ACOUSTIC MEASUREMENT ANALYSIS FOR ASSESSMENT OF WHEEL/RAIL INTERACTION FORCE	820
<i>Pierre-Emile Chartrain, Estelle Bongini, Pierre-Olivier Mattei</i>	
TRAIN INDUCED VIBRATION OF INHOMOGENEOUS SOILS – A PREDICTION BASED ON MEASURED AND CALCULATED POINT-LOAD SOLUTIONS	828
<i>Lutz Auersch</i>	
DIRECT VS. IN-SITU STRUCTURE-BORNE SOUND SOURCE CHARACTERIZATION - EFFECT OF SIMPLIFICATIONS ON POWER TRANSMISSION FOR A TYPICAL RAILWAY VEHICLE SOURCE	836
<i>Torsten Kohrs, Karl-Richard Kirchner</i>	

Volume 2

EXPERIMENTAL INVESTIGATION OF RAILWAY NOISE AND RAILWAY NOISE MAPPING IN LATVIA	844
<i>Andrei Baranovskii</i>	

FLOW INDUCED NOISE

A COMPUTERIZED DEVELOPMENT SYSTEM FOR HIGH-EFFICIENCY AND LOW-NOISE FAN USING FANDAS AND CFX CODES	852
<i>Chan Lee, Hyun Gwon Kil, Kyeong Eung Tae</i>	
IDENTIFICATION AND ANALYSIS OF DOMINANT NOISE GENERATING FLOW STRUCTURES IN A COMPRESSIBLE FLOW OVER A 3D OPEN CAVITY	862
<i>Vladimir Jovanovic, Johan Meyers</i>	
A STUDY ON THE VIBRATION AND NOISE BY ACOUSTIC RESONANCE IN THE TUBE BANK OF A CFB BOILER	870
<i>Sung Jong Ahn, Young Ho Ju, Cheol Hong Kim</i>	

NOISE AND VIBRATION IN SHIPS

EXPERIMENTAL AND THEORETICAL RESEARCH OF NOISE EMITTED BY MERCHANT SHIPS IN PORT	877
<i>Hristo Draganchev, Sevdalin Valchev, Christo Pirovsky, Milcho Georgiev, Boris Mihaylov</i>	
NOISE REDUCTION ON YACHTS	885
<i>Anna Marchesini, Edoardo Alessio Piana</i>	
SHIP HULL STRUCTURE RESPONSE ON AIRBORNE NOISE EXCITATION	893
<i>Leo Boroditsky, Ray Fischer</i>	

URBAN ACOUSTICS

ANALYSIS AND CONTROL OF RECREATIONAL NOISE IN THE HISTORICAL CENTRE OF GENOVA, ITALY	900
<i>Ilaria Pittaluga, Corrado Schenone, Grazia Mangili</i>	
ASSURANCE OF ACOUSTIC COMFORT IN RENOVATING DORMITORIES	908
<i>Pavel Balbatunov, Marius Mickaitis, Aleksandras Jagniatinskis</i>	

NOISE REDUCING PAVEMENTS

METHODS FOR TESTING ASPHALT PERFORMANCE IN URBAN AREAS	913
<i>Sergio Luzzi, Francesco Borch, Luca Barbieri, Ines Antunes</i>	

THERMOACOUSTIC TECHNOLOGIES: FROM FUNDAMENTALS TO APPLICATIONS

OPTIMIZATION OF THERMOACOUSTIC STACKS FOR MAXIMUM GENERATION OF ACOUSTIC ENERGY	921
<i>Tobias Holzinger, Wolfgang Polifke</i>	
A NEW NUMERICAL OPTIMIZATION APPROACH FOR STANDING-WAVE THERMOACOUSTIC ENGINES	928
<i>Hussein Chaitou, Philippe Nika, Guillaume Layes</i>	

CFD MODELLING OF FLOW AND HEAT TRANSFER WITHIN THE PARALLEL PLATE HEAT EXCHANGER IN STANDING WAVE THERMOACOUSTIC SYSTEM.	936
<i>Fatimah A. Z. Mohd Saat, Artur J. Jaworski, Xiaoan Mao, Zhibin Yu</i>	
TEMPERATURE DIFFERENCE REQUIRED FOR THE OPERATION OF A VAPORIZED WATER THERMOACOUSTIC ENGINE	944
<i>Daisuke Noda, Yuki Ueda</i>	

COMBUSTION NOISE AND THERMO-ACOUSTICS

WEAKLY NONLINEAR ANALYSIS OF THERMOACOUSTIC OSCILLATIONS	948
<i>Matthew Juniper</i>	
NONLINEAR PHENOMENA IN THERMOACOUSTICS: A COMPARISON BETWEEN SINGLE-MODE AND MULTI-MODE METHODS	953
<i>Karthik Kashinath, Matthew P. Juniper, Santosh Hemchandra</i>	
WHEN WILL A FLAME DESCRIBING FUNCTION APPROACH TO THERMOACOUSTICS WORK WELL?	961
<i>Simon J. Illingworth, Matthew P. Juniper</i>	
ACOUSTIC COUPLING IN COMBUSTION INSTABILITY	969
<i>Raphael Assier, Xuesong Wu</i>	
MATRIX-FREE CONTINUATION OF LARGE THERMOACOUSTIC SYSTEMS	977
<i>Iain Waugh, Simon Illingworth, Matthew Juniper</i>	

SPEECH COMMUNICATION

ANALYSIS OF POLISH VOWELS PRODUCED BY ESOPHAGEAL SPEAKERS	985
<i>Marzena Miesikowska, Leszek Radziszewski</i>	
ANALYSIS OF THE RADIATION EFFECTS ON VOWELS BY MEANS OF TIME DOMAIN FINITE ELEMENT SIMULATIONS	989
<i>Marc Arnela, Oriol Guasch, Francesc Alías</i>	
EFFECT OF DOWNSTREAM CONDITIONS ON THE OSCILLATION OF THE VOCAL FOLDS DURING SPEECH	997
<i>Xavier Pelorson, Louis Delebecque, Denis Beauteemps, Jorge Carlos Lucero</i>	
RESTORATION OF INTERMITTENT SPEECH WITH COMPOSITE GAP-FILLING SCHEMES RELYING ON HUMAN AUDITORY CAPABILITY	1005
<i>Mitsunori Mizumachi, Kouichi Ohga, Minayo Fujii, Toshiharu Horiuchi</i>	
INTELLIGIBILITY ASSESSMENT IN ELEMENTARY SCHOOL CLASSROOMS BY USING BINAURAL ROOM RESPONSES OF A SMALL DUMMY HEAD	1013
<i>Viviane S. G. Melo, Ricardo E. Musafir, Roberto A. Tenenbaum</i>	

SOUND FOCUSING AND MANIPULATION

LOUDSPEAKER ARRAYS FOR FAMILY TV	1021
<i>Marcos F. Simón, Stephen J. Elliott, Jordan Cheer</i>	
FIRE DETECTION TECHNIQUE BASED ON AUDIBLE SOUND FIELD	1029
<i>Kang-Ho Park, Sung Q. Lee, Woo Seok Yang, Jongdae Kim, Kihyun Kim, Ho-Min Ryu, Semyung Wang</i>	
INTRUSION DETECTION BASED ON THE SOUND FIELD VARIATION IN AUDIBLE FREQUENCY - GENERAL SOUND SPACE CASE	1037
<i>Sung Q. Lee, Kang-Ho Park, Kihyun Kim, Ho-Min Ryu, Semyung Wang</i>	
ACTIVE LOCALIZATION OF A SILENT INTRUDER USING ACOUSTIC IMAGING IN ANECHOIC SPACE	1045
<i>Kihyun Kim, Daesung Kim, Homin Ryu, Semyung Wang, Sung Q. Lee, Kang-Ho Park</i>	

KEYNOTES

TRADITIONAL AND INNOVATIVE CONCEPTS FOR THE NOISE CONTROL OF OUTDOOR MACHINES	1053
<i>Eleonora Carletti</i>	
ON THE INTERACTION BETWEEN ACOUSTIC PRESSURE WAVES AND THE LIVING CELL	1069
<i>Eitan Kimmel, Boris Krasovitski, Michael Plaksin, Michael Assa, Avner Geva, Shy Shoham</i>	

ARCHITECTURAL ACOUSTICS

EVALUATION ON THE INSULATION PERFORMANCE OF FLOOR IMPACT SOUND AT MODULAR HOUSING	1081
<i>Kyung-Woo Kim, Won-Hak Lee, Seok-Ho Lim</i>	
CHARACTERISTICS OF FLOOR IMPULSE VIBRATION AT MODULAR HOUSE	1089
<i>Won-Hak Lee, Kyung-Woo Kim, Seok-Ho Lim</i>	
COMPARISON OF ANNOYANCE BETWEEN STANDARD IMPACT SOURCE AND LIVING IMPACT SOURCE	1096
<i>Hyeon Ku Park, Kyung Mo Kim, Guk Gon Song, Sun-Woo Kim</i>	

SOUND ABSORPTION OF MEMBRANE STRUCTURES FOR BUILDING MATERIALS	1101
<i>Ayumi Mitoma, Daiji Takahashi</i>	
SUSTAINABLE ACOUSTIC ABSORBERS USING RECYCLING PAPER	1109
<i>Joonhee Lee, Kwan-Seop Yang, Joonoh Yeon, Kyung-Woo Kim</i>	

ROOM ACOUSTICS

THE SOUND PRESSURE LEVELS AT WORK PLACES	1115
<i>Fabian Probst</i>	
EMPIRICAL NOISE AND VIBRATION MODEL FOR EQUIPMENT INSTALLED IN BUILDING SERVICES	1119
<i>Seong-Hyun Lee, Bong-Ki Kim, Sung-Kon Yum</i>	
A STUDY ON THE REVERBERATION TIME IN THE RECTANGULAR ROOM BY PLACEMENT OF ABSORBING MATERIALS : SIMULATIONS AND EXPERIMENTS	1125
<i>Du Hwan Chun, Hae Joong Na</i>	
NUMERICAL ANALYSIS FOR THE IMPROVEMENT OF A SPECIAL REVERBERATION TEST ROOM	1131
<i>Davide Borelli, Corrado Schenone</i>	

GENERAL VIBRATIONS

ECCENTRIC LATTICE TOWER RESPONSE TO HUMAN INDUCED DYNAMIC LOADS	1139
<i>Liga Gaile, Ivars Radinsh</i>	
SHAPING COMMANDS TO MAXIMIZE PENDULUM SWING	1147
<i>Ehsan Maleki, Fernando Bazerghi, William Singhose, Sirri Sunay Gürleyük</i>	
ESTIMATION OF UNMEASURED FREQUENCY RESPONSE FUNCTIONS	1155
<i>F. C. Batista, N. M. M. Maia</i>	
SLOSH SUPPRESSION OF A LIQUID IN A SUSPENDED CONTAINER USING ROBUST INPUT SHAPING	1163
<i>Aravind Samba Murthy, Arto Kivila, William Singhose</i>	
VIBRATION OF ORTHOTROPIC DOUBLE CURVATURE PANEL WITH A SET OF CUTOFFS OF ARBITRARY CONFIGURATION	1171
<i>Tetiana Shopa</i>	
NONLINEAR FREE DYNAMIC RESPONSE OF A ONE DEGREE-OF-FREEDOM OSCILLATOR INDUCED BY A QUADRATIC VELOCITY DEPENDENT MODEL OF FRICTION	1179
<i>F. Majdoub, J. Perret-Liaudet, M. Belin, J. M. Martin</i>	
OPTIMAL CONTROL OF SYSTEMS WITH PROBABILISTIC UNCERTAINTIES	1185
<i>Dan Stancioiu, Huajiang Ouyang</i>	
MODAL AND TRANSIENT ANALYSIS OF A ROTATING MULTI-PACKET BLADE SYSTEM WITH A MISTUNED BLADE	1193
<i>Seung Min Kwon, Hong Hee Yoo</i>	

ACTIVE NOISE AND VIBRATION CONTROL IN PRACTICAL SYSTEM IMPLEMENTATIONS

A CONDITIONAL FILTER FOR REDUCTION OF THE SEARCH SPACE IN GENETIC ALGORITHM OPTIMISATION OF SENSOR AND ACTUATOR LOCATION IN ACTIVE VIBRATION CONTROL	1199
<i>A. H. Daraji, J. M. Hale</i>	
AN INVESTIGATION OF A THEORETICAL TOOL FOR PREDICTING PERFORMANCE OF AN ACTIVE NOISE CONTROL SYSTEM	1212
<i>Annea Barkefors, Simon Berthilsson, Mikael Sternad</i>	
VIBRATION SIMULATION AND ANALYSIS OF LARGE GLASS HANDLING ROBOT WITH FEM	1220
<i>Dong Il Park, Cheol Hoon Park, Hyunmin Do, Kwang Jo Jung</i>	
MEASUREMENT AND PREDICTION OF GROUND VIBRATIONS ON CULTURAL HERITAGE BUILDINGS	1227
<i>Samo Lubej, Andrej Ivanic, Primož Jelušič, Marjan Lep, Sebastian Toplak, Beno Mesarec, Igor Ivanovski</i>	
ACTIVE VIBRATION CONTROL OF A PAPER MACHINE HEADBOX	1235
<i>Hans Rudolf Graf, Erich Kläui</i>	
DECENTRALIZED ACTIVE VIBRATION CONTROL USING MULTIPLE INERTIAL ACTUATORS	1243
<i>Roshun Paurobally, Kah Hoe Ho</i>	
OPTIMISATION OF NUMBER AND PLACEMENT OF PIEZOELECTRIC SENSOR / ACTUATOR PAIRS FOR ACTIVE VIBRATION REDUCTION OF A FLEXIBLE PLATE USING THE GENETIC ALGORITHM	1251
<i>A. H. Daraji, J. M. Hale</i>	

WAVE PROPAGATION IN SOLIDS AND STRUCTURES

DECOMPOSITION OF THE COCHLEAR RESPONSE USING WAVE FINITE ELEMENTS	1267
<i>S. J. Elliott, Guangjian Ni, B. Lineton, B. R. Mace</i>	
WAVE PROPAGATION IN WAVEGUIDES WITH LOCAL NON-UNIFORMITIES USING A COMBINED SPECTRAL SUPER ELEMENTS	1275
<i>J. Ryue</i>	

SIMPLE PREDICTION OF WAVEGUIDE PROPERTIES OF THIN ANNULAR PLATES	1283
<i>Maziyar Nesari Zadeh, Sergey V. Sorokin</i>	
ULTRASONIC CHARACTERIZATION OF POLYUREA ELASTOMERS	1290
<i>V. Samulionis, J. Banys, Š. Svirskas, A. Sanchez-Ferrer, R. Mezzenga</i>	
ACOUSTOPOLARISCOPY METHOD AND NONLINEAR EFFECTS BY PROPAGATING OF TRANSVERSAL WAVES IN THE SAMPLES OF KOLA (SG-3) AND OUTOKUMPU (OKU) DRILL HOLES	1298
<i>Feliks Gorbatshevich, Mikhail Kovalevskiy, Olga Trishina</i>	
RAPID CHARACTERIZATION OF LAMB WAVE PROPAGATION IN COMPOSITE MATERIALS USING EMATS	1305
<i>Osvaldas Putkis, Anthony J. Croxford</i>	
LOW-FREQUENCY WAVE PROPAGATION IN AN ELASTIC PLATE LOADED BY A TWO-LAYER FLUID	1313
<i>Dmitrij Indeitsev, Sergey Sorokin</i>	
SECULAR EQUATION FOR RAYLEIGH – EDGE WAVES IN A THIN ORTHOTROPIC MEDIUM	1321
<i>Jan Cerv, Jiri Plešek</i>	
REFLECTION OF LEAKY ACOUSTIC WAVE FROM METALIZED SURFACE OF PIEZOELECTRIC CRYSTAL	1327
<i>Jaroslavas Belovickis, Romualdas Rimeika, Daumantas Ciplys</i>	

SEMI-ACTIVE VIBRATION CONTROL

SMART FLUID DAMPER FOR ROTOR SYSTEMS	1333
<i>Jens Bauer</i>	
SEMI-ACTIVE VIBRATION CONTROL OF A RAIL-TRACK SUPPORTED BY DISCRETE SPRINGS AND MAGNETO- RHEOLOGICAL DAMPERS UNDER A TRAVELLING MASS	1341
<i>Bong-Jo Ryu, Youngshik Kim, Jin-Kyu Kang, Boo-Jin Oh, Young-Sik Yoon</i>	
OBSERVER BASED HALF-CAR MODEL IDENTIFICATION OF MAGNETORHEOLOGICAL VEHICLE SUSPENSION	1349
<i>Piotr Krauze</i>	
IDENTIFICATION OF A MAGNETORHEOLOGICAL DAMPER FOR SEMI-ACTIVE VIBRATION CONTROL	1357
<i>Jerzy Kasprzyk, Krzysztof Plaza, Janusz Wyrwal</i>	
MAXIMIZATION OF DAMPING RATIO IN SEMI-ACTIVE FRICTION DAMPER FOR SPACE TRUSS STRUCTURES BY MODAL APPROACH	1365
<i>Young-Min Park, Kwang-Joon Kim, Hyun-Ung Oh</i>	
A HYBRID STRUCTURE OF DUAL STATORS AND A PNEUMATIC SPRING FOR RESONANCE CONTROL IN AN AIR MOUNT	1373
<i>Hyungtae Kim, Cheolho Kim, Sungbok Kang, Seokjun Moon, Gyuseop Lee</i>	
TRIPLE MECHANISM OF AN ACTIVE AIR SPRING COMBINING PNEUMATICS, ELECTRO-MAGNETS AND MR FLUID IN AN AIR MOUNT	1381
<i>Hyungtae Kim, Cheolho Kim, Seungbok Choi, Seokjun Moon, Wongil Song</i>	

STRUCTURE-BORNE SOUND IN BUILDINGS

A SUBSTITUTION METHOD FOR STRUCTURE-BORNE SOURCE POWER IN HEAVYWEIGHT CONSTRUCTION	1389
<i>Christoph Höller, Barry M. Gibbs</i>	
ESTIMATES OF MOBILITY FOR PREDICTION OF STRUCTURE-BORNE SOUND TRANSMISSION IN BUILDINGS	1397
<i>Barry M. Gibbs, Andreas R. Mayr</i>	
USING A GLOBAL MODE APPROACH ON ISOLATED JUNCTIONS TO CALCULATE COUPLING LOSS FACTORS FOR SEA MODELS OF LARGE HEAVYWEIGHT BUILDINGS	1405
<i>David Wilson, Carl Hopkins</i>	
CONSIDERING THE STOCHASTIC NATURE OF LOSS FACTORS TO CLASSIFY ENERGY TRANSMISSION PATHS IN SEA	1413
<i>Àngels Aragonès, Oriol Guasch</i>	

VIBRATION OF BUILDINGS

PREDICTION OF VIBRATIONS INDUCED BY THE CONSTRUCTION ACTIVITIES BASED ON FULL SCALE MEASUREMENTS	1421
<i>Edita Talic, Jacob Egede Andersen, Admir Mehic</i>	
PREDICTION OF GROUND VIBRATIONS DUE UNDERGROUND BLASTING	1429
<i>Primož Jelušič, Samo Lubej, Andrej Ivanič</i>	

ADVANCES IN SOUND ABSORBING MATERIALS

MEASUREMENT OF MATERIAL'S ACOUSTIC PROPERTIES USING A VOLUME VELOCITY SOURCE	1437
<i>Jorge P. Arenas, Luis Darmendrail</i>	
LOW-FREQUENCY TOTAL ABSORPTION WITH MEMBRANE-TYPE ACOUSTIC METAMATERIAL	1445
<i>Guancong Ma, Jun Mei, Min Yang, Zhiyu Yang, Weijia Wen, Ping Sheng</i>	

PASSIVE NOISE AND VIBRATION CONTROL

NOISE BARRIER AS A PART OF A SOUND-PROOFED ENCLOSURE	1453
<i>Lyudmila Ph. Drozdova, Alexander V. Kudaev, Natalia V. Tyurina</i>	
EFFECTS OF POLYMERIC MATERIAL SOLUTION ON VIBRATION AND NOISE REDUCTION ON STEREOPHONIC EQUIPMENT	1461
<i>Kiminobu Nishimura, Ryuhkei Ina</i>	
USING PIEZOELECTRIC IMPACT ABSORBERS ON VIBRATION CONTROL OF STRUCTURES	1469
<i>Y. M. Huang, C. W. Hsu</i>	
SENSITIVITY ANALYSIS OF SHUNTED PIEZOELECTRICS IN VIBRATION DAMPING PERFORMANCE UNDER TEMPERATURE VARIATION	1476
<i>Jae-Won Park, Jae-Hung Han, Hyun-Ung Oh</i>	
A STUDY ON MODELING AND SUPPRESSION OF TRANSVERSE VIBRATION FOR AXIALLY-EXTENDING BEAMS UNDER GRAVITY	1484
<i>Won-Sang Yun, Seong-Wook Hong</i>	
ACOUSTICAL AND VIBRATION PERFORMANCE OF LAYERED BEAMS WITH THE DYNAMIC VIBRATION ABSORBERS	1491
<i>Bohdan Diveyev, Orest Horbay, Roman Pelekh, Andrij Smolenskyy</i>	
DIFFERENT TYPE VIBRATION ABSORBERS DESIGN FOR BEAM-LIKE STRUCTURES	1499
<i>Bohdan Diveyev, Ihor Vikovych, Ihor Dorosh, Ivan Kemytskyy</i>	

COMMUNITY AND ENVIRONMENTAL NOISE

NOISE BALANCE 2010 - ANALYSIS OF DECISION-MAKING CRITERIA FOR NOISE REDUCTION MEASURES TO BE LAID DOWN IN NOISE ACTION PLANS IN ACCORDANCE WITH DIRECTIVE 2002/49/EC ON ENVIRONMENTAL NOISE	1507
<i>Matthias Hintzsche, Eckhart Heinrichs</i>	
MUNICIPALITY OBLIGATIONS AND INITIATIVES FOR ENVIRONMENTAL NOISE MANAGEMENT	1515
<i>Zanda Krukle</i>	
ASSESSMENT OF A SOCIO-ACOUSTIC SURVEY IN AN ITALIAN URBAN AREA	1523
<i>Rosario Caracausi, Gaetano Cognata</i>	
CHANGES IN ACOUSTIC CLIMATE AROUND MOTORWAY A2 AT CONSECUTIVE STAGES OF DEVELOPMENT	1530
<i>Malgorzata Orczyk, Franciszek Tomaszewski</i>	

OUTDOOR SOUND PROPAGATION

ANALYSIS OF CLAP SOUNDS RECORDED DURING THE SEPTEMBER 9-10 2011 GEOMAGNETIC STORM	1538
<i>Unto K. Laine</i>	

ENVIRONMENTAL NOISE & VIBRATION FROM URBAN TRANSPORTATION NETWORKS

A SCALABLE ACOUSTIC SENSOR NETWORK FOR MODEL BASED MONITORING OF URBAN TRAFFIC NOISE	1546
<i>Tom Basten, Peter Wessels, Frits Van Der Eerden</i>	
SOUND ATTENUATION PROVIDED BY BARRIERS INSTALLED AT FLYOVERS	1554
<i>Natalia N. Minina, Natalia V. Tyurina, Nickolay I. Ivanov</i>	
ENVIRONMENTAL NOISE MONITORING PROGRAM IN URBAN & SEMI URBAN MOTORWAY & RAILWAY NETWORKS IN GREECE. A COMPREHENSIVE ANALYSIS FOR THE LAST 10 YEARS OF OPERATION	1558
<i>Basile C. Dalamagas, Konstantinos Vogiatzis, Dimitra Dalamaga</i>	

COMMUNITY AND ENVIRONMENTAL NOISE

NOISE POLLUTION ASSESSMENT OF POOR COMMUNITY AREAS IN RIO DE JANEIRO	1565
<i>Bruna P. V. Lessa, Fernando A. N. Castro Pinto</i>	

THERMOACOUSTIC TECHNOLOGIES: FROM FUNDAMENTALS TO APPLICATIONS

MULTI-STAGE TRAVELING WAVE THERMOACOUSTICS IN PRACTICE	1573
<i>Kees De Blok</i>	
DEMONSTRATOR OF A COMBUSTION DRIVEN THERMOACOUSTIC ELECTRICITY GENERATOR FOR REMOTE AND RURAL AREAS OF DEVELOPING COUNTRIES	1581
<i>Zhibin Yu, Artur J. Jaworski</i>	
ASSESSMENT OF THE PERFORMANCE OF REGENERATORS IN TRAVELLING-WAVE THERMOACOUSTIC ENGINES	1589
<i>Chris Lawn</i>	
STUDY ON A CLOSED-LOOP, ACOUSTICALLY RESONANT MULTI-STAGE TRAVELING-WAVE THERMOACOUSTIC HEAT ENGINE	1597
<i>S. Zhang, E. C. Luo, Y. Huang</i>	
EXPERIMENTAL STUDY OF HEAT TRANSFER FROM PLAIN FINS IN OSCILLATORY FLOW – A MICROSCOPIC VIEW OF HEAT EXCHANGE PROCESSES IN THERMOACOUSTIC DEVICES	1605
<i>Xiaoaon Mao, Artur J. Jaworski</i>	
A UNIQUE EXPERIMENTAL SETUP FOR EVALUATING THERMOACOUSTIC CONVERSION PERFORMANCE OF A REGENERATOR UNDER DIFFERENT ACOUSTICAL FIELDS	1613
<i>Ruidong Zhao, Zhanghua Wu, Ercang Luo, Wei Dai, Guoyao Yu</i>	
DESIGN AND EXPERIMENTAL EVALUATION OF A TRAVELLING WAVE THERMOACOUSTIC COOLER DRIVEN BY A STANDING WAVE THERMOACOUSTIC ENGINE	1621
<i>Patcharin Saechan, Zhibin Yu, Artur J. Jaworski</i>	
THERMOACOUSTIC AND ENERGY CONVERSION: FUTURE STEPS	1629
<i>Adrien Bétrancourt, Thierry Le Pollès, Emmanuel Chabut, Maurice-Xavier François</i>	

PSYCHOLOGICAL / PHYSIOLOGICAL ACOUSTICS

HEARING SENSITIVITY TO SPECTRUM-PATTERN SHIFTS	1637
<i>Alexander Ya. Supin, Dmitry I. Nechaev</i>	
EFFECTS OF CHANGES IN THE FEELING OF DEPTH OF A VISUAL TARGET ON THE SUBJECTIVE SOUND PRESSURE LEVEL OF ITS ASSOCIATED SOUND	1645
<i>Hiroshi Hasegawa, Nobuyuki Ishii, Tomoharu Ishikawa, Miyoshi Ayama</i>	
TIME-VARYING SOUND QUALITY EVALUATION USING BRAIN MAGNETIC FIELD	1652
<i>Shunsuke Ishimitsu, Kensuke Fujinoki, Takayuki Arai, Seiji Nakagawa, Yoshiharu Soeta</i>	

HEARING PROTECTORS: ADVANCED TECHNOLOGY IN POWERED ELECTRONIC AND PASSIVE DEVICES

A MULTIDIMENSIONAL EVALUATION OF AUDITORY PERFORMANCE IN ONE POWERED ELECTRONIC LEVEL-DEPENDENT HEARING PROTECTOR	1660
<i>Christian Giguère, Chantal Laroche, Véronique Vaillancourt, Evgenia Shmigol, Tanya Vaillancourt, Jérémie Chiasson, Véronique Rozon-Gauthier</i>	

AUDIOLOGY, HEARING AIDS AND COCHLEAR IMPLANTS

EFFECTS OF ELECTRO-ACOUSTICAL HEARING ON MANDARIN SPEECH RECOGNITION UNDER BACK-GROUND NOISE FOR PATIENTS WITH COCHLEAR IMPLANTS–SIMULATION AND CLINICAL STUDIES	1668
<i>Chao-Min Wu, Kuo-Yuan Huang, Wei-Lin Tsai, Che-Ming Wu, Hung-Ching Lin</i>	

BIOACOUSTICS

MODELING SOUND LOCALIZATION USING BINAURAL CUES IN HUMPBACK WHALES	1675
<i>Jennifer N. Schneider, David R. Lloyd, Eduardo Mercado III</i>	
ACOUSTIC MONITORING OF CAPERCAILLIE COURTING DISPLAY	1681
<i>Seppo Fagerlund</i>	

Volume 3

MUSICAL ACOUSTICS

EFFECT OF VIOLIN'S VARNISHING ON ITS MODAL BEHAVIOUR	1689
<i>Ewa Skrodzka, Bogumil B. J. Linde, Antoni Krupa</i>	
DISCUSSIONS OF SOUND CHARACTERISTICS OF VIBRAPHONE BY DIFFERENT PLAYING TECHNIQUES	1691
<i>Bor-Tsuen Wang, Shiang-Ruei Wu, Sho-Chuan Hsu, Cheng-Hsien Kao</i>	

MEASURING MUSICAL INSTRUMENTS DIRECTIVITY PATTERNS WITH SCANNING TECHNIQUES	1697
<i>Daniel Fernandez Comesaña, Takashi Takeuchi, Sandra Morales Cervera, Keith Holland</i>	
OPTIMIZATION AND SIMULATION ALGORITHMS FOR THE SOUND DESIGN OF LABIAL ORGAN PIPES	1705
<i>Péter Rucz, Fülöp Augusztinovicz, Péter Fiala, Judit Angster, András Miklós, Thomas Trommer</i>	
MEASUREMENT OF PRESSURE-OSCILLATION CHARACTERISTICS WITH EMOUCHURE VARIATION ON ARTIFICIAL BLOWING OF TRUMPET	1713
<i>Tsubasa Enokida, Naoto Wakatsuki, Koichi Mizutani</i>	
COMPLICATED DYNAMICS EXHIBITED BY THIN SHELLS DISPLAYING NUMEROUS INTERNAL RESONANCES : APPLICATION TO THE STEELPAN	1721
<i>Mélodie Monteil, Cyril Touzé, Olivier Thomas</i>	
AMPLITUDE DEPENDENCE OF BEAT ON A SINGLE STRING VIBRATION	1729
<i>Toru Kobayashi, Naoto Wakatsuki, Koichi Mizutani</i>	
ON THE DYNAMICAL BEHAVIOUR OF WORN GUITAR STRINGS	1737
<i>Miguel Marques, Octavio Inácio, Vincent Debut, José Antunes</i>	

MEASUREMENT TECHNIQUES AND SENSORS

3D VIBRATION MEASUREMENT USING ONE LASER SCANNING VIBROMETER(LSV) AT THREE DIFFERENT LOCATIONS MOVEMENT	1745
<i>Dongkyu Kim, Jisu Kim, Kyihwan Park</i>	
VIBRATORY GYROSCOPE WITH MULTIPLE SENSITIVITY UTILIZING PLURAL DEGENERATE MODES	1753
<i>Naoto Wakatsuki, Koichi Mizutani, Mami Nakanishi</i>	
MEASUREMENT OF SOUND VELOCITY ALONG CIRCULAR CONCAVE SURFACE USING WHISPERING GALLERY MODES	1761
<i>Yuya Saito, Koichi Mizutani, Naoto Wakatsuki</i>	
PARTICLE VELOCITY MEASUREMENTS USING PHOTON CORRELATION SPECTROSCOPY FOR THE DIRECT REALISATION OF THE SOUND PRESSURE UNIT IN AIRBORNE ACOUSTICS	1769
<i>Triantafillos Koukoulas, Pete Theobald, Ben Piper, Srinath Rajagopal, Richard Barham, Stephen Robinson</i>	
A REAL-TIME ROCKING MOTION MONITORING SYSTEM	1777
<i>Lixue Wu</i>	
COMPARISONS OF AIRCRAFT GENERATED VORTICES MEASURED BY A PHASED MICROPHONE ARRAY AND A PULSED LIDAR	1785
<i>David Y. Lai, Donald P. Delisi</i>	

NOISE AND VIBRATION DIAGNOSTICS AND ADVANCED MEASUREMENT TECHNIQUES

ESTIMATING TRAFFIC SOUNDSCAPE OF A CITY BY BUS INFORMATION SYSTEM: IN CASE OF SEOUL	1793
<i>Myoung W. Nam, Yong-Tae Hwang, Kyogu Lee</i>	
MEASURING OPERATIONAL DEFLECTION SHAPES WITH A SCANNING P-U PROBE	1801
<i>Daniel Fernandez Comesaña, Hans-Elias De Bree, Jelmer Wind, Eduardo Latorre Iglesias, Keith R. Holland, Malcolm Smith</i>	

INDUSTRIAL NOISE

NOISE-REDUCING LIGHTWEIGHT COVERS FOR HUGE INDUSTRIAL GEAR BOXES	1809
<i>Werner A. Hufenbach, Sirko Geller, Frank Kolbe, Martin Dannemann, Daniel Wohlfahrt, Ole Renner, Martin Pohl</i>	
COMPARISON OF NOISE CONTROL MEASURES SUBJECT TO TYPE OF USED EQUIPMENT	1815
<i>Sergey Semin, Vladimir Tupov</i>	
NOISE LEVELS OF THE MOST COMMONLY USED HAND TOOLS (THE PERIOD FROM 2007 TO 2010 YEAR)	1823
<i>Lakisa Svetlana, Zellane Mairita, Seile Anita</i>	

HUMAN RESPONSE TO NOISE AND VIBRATION

HUMAN RESPONSE TO VIBRATION FROM PASSENGER AND FREIGHT RAILWAY TRAFFIC IN RESIDENTIAL ENVIRONMENTS	1828
<i>James Woodcock, Calum Sharp, Gennaro Sica, Eulalia Peris, Andrew T. Moorhouse, David C. Waddington</i>	
AN EPIDEMIOLOGICAL STUDY ON RAYNAUD'S PHENOMENON AMONG WORKERS USING AN IMPACT WRENCH	1836
<i>Ikuharu Morioka, Yoko Aiba, Kenya Yamamoto, Hidesuke Shimizu, Satoshi Ohshiba, Kazuhiro Ikeda, Kazuhisa Miyashita</i>	
SYSTEM FOR DETERMINATION OF HAZARDOUS AREAS FOR THE BLIND PEOPLE USING WAVE-VIBRATION MARKERS - WRIST VIBRATION PERCEPTION THRESHOLD	1844
<i>Jerzy Wiciak, Dorota Mlynarczyk</i>	

VIBRATORY DETECTION THRESHOLDS ON PROXIMAL PHALANGE AND A WRIST IN VISUALLY HANDICAPPED YOUNG PERSONS	1850
--	------

Ewa Skrodzka, Edyta Bogusz

NEW METHOD OF SPATIAL ORIENTATION TEACHING BASED ON CITY SOUNDS, NOT ONLY FOR THE BLIND	1854
--	------

Bartosz Czechyra, Franciszek Tomaszewski, Skrodzka Ewa, Durek-Sypek Iwona

SIGNAL PROCESSING IN ACOUSTICS AND VIBRATION

BLIND SEPARATION OF UNCORRELATED SOUND SOURCES FROM THE PRINCIPLE OF LEAST SPATIAL COMPLEXITY	1860
--	------

Bin Dong, Jérôme Antoni

RESEARCH OF VIBRATION ENERGY PROPAGATION IN STRUCTURAL ELEMENTS	1868
--	------

Jan Warczek, Boguslaw Lazarz, Zbigniew Stanik

INVESTIGATION OF TRANSIENT NEAR-FIELD ACOUSTICAL HOLOGRAPHY USING TEMPORAL AND SPATIAL LAPLACE TRANSFORMS	1874
--	------

Jean Michel Attendu, Jean-François Blais, Annie Ross

OPTIMIZATION OF DRIVING PULSE ENVELOPE IN DETECTION OF HARMONIC RESPONSE FROM A LIPID-SHELLED ULTRASOUND CONTRAST AGENT	1882
--	------

Satya. V. V. N. Kothapalli, D. Grishenkov

ULTRASOUND AND ULTRASONIC MEASUREMENTS

USING SHEAR ULTRASONIC WAVE TRANSDUCERS TO STUDY SOFT CHEESE	1890
---	------

Antonio Jiménez, M. Montaña Rufo, Jesús M. Paniagua, Fernando T. Pachón, Abel Crespo

TEMPERATURE RISE CAUSED BY ULTRASONIC RADIATION IN TISSUE MIMICKING PHANTOM	1898
--	------

Nobuyuki Endoh, Takenobu Tsuchiya, Ryuta Niikawa, Yu Sakuma, Shin Tanaka

THERMAL-PROPERTY MIMICKING PHANTOM FOR STUDIES ON THE TEMPERATURE RISE BY THE ULTRASOUND FROM ULTRASONIC MEDICAL DEVICES	1904
---	------

Nobuyoshi Masuzawa, Yasuharu Hagiwara

RAILWAY NOISE AND VIBRATION

NOISE AND VIBRATION ACTIVITY OF TRAMS AS A DEVELOPMENT OF A TRAM ACOUSTIC SIGNATURE	1912
--	------

Bartosz Czechyra

ESTIMATION METHODS FOR RAILWAY NOISE CONSIDERING THE DIRECTIVITY AND UNSTEADINESS OF NOISE SOURCES	1918
---	------

Nobuhiro Yamazaki, Toki Uda, Kiyoshi Nagakura, Yoshiki Kikuchi, Takeshi Kurita

CONDITION MONITORING SYSTEM FOR A LIGHT RAIL VEHICLE	1926
---	------

Bartosz Czechyra, Bartosz Firlik

AEROACOUSTICS

ACOUSTIC RADIATION IN A UNIFORM FLOW AROUND A TWO-DIMENSIONAL CYLINDER AT LOW REYNOLDS NUMBER	1934
--	------

Hiroshi Yokoyama, Akiyoshi Iida

THE EFFECT OF SINUSOIDAL AIRFOIL GEOMETRY ON THE REDUCTION OF FLOW INDUCED TONAL NOISE	1942
---	------

Kristy Hansen, Con Doolan

CHARACTERISTICS OF AERODYNAMIC SOUND SOURCE OF TAPERED CYLINDER	1950
--	------

Hidechito Hayashi, Jou Ebine, Souichi Sasaki, Hiromitsu Hamakawa

AEROACOUSTIC SOURCE MODELING FOR THE GALBRUN EQUATION IN TIME DOMAIN	1959
---	------

Xue Feng, Mabrouk Ben Tahar

SOUND INSULATION ISSUES: PREDICTION MODELS FOR SOUND INSULATION AND DISCUSSION ABOUT RATING INDEXES

ACOUSTIC METAMATERIAL AND HOMOGENIZATION THEORY IN SOUND BLOCKING APPLICATIONS	1966
---	------

Min Yang, Zhiyu Yang

INVESTIGATION ON THE VALIDITY OF PREDICTION MODELS FOR MULTILAYERED STRUCTURES	1974
---	------

Selma Kurra

PASSIVE NOISE AND VIBRATION CONTROL

COMMAND SHAPER DESIGN FOR TRANSVERSE VIBRATION SUPPRESSION OF AXIALLY-EXTENDING CANTILEVER BEAMS UNDER GRAVITY	1982
<i>Seong-Wook Hong, William Singhose</i>	
DEVELOPMENT OF ELASTOMER BASED VIBRATION ISOLATION DEVICE FOR LOW-AMPLITUDE VIBRATIONS	1989
<i>Shantti Swaroop Kandala, Dae-Oen Lee, Jae-Hung Han</i>	
VARIABLE STIFFNESS ANALYSIS AND CONSIDERATION FOR VIBRATION CONTROL	1996
<i>Xinfeng Yang</i>	

NONLINEAR ACOUSTICS AND VIBRATION

VISUALIZATION OF PARAMETRIC SOUND GENERATION PROCESS BASED ON WAVE NUMBER FILTERING USING NUMERICAL SIMULATION	2003
<i>Hideyuki Nomura, Tomoo Kamakura, Gregory T. Clement, Claes M. Hedberg</i>	
A NEW NONLINEAR CONVOLUTION METHOD IN THE EMULATION OF NONLINEAR ACOUSTIC DEVICES	2010
<i>Lamberto Tronchin, Valerio Tarabusi</i>	
NONLINEAR MICROBUBBLE BEHAVIOUR FOR ENHANCED DRUG UPTAKE	2018
<i>Spiros Kotopoulos, Anthony Delalande, Chantal Pichon, Michiel Postema</i>	

THERMOACOUSTIC TECHNOLOGIES: FROM FUNDAMENTALS TO APPLICATIONS

CFD MODELING OF STREAMING PHENOMENA IN A TORUS-SHAPED THERMOACOUSTIC ENGINE	2024
<i>J. A. Lycklama À Nijeholt, M. E. H. Tijani, S. Spoelstra, M. S. Logino, A. K. Kuczaj</i>	
APPLICATION OF THE MESOSCOPIC METHOD TO MODEL NONLINEAR THERMOACOUSTIC OSCILLATIONS	2032
<i>Xiaoqing Zhang, Heying Feng</i>	
SECOND LAW ANALYSIS OF OSCILLATING FLOW CONVECTION INSIDE POROUS MEDIA OF THERMOACOUSTIC ENGINES: AN OPTIMIZATION STUDY	2040
<i>Antonio Piccolo</i>	
PERFORMANCE CHARACTERIZATION OF A MICRO-SCALE THERMOACOUSTIC ENERGY HARVEESTER	2048
<i>Ahmed Abd El-Rahman, Mohamed Serry, Sherif Sedky, Ehab Abdel-Rahman</i>	

COMBUSTION DYNAMICS, ACOUSTICS, VIBRATION AND FATIGUE

MULTIPLE-INPUT, SINGLE-OUTPUT APPROACH FOR IDENTIFICATION OF LAMINAR PREMIXED FLAME DYNAMICS FROM DIRECT NUMERICAL SIMULATION	2057
<i>Ahtsham Ulhaq, Santosh Hemchandra, Luis Tay Wo Chong, Wolfgang Polifke</i>	
LOW-ORDER MODELLING OF DISTRIBUTED HEAT RELEASE	2065
<i>Robert E. Leandro, Wolfgang Polifke</i>	
THERMAL BOUNDARY EFFECTS ON A GT LINER STRUCTURE	2073
<i>Salvatore Matarazzo, Hannes Laget, Evert Vanderhaegen, A. Can Altunlu, Saverio Tufano</i>	
FLAME DESCRIBING FUNCTION MEASUREMENTS FOR LIMIT CYCLE CHARACTERIZATION	2081
<i>Juan Carlos Roman Casado, J. B. W. Kok</i>	
HOW TO ACHIEVE HIGH LEVELS OF EXCITATION IN THE FUEL LINE OF A PRESSURIZED COMBUSTOR	2089
<i>Mehmet Kapucu, Jim B. W. Kok</i>	

COMPUTATIONAL ACOUSTICS

THE EFFECT OF ELASTIC PARAMETERS OF ALTERATION ZONE ON THE DISPERSION PROPERTIES OF NORMAL MODES IN BOREHOLE	2097
<i>Denis Syresin, Timur Zharnikov</i>	
LATE TIME STABILITY OF THE TRANSIENT BOUNDARY ELEMENT METHOD	2105
<i>Michael Stütz, Michael Möser, Martin Ochmann</i>	
IMPEDANCE MODELLING AND EDUCATION FOR CAA USING THE IMPROVED MULTIPOLE BROADBAND MODEL	2113
<i>Junis Abdel Hay, Stefan Busse-Gerstengarbe, Frank Thiele, Xiaoyan Li, Xiaodong Li</i>	
HALFSPACE FORMULATIONS FOR THE BOUNDARY ELEMENT METHOD IN 3D-ACOUSTICS USING THE FAST MULTIPOLE METHOD	2121
<i>Sören Keuchel, Malte Gehlken, Otto Von Estorff</i>	

MID-FREQUENCY METHODS IN SOUND AND VIBRATION

TOWARD NEW HYBRID METHODS FOR MIDFREQUENCY VIBRATION PROBLEMS	2128
<i>Herve Riou, Pierre Ladeveze, Louis Kovalevsky</i>	
DESIGN OPTIMIZATION OF 3D UNBOUNDED VIBRO-ACOUSTIC PROBLEMS USING THE WAVE BASED METHOD	2135
<i>Kunmo Koo, Bert Pluymers, Wim Desmet, Semyung Wang</i>	
A PERTURBATION METHOD FOR LOCALLY DAMPED DYNAMIC SYSTEMS	2143
<i>L. Cortes, N. S. Ferguson, A. Bhaskar</i>	

KEYNOTES

VORTEX SOUND INTERACTION AND ITS APPLICATION IN AEROSPACE PROPULSION SYSTEM	2151
<i>Xiaofeng Sun</i>	
CONTEMPORARY VIBRATION ISOLATION: THEORY AND APPLICATIONS	2170
<i>Leif Kari</i>	

ACOUSTICAL TREATMENT OF COMMON SPACES

ACOUSTIC TREATMENT OF COMMON SPACES: A FEW TRENDS	2183
<i>Marc Asselineau</i>	

AVIATION NOISE

IMPACT OF TALLINN AIRPORT NOISE ON NEIGHBOURING RESIDENTIAL AREAS	2189
<i>Signe Vanker, Mariann Reppo, Mart Enneveer</i>	
MULTI-OBJECTIVE, MULTI-DISCIPLINARY OPTIMIZATION OF TAKE-OFF AND LANDING PROCEDURES TO MINIMIZE THE ENVIRONMENTAL IMPACT OF COMMERCIAL AIRCRAFT: THE NOISE VS FUEL CONSUMPTION TRADE-OFF WITHIN THE EC PROJECT COSMA	2196
<i>U. Iemma, M. Diez, C. Leotardi, F. Centracchio</i>	
PRELIMINARY OPERATIONS FOR CALIBRATING A PHASED MICROPHONE ARRAYS FOR AIR TRAFFIC MONITORING	2204
<i>Orsola Petrella, Vincenzo Quaranta, Salvatore Ameduri, Giovanni Betta</i>	

STANDARDS IN ACOUSTICS, NOISE AND VIBRATION

CALCULATION OF NOISE CHARACTERISTICS OF TECHNOLOGICAL EQUIPMENT BY ITS TECHNICAL CHARACTERISTICS	2212
<i>I. N. Zapletnikov, A. A. Shubin, I. S. Sevatorova</i>	

NOISE AND VIBRATION IN SPACE VEHICLES

DESIGN OPTIMIZATION OF THE SUPPORT STRUCTURE OF A NANOSATELLITE	2220
<i>Akshay K. Gulati, Chandramouli Padmanabhan</i>	

HUMAN RESPONSE TO NOISE AND VIBRATION

INDUSTRIAL VIBRATION IN LATVIA	2228
<i>Janis Dundurs, Žanna Martinsone</i>	
DEVELOPMENT OF VIBROACOUSTIC STIMULATION SEAT FOR A MOVIE THEATER CHAIR	2236
<i>Tae Gyun Kim, Deok-Hong Moon</i>	
ESTABLISHING VIBROTACTILE THRESHOLDS ON THE FINGERTIP FOR PEOPLE WITH AND WITHOUT A HEARING IMPAIRMENT OVER THE MUSICAL FREQUENCY RANGE BETWEEN C1 AND C6	2244
<i>Saúl Maté-Cid, Carl Hopkins, Gary Seiffert, Robert Fulford, Jane Ginsborg</i>	
REVIEW OF BIODYNAMIC MODELS OF HAND-ARM HUMAN SYSTEM	2252
<i>Marek S. Kozien, Marek A. Ksiazek</i>	
SOUND DESIGN OF INDUSTRIAL PRODUCTS BASED ON THE PREFERRED MATCHING BETWEEN VISUAL AND AUDITORY SENSATION	2262
<i>Akihiko Arimitsu, Wan-Ho Cho, Takeshi Toi</i>	
EFFECT OF PHASE BETWEEN THE TWO COMPONENTS ON DYNAMIC RESPONSE OF SEATED SUBJECTS EXPOSED TO DUAL-AXIS WHOLE-BODY VIBRATION	2269
<i>Nobuyuki Shibata</i>	

GENERAL VIBRATIONS

HAND TOOLS' CREATED HAND - ARM VIBRATION LEVELS EVALUATION IN LATVIAN WORK ENVIRONMENT	2275
<i>Mairita Zellane, Svetlana Lakisa, Anita Seile</i>	

VIBRATION OF SMART AND COMPOSITE MATERIAL SYSTEMS

A SELF-TUNE MECHANISM ON A PZT VIBRATION ENERGY HARVESTER	2279
<i>Shyh-Chin Huang, Kao-An Lin</i>	
CONTROL AND RESPONSE CHARACTERISTICS OF SEMI-ACTIVE SUSPENSION SYSTEM WITH MAGNETORHEOLOGICAL DAMPERS FOR ARMORED VEHICLES	2287
<i>Ling Zheng, Yinong Li, Yanling Li</i>	
VIBRATION DAMPING OF HOLLOW SHAFT BY USING MAGNETORHEOLOGICAL ELASTOMER	2295
<i>Chul-Hee Lee, Jeong-Heon Park, Eun-Sang Lee, Won Oh Cho, Cheol Hyun Kim, Nam Gyeong Kim</i>	
DYNAMICAL ANALYSIS OF A TWO-STAGE NON-LINEAR MRE VIBRATION ISOLATION SYSTEM	2301
<i>Guanghong Zhu, Yeping Xiong, Steve Daley, Ajit Shenoi</i>	
DAMPING PERFORMANCE OF COMPOSITE STRUCTURES WITH INTEGRATED VISCOELASTIC LAYERS – SIMULATION AND EXPERIMENTAL INVESTIGATIONS	2309
<i>Martin Dannemann, Werner Hufenbach, Jens Friedrich, Stefan Friebe, Frank Kolbe</i>	
THE VARIATION RATE OF SHEAR MODULUS OF MAGNETORHEOLOGICAL ELASTOMER DUE TO ADDING SILANE COUPLING AGENT	2317
<i>Ji-Hyun Yoon, In-Hyung Yang, Jae-Eun Jeong, Un-Chang Jeong, Jae-Eung Oh</i>	

PHYSICAL ACOUSTICS

ACOUSTO-OPTIC VISUALIZATION OF ACOUSTIC WAVES IN CRYSTALS WITH STRONG ANISOTROPY OF ELASTIC PROPERTIES	2323
<i>Vitaly Voloshinov, Evgeny Djakonov, Nataliya Polikarpova</i>	
METHODS FOR INVESTIGATING DEPENDENCE OF PROPERTIES OF SINGLE CRYSTAL MATERIALS FROM ENVIRONMENT AND OPERATIONAL CONDITIONS	2331
<i>Corey Bachand, Boris Aronov, David A. Brown</i>	
THE MATRIX RICCATI EQUATION APPROACH TO CALCULATE DISPERSION CURVES FOR RADIALY INHOMOGENEOUS WAVEGUIDES WITH AXIALLY SYMMETRIC ANISOTROPY	2346
<i>Timur Zharnikov, Denis Syresin</i>	
EXPERIMENTAL CHARACTERIZATION OF A 10-6 RELATIVE AMPLITUDE FLOW EFFECT ON THE SPEED OF SOUND MEASUREMENT INSIDE AN ACOUSTIC QUASISPHERICAL RESONATOR	2353
<i>Arnaud Guillou, Laurent Pitre, Fernando Sparasci, Daniel Truong, Lara Risehari, Marc E. Himbert</i>	
NORMAL INCIDENCE ULTRASONIC BEAM TRANSMISSION THROUGH A WATER-IMMERSED PLATE USING A PIEZOELECTRIC TRANSDUCER. FINITE ELEMENT MODELING, ANGULAR SPECTRUM METHOD AND MEASUREMENTS	2361
<i>Magne Aanes, Kjetil Daae Lohne, Per Lunde, Magne Vestrheim</i>	
SIMULATION OF ACOUSTIC STREAMING BY MEANS OF THE FINITE-DIFFERENCE TIME-DOMAIN METHOD	2369
<i>Arturo Santillan</i>	

ACTIVE VIBRATION CONTROL IN ROTATING MACHINES THEORY AND APPLICATIONS

DESIGN OF 100,000RPM CLASS ULTRACENTRIFUGE USING HYBRID MAGNETIC BEARINGS	2377
<i>Cheol Hoon Park, Sang Kyu Choi, Sang Yong Ham, Doo Euy Hong, Soo Hyun Kim</i>	
CONTROLLING ROTOR VIBRATIONS OF TWO-POLE INDUCTION MACHINE UNDER LOADED OPERATION	2383
<i>Anssi Sinervo, Antero Arkkio</i>	
ACTIVE CONTROL METHOD FOR ATTENUATION OF TORQUE VIBRATIONS IN AC INDUCTION MOTOR	2391
<i>Sami Kiviluoto, Tapani Hyvämäki, Kai Zenger, Ilari Kärkkäinen, Antero Arkkio</i>	
ACTIVE VIBRATION CONTROL OF JOURNAL BEARINGS WITH THE USE OF PIEZOACTUATORS	2400
<i>Jiri Tuma, Jaromir Škuta, Jiri Šimek</i>	
INFLUENCE OF EXTERNAL EXCITATIONS ON BALL POSITIONING OF AN AUTOMATIC BALANCER	2408
<i>C. K. Sung, C. H. Lu, T. C. Chan</i>	
ACTIVE LOAD CONTROL DESIGN FOR LARGE WIND TURBINE BLADES USING TRAILING EDGE FLAP	2416
<i>Jong-Won Lee, Jae-Hung Han, Hyung-Kee Shin</i>	

FLOW DUCT ACOUSTICS AND MUFFLERS

ACOUSTIC INVESTIGATION OF CROSS FLOW - EXTENDED CLOSED END MUFFLER	2422
<i>Muttalip Askin Temiz, Haluk Erol</i>	
QUASI-3D ACOUSTIC MODELLING OF COMMON INTAKE AND EXHAUST COMPONENTS	2430
<i>Gianluca Montenegro, Augusto Della Torre, Angelo Onorati, Robert Fairbrother, Yasser Elnemr, Andreas Dolinar</i>	
FAN NOISE REDUCTION BY USING PERIODIC RESONATOR ARRAY	2438
<i>Yong-Ho Heo, Eun-Ok Yim, Jeong-Guon Ih</i>	
NONLINEAR SOURCE CHARACTERISATION TECHNIQUES FOR IC-ENGINES	2442
<i>Hans Bodén</i>	
DIRECT DRIVE VALVE MODEL USED AS AN ACOUSTIC SOURCE IN A NETWORK MODEL	2450
<i>Roel A. J. Müller, Jakob Hermann, Wolfgang Polifke</i>	
PRESSURE REDUCING VALVE NOISE REDUCTION	2458
<i>Alexander Igolkin, Andrey Koh, Aleksandr Kryuchkov, Artur Safin, Evgeniy Shakhmatov</i>	

ACTIVE STRUCTURAL ACOUSTIC CONTROL

ONLINE SECONDARY PATH IDENTIFICATION FXLMS ALGORITHM FOR GEARBOX ACTIVE VIBRATION CONTROL	2465
<i>Feng Zhang, Yi-Nong Li, Lei Wang, Ling Zheng</i>	
EXPERIMENTAL STUDY ON DECENTRALIZED FEED-FORWARD CONTROL STRATEGY OF PLATE VIBRATIONS WITHOUT SECONDARY PATH MODELING USING PIEZOELECTRIC PATCH ACTUATORS	2473
<i>Yin Cao, Hongling Sun, Xiaodong Li, Jing Tian</i>	
ACTIVE VIBRATION CONTROL OF A DOUBLY-CURVED PANEL UNDER PRESSURIZATION	2481
<i>Delphine Nourzad, Stephen Elliott, Maryam Ghandchi-Tehrani, Emiliano Rustighi</i>	
OPTIMAL PLACEMENT OF FLAT PIEZOACTUATORS FOR AN ADAPTIVE FEEDFORWARD CONTROL SYSTEM	2489
<i>Thomas Haase, Malte Misol, Oliver Unruh</i>	
ACTIVE CONTROL OF NOISE AND VIBRATION ON A COMBUSTION ENGINE	2497
<i>Stefan Ringwelski, Martin Zornemann, Tommy Luft, Ulrich Gabbert</i>	
PRINCIPLES AND APPLICABILITY OF MAGNETOADAPTRONIC TRANSDUCERS (MATS) TO FERROMAGNETIC MATERIALS FOR ACTIVE NOISE AND VIBRATION REDUCTION	2505
<i>Ralf Kiran Schulz, Markus Glugla</i>	

SHOCK AND VIBRO-ACOUSTICS

APPLICATION OF NON LINEAR STIFFNESS FOR SHOCK VIBRATION ISOLATION	2513
<i>Diego Francisco Ledezma-Ramirez</i>	

NON-LINEAR VIBRATION

A DRY FRICTION MODEL TO REALIZE STICK FOR SIMULATION OF A DYNAMIC SYSTEM	2521
<i>Chan Kyu Choi, Hong Hee Yoo</i>	

Volume 4

ENHANCING THE VIBRATION BEHAVIOUR OF POWER ULTRASONIC SYSTEMS VIA PIEZOELECTRIC TRANSDUCER REDESIGN	2527
<i>Andrea Cardoni, Enrique Riera</i>	
APPLICATION OF A NONLINEAR SEMI-ACTIVE TUNED VIBRATION ABSORBER TO AN AUTOMOBILE SUBSTRUCTURE	2535
<i>Nicklas Norrick</i>	
LINEAR AND NONLINEAR DYNAMICS OF A CIRCULAR CYLINDRICAL SHELL UNDER STATIC AND PERIODIC AXIAL LOAD	2543
<i>Antonio Zippo, Marco Barbieri, Matteo Strozzi, Vito Errede, Francesco Pellicano</i>	
STUDY OF A NONLINEAR QUADRATIC SUSPENSION FOR AUTOMOBILE	2551
<i>Nicolae-Doru Stanescu, Jan-Cristian Grigore</i>	

THERMOACOUSTIC TECHNOLOGIES: FROM FUNDAMENTALS TO APPLICATIONS

HIGH TEMPERATURE THERMOACOUSTIC HEAT PUMP	2559
<i>Hassan Tijani, Simon Spoelstra, Jan-Aiso Lycklama</i>	
DESIGN OF A LOW-COST TWO-STAGE THERMOACOUSTIC ELECTRICITY GENERATOR FOR RURAL COMMUNITIES IN DEVELOPING COUNTRIES	2566
<i>Kalid Abdoulla, Zhibin Yu, Artur J. Jaworski</i>	

WAVE BEHAVIORS IN THERMOACOUSTIC SYSTEM	2574
<i>Qing Li</i>	
A LOOPED THREE-STAGE TRAVELING-WAVE THERMOACOUSTIC ENGINE WITH LIQUID PISTON	2581
<i>Donghui Li, Ercang Luo, Yanyan Chen, Liming Zhang, Yun Huang</i>	
HEAT TRANSFER PERFORMANCE OF FINNED-TUBE THERMOACOUSTIC HEAT EXCHANGERS IN OSCILLATORY FLOW	2588
<i>Wasan Kamsanam, Xiaolan Mao, Artur J. Jaworski</i>	
ACOUSTIC NONLINEARITIES IN THERMOACOUSTIC REFRIGERATORS DRIVEN BY LOUDSPEAKERS	2596
<i>Shu-Yu Xiao, Sha Tao, Mei-Chen Qiu, Huan Ge, Li Fan, Shu-Yi Zhang, Hui Zhang</i>	
STUDY ON THE RELATIONSHIP BETWEEN FREQUENCY AND PRESSURE AMPLITUDE OF THE THERMOACOUSTIC ENGINE	2604
<i>Huifang Kang, Fan Jiang, Hongfei Zheng</i>	
PERFORMANCE EVALUATION OF THERMOACOUSTIC ENGINE USING DIFFERENT GASES	2609
<i>A. H. Ibrahim, M. Emam, Hosny Omar, Karim Addas, Ehab Abdel-Rahman</i>	

EDUCATION IN ACOUSTICS, NOISE AND VIBRATION

EASYSMOD: A MATLAB/SCILAB TOOLBOX FOR TEACHING MODAL ANALYSIS	2616
<i>Georges Kouroussis, Lassaad Ben Fekih, Calogero Conti, Olivier Verlinden</i>	

EDUCATION IN ACOUSTICS, NOISE AND VIBRATION

PROJECT BASED LEARNING IN ACOUSTICS FOR ENGINEERS	2624
<i>María Jesús Elejalde García, Erica Macho Stadler</i>	
LEARNING BASED ON PROJECTS AND PROBLEM SOLVING ON ACOUSTICAL REHABILITATION	2632
<i>María Jesús Elejalde García</i>	

GENERAL ACOUSTICS

THEORETICAL PREDICTION AND EXPERIMENTAL MODAL ANALYSIS OF SOUND PROPAGATION ALONG A LONG ENCLOSURE	2640
<i>S. H. K. Chu, S. K. Tang</i>	
MATHEMATICAL REVISIT OF ACOUSTIC SHIELDING BY EMPENNAGE	2648
<i>Wonju Jeon, Duck-Joo Lee</i>	

STOCHASTIC SIGNAL PROCESSING IN SOUND AND VIBRATION

STOCHASTIC SIGNAL PROCESSING FOR NOISE SUPPRESSION OF SPEECH SIGNAL IN REAL ENVIRONMENT	2653
<i>Akira Ikuta, Hisako Orimoto</i>	
A STUDY ON AUTOMATED QUALITY EVALUATION OF TIME-VARYING SOUND USING WAVELET TRANSFORMS	2661
<i>Kodai Murakoshi, Shunsuke Ishimitsu, Kensuke Fujinoki</i>	
DEVELOPMENT OF A SPEECH SUPPORT SYSTEM FOR ARTICULATION DISORDERS	2667
<i>T. Yamanaka, S. Ishimitsu, H. Nagoshi, K. Fukui</i>	
A SIMPLIFIED ESTIMATION METHOD FOR ENVIRONMENTAL NOISES USING INDEPENDENT COMPONENT ANALYSIS	2673
<i>Yasuo Mitani, Noboru Nakasako</i>	

VIRTUAL ACOUSTICS

LARGE-SCALE SOUND FIELD RENDERING BY GPU CLUSTER WITH MULTI-SPEAKER REPRODUCTION SYSTEM	2680
<i>Takao Tsuchiya, Takuto Ishii, Yuma Hasuike</i>	
ON INDIVIDUAL DIFFERENCES IN PINNA-RELATED TRANSFER FUNCTIONS CALCULATED BY NUMERICAL SIMULATION	2688
<i>Parham Mokhtari, Hironori Takemoto, Ryouichi Nishimura, Hiroaki Kato</i>	

FAULT DIAGNOSIS AND PROGNOSIS

REAL TIME IN-SITU DAMAGE CLASSIFICATION, QUANTIFICATION AND DIAGNOSIS FOR COMPOSITE STRUCTURES	2696
<i>Cecilia Larrosa, Fu-Kuo Chang</i>	

APPLICATION OF HILBERT-HUANG TRANSFORM AND SUPPORT VECTOR MACHINE ON DEFECT DIAGNOSIS OF ROLLER BEARING SYSTEM	2705
<i>Tian-Yau Wu, Chia-Hsiang Lai</i>	
APPLICATION OF CYCLIC ADAPTIVE FILTER IN GEARBOX FAULT DIAGNOSIS	2714
<i>Yang Ming, Jin Chen</i>	
DETERMINING VIBRATION SIGNATURE OF A DEFECTIVE PLANET BEARING IN A WIND TURBINE EPICYCLIC GEARBOX	2722
<i>Sharad Jain, Peter Whiteley, Hugh Hunt</i>	
THE ASSESSMENT OF WEAR AND TEAR OF BEARINGS WHEELS OF A PASSENGER CAR BASED ON VIBRATION ANALYSIS OF CHANGES IN EMISSIONS	2730
<i>Zbigniew Stanik, Boguslaw Lazarz, Jan Warczek</i>	
ANALYSIS OF MEASUREMENT POINTS SENSITIVITY OF VIBRATION SIGNALS ON THE ENGINE HEAD IN IMPACT TESTS	2737
<i>Franciszek Tomaszewski, Grzegorz. M. Szymanski</i>	
COMPARISON BETWEEN PATTERN RECOGNITION SCHEMES FROM NOISE MAPPINGS	2745
<i>Fernando A. N. C. Pinto, Wallace De S. Pacheco, Renan Da S. De Siqueira, Felipe M. G. França</i>	

NOISE AND CHILDREN'S COGNITION AND HEALTH

DOES TRAFFIC-RELATED AIR POLLUTION EXPLAIN THE ASSOCIATIONS OF AIRCRAFT AND ROAD TRAFFIC NOISE EXPOSURE WITH CHILDREN'S HEALTH AND COGNITION?	2753
<i>Stephen Stansfeld, Charlotte Clark</i>	
NOISE EXPOSURE, NOISE ANNOYANCE, BLOOD PRESSURE, AND HEARING OF 8-14 YEAR OLD GERMAN CHILDREN	2761
<i>Wolfgang Babisch, Christine Schulz, Margarete Seiwert, Kerstin Becker, André Conrad, Catrin Zigelski, Marike Kolossa-Gehring</i>	
SUMMARY OF EVIDENCE FOR REPRODUCTIVE OUTCOMES ASSOCIATED WITH NOISE EXPOSURE – EXPERIMENTAL AND HUMAN STUDIES	2769
<i>Gordana Ristovska, Helga Elvira Laszlo, Anna Hansell</i>	
EXPOSURE OF SCHOOLS AND KINDERGARTENS TO ELEVATED ROAD TRAFFIC NOISE IN LJUBLJANA	2777
<i>Sonja Jeram, Nataša Kovac, Nika Zupan</i>	
INVESTIGATING NOISE ANNOYANCE IN CHILDREN - HOW TO ASK?	2783
<i>Goran Belojevic, Gary W. Evans</i>	
NOISE MEASUREMENTS IN INCUBATORS AT NEONATAL INTENSIVE CARE UNIT	2787
<i>Magnus Berggren, Kristian Nilsson, Lars Håkansson, Helen Agnesson, Stefan Hedsten</i>	

GENERAL VIBRATIONS

AN APPROACH FOR FINITE ELEMENT MODEL UPDATING USING VIBRATION TEST DATA	2795
<i>Xiaogeng Wang</i>	
NONLINEAR VIBRATIONS OF FUNCTIONALLY GRADED CYLINDRICAL SHELLS: EFFECT OF COMPANION MODE PARTICIPATION	2802
<i>Matteo Strozzi, Francesco Pellicano</i>	
SIMULATION OF 2-MW WIND TURBINE BY 4-DEGREE-OF-FREEDOM MATHEMATICAL MODEL	2810
<i>Yun-Ho Shin, Seok-Jun Moon, Ji-Yun Ryu</i>	
THE VIBRATIONS ON OPEN PLAN SUSPENDED CHAIN KINEMATIC WITH CLEARANCES JOINT	2824
<i>Jan-Cristian Grigore, Nicolae-Doru Stanescu</i>	

SIGNAL PROCESSING IN ACOUSTICS AND VIBRATION

ON PHASE LOCKED MOTION IN A SYSTEM OF FOUR PHASE ONLY OSCILLATORS WITH DELAYED COMMUNICATION	2832
<i>Jacqueline Bridge</i>	
MUSIC ALGORITHM FOR BROADBAND SOURCE DOA ESTIMATION	2838
<i>Metod Celestina, Andrej Trost</i>	
THE INFLUENCE OF CHANGING VEHICLE TIRE STIFFNESS ON PHASE ANGLE	2844
<i>Lukasz Konieczny, Rafal Burdzik, Boguslaw Lazarz</i>	
INFLUENCE OF DAMPING CHARACTERISTICS CHANGES ON VEHICLES VIBRATION RESEARCH	2852
<i>Rafal Burdzik, Lukasz Konieczny, Boguslaw Lazarz</i>	

ULTRASOUND AND ULTRASONIC MEASUREMENTS

OPTIMIZES THE EFFICIENCY TRANSFER OF ENERGY INTO A HIGH POWER PIEZOELECTRIC TRANSDUCER IN FUNCTION OF COMPONENT ELEMENTS OF EQUIVALENT ELECTRIC SCHEMES	2862
<i>Odobescu Grigore Liviu</i>	

ON THE SYSTEM OF REVERB IDENTIFICATION IN CLOSED AREAS	2870
<i>Adalat B. Pashayev, Elkhan N. Sabziev</i>	

VEHICLE NOISE, VIBRATION & HARSHNESS

ANALYSIS OF DISC BRAKE SQUEAL: PROGRESS AND CHALLENGES	2874
<i>Sebastian Oberst, Joseph C. S. Lai</i>	
ANALYSIS OF ABNORMAL VIBRATION PHENOMENA BY A LOCK-UP CLUTCH OPERATING IN AN AUTOMATIC TRANSMISSION SYSTEMS	2882
<i>Chang Woo Shin, Chunhua Zheng, Sukwon Cha, Beomsoo Kim, Wonsik Lim</i>	
COMPARISON OF DIFFERENT FINITE ELEMENT TYPES FOR STRUCTURAL MODAL ANALYSIS	2889
<i>Marcus Guettler, Steffen Marburg</i>	
ON EXPERIMENTAL-ANALYTICAL EVALUATION OF PASSENGER CAR RIDE QUALITY SUBJECT TO ENGINE AND ROAD DISTURBANCES	2896
<i>Neda Nickmehr, Jan Åslund, Lars Nielsen, Kristoffer Lundahl</i>	
THE VIBROACOUSTIC ANALYSIS OF TWO CARS CRASH	2904
<i>Marcin Jasinski, Pawel Kuc</i>	

DUCT ACOUSTICS

EFFECTS IMPAIRING THE SYNTHESIS OF ACOUSTIC DUCT MODES WITH LOUDSPEAKER ARRAYS	2912
<i>Ulf Tapken, Kenichiro Nagai</i>	
ADAPTATION OF THE EXPERIMENTAL "TWO MICROPHONE TRANSFER FUNCTION" METHOD TO COMPUTE THE RADIATION IMPEDANCE OF DUCTS FROM NUMERICAL SIMULATIONS	2920
<i>Marc Arneta, Oriol Guasch</i>	
STOPBAND OF SOUND IN PERIODICALLY CORRUGATED DUCTS	2928
<i>Hyun-Sil Kim, Jae-Seung Kim, Bong-Ki Kim, Sang-Ryul Kim, Seong-Hyun Lee</i>	

FLUID-STRUCTURE INTERACTION

FLOW INDUCED VIBRATION TEST RESULTS OF THE VARIOUS NUCLEAR FUEL PROTECTIVE GRIDS IN INFINIT FACILITY	2936
<i>Joo Young Ryu, Kyong Bo Eom, Nam Gyu Park, Il Kyu Kim, Yong Hwan Kim, Sang Youn Jeon, Jung Min Suh</i>	
FEM ANALYSIS FOR FLUID-STRUCTURE COUPLING THREE-DIMENSIONAL VIBRATION OF CURVED FLUID-CONVEYING PIPE	2942
<i>Zhushi Rao, Jun Zhou, Na Ta, Zhike Peng, Yuzhong Yao</i>	
QUANTIFICATION OF THE BENEFITS OF A STREAMLINED TETHER FOR A HIGH-ALTITUDE-TETHERED BALLOON	2950
<i>H. M. Costello, K. A. Kuo, H. E. M. Hunt</i>	
NOISE REDUCTION PROCESSING FOR WORK-RATE COMPUTATION OF A VIBRATING STEAM GENERATOR TUBE	2958
<i>Valérie Lalonde, Annie Ross, Michel J. Pettigrew</i>	
FLUID-STRUCTURE INTERACTION IN EHD LUBRICATED CONTACTS CLOSE TO THE ELASTIC RESONANCE	2966
<i>Marco Barbieri, Francesco Pellicano</i>	

COMBUSTION DYNAMICS, ACOUSTICS, VIBRATION AND FATIGUE

FLUID-STRUCTURE INTERACTION ON THE COMBUSTION INSTABILITY	2973
<i>A. Can Altunlu, Mina Shahi, Artur Pozarlik, P. J. M. Van Der Hoogt, J. B. W. Kok, Andre De Boer</i>	
EXPERIMENTAL INVESTIGATION OF THERMOACOUSTIC INSTABILITIES IN A SWIRL-STABILIZED LEAN PREMIXED COMBUSTOR	2981
<i>Sebastian Lipari, Álvaro Sobrino, Javier Ballester</i>	
NUMERICAL SIMULATION OF STABLE/UNSTABLE COMBUSTION IN A BLUFF-BODY STABILIZED COMBUSTOR	2990
<i>Santosh Kumar, J. B. W. Kok</i>	
NONLINEAR THERMO-ACOUSTIC EFFECTS IN A MATRIX BURNER	3000
<i>Maria A. Heckl</i>	

NUMERICAL METHODS FOR ACOUSTICS AND VIBRATION

THE WAVELET-GALERKIN METHOD FOR SOLVING VIBRATORY PDE'S WITH SPATIALLY DEPENDENT VARIABLES	3009
<i>Simon Jones, Mathias Legrand</i>	
SYSTEM IDENTIFICATION WITH GROUPING ELEMENTS OF MASS AND STIFFNESS MATRICES	3017
<i>Masayoshi Misawa, Masaki Oba, Yasunori Harada</i>	

EQUIVALENT POWER VOLUME VELOCITY (EPVV) FOR SOUND SOURCE CHARACTERISATION APPLIED TO A DIESEL GENERATOR SET	3025
--	-------------

Mark V. Boyle, Richard K. Cooper, Theresa Robinson, Charles McCartan

PROPAGATION OF VIBRATION INDUCED ON TRACK: IMPLEMENTATION OF PREVISIONAL MODELS FOR LOW AND HIGH SPEED TRAINS AND COMPARISON WITH EXPERIMENTAL MEASUREMENTS	3033
--	-------------

Salvatore Curcuruto, Delio Atzori, Rinaldo Betti, Giuseppe Marsico, Enrico Mazzocchi, Ernesto Monaco, Francesco Amoroso, Vincenzo Limone, Giuseppe Loprencipe, Fabio De Felice

CONDITION MONITORING AND VIBRATION TESTING

CONDITION MONITORING OF WIND TURBINE BLADE USING FIBER BRAGG GRATING SENSORS.....	3041
--	-------------

Ki-Yong Oh, Jaekyung Lee, Joon-Young Park, Jun-Shin Lee, Hyung-Joon Bang

SATELLITE FORCE LIMITED SINE VIBRATION TESTING.....	3049
--	-------------

Jun-Gang Zhang, Xing-Rui Ma

LOAD SUSCEPTIBILITY VIBRATION CHARACTERISTICS AS THE MEASURE OF MACHINE CONDITION.....	3059
---	-------------

Walter Bartelmus, Radoslaw Zimroz

EXPERIMENTS ON THE EFFECT OF FACE WIDTH AND TOOTH ERROR IN HELICAL GEAR VIBRATION	3064
--	-------------

Chan Il Park, Don Hyuk Jeon

ADDITIONAL PAPERS

FLAME SATURATION CURRENT AS A MEASURE OF THE FLAME THERMO-ACOUSTIC BEHAVIOR.....	3071
---	-------------

L. B. W. Peerlings, M. Manohar, V. N. Kornilov, L. P. H. De Goey

ON ESTIMATION OF PERIOD OF LIQUID DRIP FLOW FROM A CAPILLARY OPENING	3078
---	-------------

Yury Zaslavsky, Vladislav Zaslavsky

FINITE ELEMENT MODEL UPDATING USING ANTI-RESONANCE FREQUENCIES.....	3082
--	-------------

Vikas Arora

SIMULATIONS OF DIFFERENT CONFIGURATION OF MODAL SPLIT: IMPACTS ON TRAFFIC NOISE IN URBAN CENTERS	3090
---	-------------

Frederico Rodrigues, Carlos David Nassi, Suzana Kahn

ACOUSTIC CONTROL OF QUALITY OF THE WELD-FABRICATED CONNECTIONS IS IN TECHNOLOGICAL SYSTEM	3100
--	-------------

Kirill Trapezon, Valentin Abakumov

ACOUSTIC EVALUATION OF THE GREAT SYNAGOGUE OF ROME.....	3104
--	-------------

Massimo Coppi, Andrea Venditti, Roberto De Lieto Vollaro

CROSS-TALK RESPONSE ANALYSIS ON A PIEZOELECTRIC ULTRASONIC MATRIX ARRAY	3112
--	-------------

Israel Sánchez Domínguez, Pedro Acevedo Contla, Fabián García Nocetti, Manuel Recuero López

DIRECTIVITY MEASUREMENT OF SANTUR INSTRUMENT	3120
---	-------------

Hadi Ghasemi

ACOUSTICS, DYNAMICS AND STRUCTURE OF FLOWS INDUCED BY WATER DROP FALLING IN DEEP LIQUID.....	3125
---	-------------

Yuli D. Chashechkin, Victor E. Prokhorov

ACOUSTIC ENVIRONMENT ASSESSMENT IN THE CONTEMPORARY MASJIDS WITH SPECIAL REFERENCE TO NON-TRADITIONAL FORMS - CASE STUDY	3132
---	-------------

Ahmed Ali Elkhateeb

DEVELOPMENT OF A DUCT SILENCER FOR HEAVY INDUSTRIAL COMPRESSOR SYSTEMS	3140
---	-------------

Richard Büssow

WAVES PROPAGATION IN SEA SAND AND SEA SAND UNDER ACTION OF WAVES.	3148
---	-------------

Nora Vilchinska

DYNAMIC LOADING OF COMPOSITE BEAM WITH THE SUDDEN LONGITUDINAL STRATIFICATION.....	3156
---	-------------

Vladimir Gordon, Vitaly Kolchunov, Yury Stepanov

PHASE VELOCITY AND ATTENUATION OF ELASTIC WAVES IN VISCOUS FLUID FILLED PIPES BURIED IN THE GROUND.....	3163
--	-------------

Ilya Merhasin, Evyatar Hemo

ASYMPTOTIC AND NUMERICAL ANALYSIS OF COUPLED TIMOSHENKO BEAMS WITH DISSIPATIVE JOINTS.....	3170
---	-------------

Matthew P. Coleman

ACTIVE CONTROL OF FLEXIBLE BEAMS USING FILTERED VELOCITY FEEDBACK CONTROLLERS	3177
--	-------------

Chinsuk Hong, Changjoo Shin, Weui Bong Jeong, Han-Wool Lee

HIGH FREQUENCY THERMOACOUSTICS FOR ENERGY CONVERSION.....	3191
--	-------------

Orest G. Symko, Ivan Rodriguez, Myra Flitcroft

ON THE STABILITY CRITERIA OF THE DYNAMICAL SYSTEMS WITH APPLICATIONS	3198
---	-------------

Marcel Migdalovici, Daniela Baran

EFFECT OF A TURBULENT BOUNDARY LAYER ON THE SURFACE PRESSURE OF TRENCH CAVITIES	3206
--	-------------

Heechang Lim, Youngtae Lee

SUBJECTIVE AND OBJECTIVE EVALUATION OF IMPACT NOISE SOURCES IN WOODEN AND HEAVYWEIGHT FLOOR CONSTRUCTIONS	3213
<i>Moritz Späh, Andreas Liebl, Lutz Weber, Philip Leistner</i>	
SIMULATION OF NONLINEAR WESTERVELT EQUATION AND ITS APPLICATION TO HIFU	3221
<i>Maxim A. Solovchuk, Tony W. H. Sheu, Marc Thiriet</i>	
FREE VIBRATION ANALYSIS OF CABLES USING ADOMIAN DECOMPOSITION METHOD	3229
<i>Reza Ahrari, Mohammad Hossein Abolbashari, Mohammad Shadkami</i>	
THE INFLUENCE OF THE STATE OF THE RILEM PLANK WHEN OBTAINING THE FUNDAMENTAL FREQUENCY OF VIBRATION REGARDING THE FOUNDATIONS OF THE NEW FACULTIES AT THE UNIVERSIDAD DE SEVILLA (SPAIN).....	3237
<i>Jesús Roldán Porras, Alfonso Corz Rodríguez</i>	
THE EFFECT OF FLUID SLOSHING ON VIBRATION OF A LAMINATED COMPOSITE RECTANGULAR PLATE	3245
<i>Korosh Khorshidi, Nahid Jafarian</i>	
CONTROL VIBRATION OF THIN CIRCULAR PLATE COUPLED PIEZOELECTRIC SENSOR WITH FUZZY METHOD	3253
<i>E. Rezaei, K. Khorshidi, M. Pagoli, A. A. Ghadimi</i>	
GAS SENSING USING ACOUSTIC ATTENUATION WITH IMPROVED RESOLUTION	3262
<i>Ajit Singh, M. Radhakrishna</i>	
THE EFFECTIVENESS OF AIR-SHROUDING NOZZLES ON REDUCING AUDIBLE NOISE LEVELS	3268
<i>Shaw-Ching Sheen</i>	
ON IMPROVING THE DAMPING PERFORMANCE OF SYNCHRONIZED SWITCH DAMPING ON INDUCTOR TECHNIQUE WITH NEGATIVE CAPACITANCE	3272
<i>Xu Han, Marcus Neubauer, Jörg Wallaschek</i>	
ULTRASONIC DISINTEGRATION OF EXCESS SLUDGE BEFORE DIGESTION	3280
<i>Ewa Zielewicz</i>	
IDENTIFICATION OF NOISE SOURCES OF HIGH-SPEED TRAINS WITH MICROPHONE ARRAY AND ON-BOARD MEASUREMENTS	3288
<i>Sunghoon Choi, Hee-Min Noh, Seog-Won Kim, Ki-Hwan Kim</i>	
A PROBABILISTIC APPROACH TO IDENTIFY THE DYNAMIC PROPERTIES OF HINGE JOINT IN STRUCTURAL SYSTEMS	3295
<i>Junho Won, Che Kyu Lim, Doo-Ho Lee, Joo-Ho Choi</i>	
DETERMINATION OF TWISTING MOMENTS IN SHAFTING'S WITH TAKING INTO ACCOUNT KINEMATIC EXCITEMENT OF VIBRATIONS	3303
<i>Yevhen Kharchenko, Olha Kunta, Lidiya Kharchenko</i>	
THE EFFECTS OF BAFFLES GEOMETRY ON SLOSHING DYNAMICS OF A VISCOUS LIQUID TANK	3310
<i>Morteza Shahravi, Milad Azimi</i>	
FREE VIBRATION ANALYSIS OF RODS USING ADOMIAN DECOMPOSITION METHOD	3318
<i>Mohammad Shadkami, Reza Ahrari, Mohammad Hossein Abolbashari</i>	
CAE-NVH CHARACTERIZATION AND OPTIMAZATION OF THE AUTOMOTIVE SEAT RATTLE NOISE	3326
<i>Milad Tatari, Mohammad Mahjoob, Naser Nasrollahzadeh, Mohammad Fard</i>	
SMALL-AMPLITUDE NONLINEAR THERMO-ACOUSTIC OSCILLATIONS	3334
<i>Bela Kosztin, Maria Heckl</i>	
FOUNDATION IMPEDANCE ANALYSIS OF SHIPS USING FE/BE COUPLED APPROACH	3342
<i>DooHo Lee, Hyun-Sil Kim, Bong-Ki Kim, Seong-Hyun Lee</i>	
COMPARISON OF SIMULATION AND EXPERIMENTAL RESULTS OF RAILWAY VEHICLE DYNAMICS BY USING 1/5 SCALE MODEL	3348
<i>Wonhee You, Joonhyuk Park, Hyunmoo Hur, Yujeong Shin</i>	
VIBRATION ANALYSIS OF NANO-FLUID CONVEYING CARBON NANOTUBES EMBEDDED IN PASTERNAK-WINKLER TYPE ELASTIC FOUNDATION WITH CONSIDERATION OF SURFACE EFFECTS	3355
<i>Anooshiravan Farshidianfar, Farzaneh Samadi</i>	
A MICROSTRUCTURE-DEPENDANT TIMOSHENKO BEAM MODEL FOR VIBRATION ANALYSIS OF MICROPIPES CONVEYING FLUID BASED ON STRAIN GRADIENT THEORY	3363
<i>Anooshiravan Farshidianfar, Farzaneh Samadi</i>	
FINITE STRAIN VIBRATION OF AN ELASTIC ROD	3371
<i>S. M. Mousavi, S. J. Fariborz</i>	
Author Index	