

16th International Congress on Sound and Vibration 2009

(ICSV16)

**Krakow, Poland
5-9 July 2009**

Volume 1 of 8

ISBN: 978-1-61567-736-8

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© (2009) by the International Institute of Acoustics & Vibration
All rights reserved.

Printed by Curran Associates, Inc. (2010)

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

| | |
|--|-----|
| SPECTRAL ANALYSIS METHOD FOR VIBRATION SOURCE EVALUATION IN MOVING VEHICLE | 1 |
| <i>M. H. Fouladi, M. J. M. Nor, O. Inayatullah, A. K. Ariffin</i> | |
| A VIBROACOUSTIC ENERGY DENSITY FIELD APPROACH FOR AN AUTOMATIC SUB-STRUCTURING METHOD OF COMPLEX STRUCTURES IN LOW- AND MEDIUM-FREQUENCY RANGES..... | 9 |
| <i>M. Kassem, C. Soize, L. Gagliardini</i> | |
| DETERMINATION OF DYNAMIC STIFFNESS CRITERION BY USING AN EXPERIMENTAL METHOD ON THE FPD MANUFACTURING EQUIPMENT | 17 |
| <i>H. Choi, J. Baek, G. Lee, J. Cho, H. Koo</i> | |
| DESIGN OF A FLOATING MASS TYPE PIEZOELECTRIC TRANSDUCER FOR USE IN IMPLANTABLE MIDDLE EAR HEARING AID..... | 23 |
| <i>L. Houguang, T. Na, R. Zhushi</i> | |
| COMPARISON OF SHEAR DEFORMABLE AND CLASSICAL THEORIES FOR NONLINEAR VIBRATIONS OF RECTANGULAR AND LAMINATED COMPOSITE PLATES..... | 31 |
| <i>M. Amabili, S. Carra</i> | |
| ACTIVE NOISE CONTROL USING STABILITY-BASED LMS STEP SIZE ADJUSTMENT | 39 |
| <i>D. Bismor</i> | |
| A COMPARISON BETWEEN THE PERFORMANCE OF FLOATING-SLAB TRACKS WITH CONTINUOUS AND DISCONTINUOUS SLABS IN REDUCING VIBRATION FROM UNDERGROUND RAILWAY TUNNELS | 46 |
| <i>M. Hussein</i> | |
| SUPPRESSION OF BENDING VIBRATION IN DRILLING PROCESS VIA A TUNABLE VIBRATION ABSORBER | 52 |
| <i>H. Moradi, M. Motamed, F. Bakhtiari-Nejad</i> | |
| THE PRIMARY NOISE SOURCES ASSOCIATED WITH TURBULENT COANDA WALL JETS | 60 |
| <i>C. Lubert</i> | |
| NUMERICAL STUDY OF THE NOISE REDUCTION BY LARGE RESONATORS ON TOP OF SOUND BARRIERS..... | 66 |
| <i>C. Richter</i> | |
| NONLINEAR FORCED VIBRATION ANALYSIS OF DOUBLY CURVED FGM SHELL PANELS USING THE METHOD OF MULTIPLE SCALES..... | 73 |
| <i>F. Aljani, F. Bakhtiari-Nejad, H. Arvin</i> | |
| IMPACT SOUND QUALITY ANALYSIS OF PASSENGER CAR | 81 |
| <i>S. Kim, H. Kim, S. Lee</i> | |
| USING AN OPTIMUM TUNABLE ABSORBER TO SUPPRESS VIBRATION OF A CANTILEVER PLATE | 86 |
| <i>H. Moradi, M. Sadighi, K. H. Hajikolaei</i> | |
| METHOD FOR CALIBRATION THE VIBRATION METER (VIBROMETER) USING ISO 5347-3..... | 94 |
| <i>M. Abd-Elbassee</i> | |
| FLUID STRUCTURE INTERACTION ANALYSIS OF A RECIPROCATING COMPRESSOR..... | 100 |
| <i>J. Kim, S. Park, I. Oh, J. Shim</i> | |
| TUNED CRADLE DAMPING DEVICE ON A SIMPLE STRUCTURAL MODEL | 108 |
| <i>H. Takei, Y. Shimazaki</i> | |
| ROOM ACOUSTICS IN OPEN PLAN OFFICES AND LARGE SPACES IN GENERAL | 116 |
| <i>N. Geebelen</i> | |
| VIBRATION EXPOSURE OF DOCTORS IN AN AMBULANCE..... | 124 |
| <i>G. Birlik, O. C. Sezgin, S. G. Geridonmez</i> | |
| EVALUATION OF THE EFFECTS OF TEMPERATURE ON RAILPAD PROPERTIES, RAIL DECAY RATES AND NOISE RADIATION..... | 132 |
| <i>R. A. Broadbent, D. J. Thompson, C. J. C. Jones</i> | |
| BLOCKAGE DETECTION IN LONG LENGTHS OF PIPELINE USING A NEW ACOUSTIC METHOD | 140 |
| <i>X. Wang, B. Lennox, J. Turner, K. Lewis, Z. Ding, G. Short, K. Dawson</i> | |
| VIBRATION ANALYSIS OF A SOFT MOUNTED ASYNCHRONOUS MACHINE CONSIDERING A SINGLE-SIDED ROTOR CORE ECCENTRICITY BY USING FEM..... | 148 |
| <i>U. Werner</i> | |
| NUMERICAL ANALYSIS OF THE DYNAMIC BEHAVIOUR OF THE OSSICULAR HUMAN EARDRUM SYSTEM..... | 156 |
| <i>L. Caminos, R. Urquiza, A. Gonzalez-Herrera</i> | |
| NEARFIELD ACOUSTIC HOLOGRAPHY FOR IDENTIFYING CYCLOSTATIONARY SOUND SOURCES WITH COMPLICATED PROFILE | 164 |
| <i>W. Jiang, H. Zhang, M. Zhang</i> | |
| RIGID BODY COLLISIONS WITH GRANULAR MATTER..... | 172 |
| <i>S. Lee, D. B. Marghitu</i> | |
| EFFECTS OF HEARING PROTECTION ON SPEECH COMMUNICATION..... | 178 |
| <i>M. McBride, R. Weatherless, T. Mermagen, T. Letowski</i> | |

| | |
|---|-----|
| PREDICTING THE INFLUENCE OF BENDING MODES ON PERFORMANCE OF RAIL VIBRATION ABSORBER FOR RAILWAY NOISE CONTROL..... | 186 |
| <i>H. P. Liu, T. X. Wu</i> | |
| ANALYSIS AND DESIGN OF HYPERREDUNDANT ROBOTS | 194 |
| <i>D. Cojocaru, R. T. Tanasie</i> | |
| THE EFFECTS OF HELMET SHAPE ON DIRECTIONAL ATTENUATION OF SOUND..... | 202 |
| <i>A. Scharine, K. Fluit, T. Letowski</i> | |
| THE BEHAVIOR OF MECHANICAL SYSTEM WITH MAGNETORHEOLOGICAL DAMPER UNDER ALTERNATIVE LOAD | 210 |
| <i>M. L. Szary</i> | |
| LIMIT CYCLE CALCULATIONS IN A RIJKE TUBE USING ONE-DIMENSIONAL NETWORK MODEL | 218 |
| <i>B. Karthik, C. Schram, A. Hirschberg</i> | |
| EU PROJECT SPENS: TYPICAL PAVEMENTS IN EUROPEAN NEW MEMBER STATES AND REPEATABILITY OF CPX-MEASUREMENTS | 225 |
| <i>M. Haider, M. Conter, R. Wehr</i> | |
| DRIVER'S PERCEPTION ON THE INFLUENCE OF INTERIOR SOUND TO VERTICAL WHOLE-BODY VIBRATION | 233 |
| <i>D. D. I. Daruis, M. J. M. Nor, M. H. Fouladi, B. M. Deros</i> | |
| THE EFFECT OF FREQUENCY-RANGE ON THE PERCEPTION OF UNPLEASANT SOUNDS USING THE METHOD OF PAIR COMPARISON | 241 |
| <i>M. D. C. Maglhaes, M. Robinson, T. J. Cox</i> | |
| GEAR NOISE ANALYSIS FOR A LARGE DIESEL ENGINE | 249 |
| <i>Z. Gao, K. Saine, M. Wollström</i> | |
| FAT BASED MODEL-FREE ADAPTIVE CONTROLLER FOR A PIEZOELECTRIC-ACTUATED SYSTEM..... | 257 |
| <i>J. Liang, H. Chen</i> | |
| STRATEGIC NOISE MAPPING – CAN IT SERVE AS A TOOL IN CITY PLANNING? | 265 |
| <i>W. Probst</i> | |
| ON DAMPING IN COLD ROLLED AND ANNEALED LOW-CARBON STEEL STRIPS AND ITS APPLICATION TO THE TRINIDAD STEELPAN | 270 |
| <i>S. E. Maloney, C. Y. Barlow, J. Woodhouse</i> | |
| COUPLED-MODE THEORY AND EXPERIMENTS FOR NOVEL ACOUSTIC WAVEGUIDES COMPOSED OF A CHAIN OF RESONANT DEFECTS IN SONIC CRYSTAL | 278 |
| <i>T. Miyashita, M. Tsukimoto, N. Kurihara</i> | |
| DYNAMICS OF PRESSURE FLUCTUATIONS IN A COMBUSTION ENGINE FIRED BY DIFFERENT FUELS | 286 |
| <i>G. Litak, A. K. Sen, R. Longwic, K. Górska</i> | |
| ADAPTIVE GENERATION OF ACOUSTIC LOCAL FIELDS AIDED BY ACTIVE NOISE CONTROL SYSTEMS..... | 292 |
| <i>J. Figwer</i> | |
| CLOSING THE MID-FREQUENCY-GAP: ACOUSTIC BIW DESIGN USING A HYBRID SEA-FEA APPROACH | 299 |
| <i>M. Buchschmid, G. Müller, A. Kropp</i> | |
| DECENTRALIZED ADAPTIVE MULTICHANNEL ACTIVE NOISE CONTROL | 307 |
| <i>J. Figwer</i> | |
| DESIGN OF A MIDDLE EAR AUDIOPROSTHESES: ANALYSIS OF THE MECHANICAL BEHAVIOUR | 315 |
| <i>A. Garcia-Gonzalez, J. Pascual-Cosp, A. Gonzalez-Herrera, J. Lopez-Garcia, R. Urquiza</i> | |
| DENOISING ULTRASONIC TRACES BY WAVELET CYCLE SPINNING PROCESSING | 323 |
| <i>J. L. S. Emeterio, E. Pardo, M. A. Rodriguez</i> | |
| DYNAMIC STABILITY OF SPINNING DISKS SUBJECTED TO PERIODICAL GYROSCOPIC MOTION | 331 |
| <i>T. H. Young, Z. Y. Lu</i> | |
| MULTIPLE SCATTERING OF OBLIQUELY ACOUSTIC WAVES FROM A GRATING OF CYLINDRICAL SHELLS..... | 339 |
| <i>S. Sodagar, F. Honarvar, A. N. Sinclair</i> | |
| CONTROLLABILITY OF NOISE TRANSMISSION THROUGH DOUBLE-GLAZED WINDOWS USING ACOUSTIC RESONATORS | 346 |
| <i>D. Li, L. Cheng</i> | |
| HYBRID MODEL OF FLOOR STRUCTURE WITH MRTMD FOR FLOOR VIBRATION CONTROL..... | 354 |
| <i>G. Kim, J. Kang</i> | |
| NOISE CONTROL OF OPEN PLAN OFFICES: A FEW CONSIDERATIONS..... | 362 |
| <i>M. Asselineau</i> | |
| FLANKING TRANSMISSION BY FACADES: TENTATIVE PREDICTION AND TESTING | 370 |
| <i>M. Asselineau, T. Scheers, M. Vercammen</i> | |
| SPATIAL PHASE-INVERSION TECHNIQUE FOR GENERATING PARAMETRIC SOUNDS | 377 |
| <i>T. Kamakura, H. Nomura, M. Akiyama, S. Sakai</i> | |
| REDUCTION OF VIBRATION IN A TIMBER TRUCK BY LOWERING THE TYRE PRESSURE..... | 385 |
| <i>M. Oksanen, E. Rytönen, A. Vähäniikkilä</i> | |
| OBSERVATION OF LOW-FREQUENCY AND INFRASOUND IN THE AUDITORY CORTEX USING FUNCTIONAL MAGNETIC RESONANCE IMAGING | 390 |
| <i>G. Scholz, E. Dommes, Y. Rothemund, J. Hensel</i> | |

| | |
|---|-----|
| ON THE USE OF SINGLE EQUIVALENT EXCITATION TO ESTIMATE THE STRUCTURE-BORNE SOUND POWER FROM MACHINES ON TIMBER JOIST FLOORS..... | 398 |
| <i>A. R. Mayr, B. Gibbs</i> | |
| VIBRATION CONTROL OF ONE-DIMENSIONAL CONTINUOUS SYSTEMS BASED ON THEIR EXACT PDE MODEL AND USING THE MAXIMUM PRINCIPLE..... | 406 |
| <i>F. Bakhtiari-Nejad, A. Jafari</i> | |
| EVALUATION OF NOISE LEVELS PRODUCED BY OPERATION AND MAINTENANCE ACTIVITIES OF A CONTINUOUS MOVEMENT FUNICULAR..... | 414 |
| <i>A. Nicolini, M. Filippini</i> | |
| ON THE CANOCICAL FORM FOR A THREE SECOND ORDER NON-LINEAR DIFFERENTIAL EQUATIONS SYSTEM..... | 422 |
| <i>N. Stanescu</i> | |
| DECIDING ISOLATOR AND MOUNTING POINTS OF A TRUCK'S EXHAUST SYSTEM BASED ON NUMERICAL AND EXPERIMENTAL MODAL ANALYSIS..... | 430 |
| <i>A. Viswanathan, E. Perumal</i> | |
| DEVELOPING PREDICTIVE TOOLS FOR FRICTION STIR WELD QUALITY ASSESSMENT..... | 438 |
| <i>K. Singh, C. Hamilton</i> | |
| ACOUSTIC AND KINEMATIC PATTERNS OF JAPANESE STOP CONSONANTS..... | 449 |
| <i>J. Dembowski, K. Aoyama</i> | |
| NUMERICAL SIMULATION OF BROADBAND COMBUSTION NOISE BASED ON STOCHASTIC SOURCE RECONSTRUCTION..... | 457 |
| <i>B. Mühlbauer, B. Noll, M. Aigner, R. Ewert, O. Kornow, J. W. Delfs</i> | |
| ON THE DETECTION OF SHALLOW BURIED OBJECTS USING SEISMIC WAVE REFLECTIONS | 465 |
| <i>B. Papandreou, E. Rustighi, M. J. Brennan</i> | |
| EVALUATION OF WHOLE - BODY VIBRATION AND RIDE COMFORT IN A PASSENGER CAR..... | 473 |
| <i>H. Nahvi, M. H. Fouladi, M. J. M. Nor</i> | |
| GAUGE THEORY FORMULATION OF ACOUSTICAL IMAGING | 481 |
| <i>W. S. Gan</i> | |
| MULTIDIMENSIONAL ACOUSTIC MODELLING OF CATALYTIC CONVERTERS | 487 |
| <i>F. D. Denia, A. G. Antebas, R. Kirby, F. J. Fuenmayor</i> | |
| FLEXURAL VIBRATION BAND GAPS IN ADVANCED COMPOSITE GRID STRUCTURES USING FINITE ELEMENT METHOD..... | 495 |
| <i>J. Wang, G. Wang, J. Wen, X. Wen</i> | |
| CONSIDERATIONS IN THE GENERATION OF TIME-HISTORY FUNCTIONS TO SIMULATE REALISTICALLY THE CONDITIONS INDUCED BY A SEQUENCE OF MECHANICAL SHOCKS..... | 502 |
| <i>Z. Sherif, A. Elka, P. Hopstone</i> | |
| ACTIVE CONTROL OF ROTOR VIBRATIONS BY ADVANCED CONTROL METHODS | 510 |
| <i>J. Orivuori, K. Zenger, A. Sinervo</i> | |
| STUDY OF THE LOSS FACTOR OF PARTITIONS BY MEANS OF TRANSIENT SEA | 518 |
| <i>M. Schneider, H. Fischer, F. Mack</i> | |
| THEATRES: ACOUSTICAL QUALITY AND NOISE | 526 |
| <i>A. Coochi, G. Semprini</i> | |
| LABORATORY TESTS OF POROELASTIC ROAD SURFACES..... | 531 |
| <i>J. A. Ejsmont, G. Ronowski</i> | |
| THE VIBRATION SPECTRUM FOR SYSTEMS OF COUPLED TIMOSHENKO BEAMS | 539 |
| <i>M. P. Coleman</i> | |
| RESONANT PHENOMENA AND GENERALIZED WAVES IN WEDGE-SHAPED WAVEGUIDE | 546 |
| <i>N. Zlobina, B. Kasatkin, S. Kasatkin</i> | |
| NUMERICAL ANALYSIS OF MULTIPLE SCATTERING CHARACTERISTICS OF ULTRASOUND BY RANDOMLY DISTRIBUTED PARTICLES | 554 |
| <i>H. Nomura, T. Kamakura</i> | |
| FLEXURAL VIBRATION BAND GAPS IN PERIODIC PIPE SYSTEM CONVEYING FLUID WITH EXTERNAL LOADS | 562 |
| <i>D. Yu, J. Wen, H. Shen, X. Wen</i> | |
| THEORETICAL AND EXPERIMENTAL INVESTIGATION OF FLEXURAL WAVE PROPAGATION IN GRID STRUCTURES WITH PERIODIC LOCALLY RESONANT STRUCTURES | 569 |
| <i>J. Wen, D. Yu, K. Xu, X. Wen</i> | |
| EXPERIENCE IN ESTIMATION OF ROAD TRAFFIC NOISE SITUATION IN URBAN ZONE | 577 |
| <i>V. Dragicevic, S. Ahac, I. Stanceric</i> | |
| APPLICATION OF SPONTANEOUS BROKEN SYMMETRY TO TURBULENCE | 585 |
| <i>W. S. Gan</i> | |
| STRESS DIAGNOSIS OF ACOUSTIC AND VIBRATION STRESSORS WITH A SPECIAL VOICE FREQUENCY ANALYSIS – VFA PRESENTATION OF A RHYTHMIC-FUNCTIONAL DIAGNOSTIC METHOD | 590 |
| <i>Arno Heinen</i> | |
| A NOVEL ONE-DIMENSIONAL ANALYSIS OF SHORT ENDCHAMBER AND EXPANSION-CHAMBER MUFFLERS | 598 |
| <i>M. L. Munjal, A. Mimani, P. S. Rao</i> | |

| | |
|--|-----|
| DIAGNOSIS OF HUMAN EMOTIONAL AND FUNCTIONAL STRESS REACTIONS TO VIBROACOUSTIC STRESSORS OF DEFINED FREQUENCIES VIA VOICE FREQUENCY ANALYSIS VFA: EXEMPLIFIED BY THE DEMONSTRATION OF A CASE STUDY | 606 |
| <i>Arno Heinen, Annegret Heinen</i> | |
| INFLUENCE OF DESIGN, PRODUCTION TECHNOLOGY, OPERATION AND CHANGE OF CONDITION FACTORS ON GEARBOX VIBRATION DIAGNOSTIC SIGNALS | 614 |
| <i>W. Bartelmus</i> | |
| THE TECHNOLOGY DEMONSTRATOR OF THE UNDERWATER MONOSTATIC ACOUSTIC BARRIER..... | 622 |
| <i>A. Elminowicz, M. Okuniewski, L. Zajaczkowski</i> | |
| COMPARATIVE ANALYSIS OF RAILWAY NOISE ATTENUATION..... | 628 |
| <i>M. Butorina, N. Ivanov, D. Kuklin</i> | |
| HIGH-RESOLUTION CABARET SCHEME FOR SOUND SCATTERING PROBLEMS..... | 637 |
| <i>S. Karabasov, V. Golovizin</i> | |
| WORK ENVIRONMENT NOISE MEASUREMENT AND ASSESSMENT..... | 645 |
| <i>J. Dundurs, M. Lacis</i> | |

VOLUME 2

| | |
|---|-----|
| ESTIMATED STRUCTURAL AND ACOUSTICAL LIFETIME OF POROUS ASPHALT SURFACE COURSES..... | 652 |
| <i>J. Haberl</i> | |
| ON CONVERGENCE PROBLEMS OF ADAPTIVE FIR FILTER WITH LMS ALGORITHM..... | 660 |
| <i>K. Tammi, A. Laiho, E. Lantto, K. Zenger, A. Arkkio</i> | |
| WEAKLY RADIATING STRUCTURAL MODES OF AUTOMOTIVE-TYPE PANELS..... | 668 |
| <i>A. Rousoumelos, S. J. Walsh, V. V. Krylov</i> | |
| NUMERICAL SIMULATION OF LINEAR ACOUSTIC FIELDS RADIATED FROM AEROENGINE INLET WITH ACOUSTIC TREATMENT OF THE INLET DUCT | 676 |
| <i>A. Osipov, K. Reyent</i> | |
| SOME NEW DEVELOPMENTS OF HIGH-ORDER SCHEMES FOR CAA APPLICATIONS | 683 |
| <i>C. Lai, L. Lai, K. Pericleous</i> | |
| A NEW METHOD OF LOCALIZATION OF VIBRATION SOURCES AND OPERATIONAL DEFECTS IN COMPLEX CONSTRUCTIONS BASED ON THE TIME REVERSAL AND THE FINITE ELEMENT MODEL OF SYSTEM (PART 1. THEORETICAL RESEARCHES)..... | 691 |
| <i>P. Artelnyy, P. Korotin, A. Suvorov</i> | |
| A NEW METHOD OF LOCALIZATION OF VIBRATION SOURCES AND OPERATIONAL DEFECTS IN COMPLEX CONSTRUCTIONS BASED ON THE TIME REVERSAL AND THE FINITE ELEMENT MODEL OF SYSTEM (PART 2. EXPERIMENTAL WORKS)..... | 699 |
| <i>P. Artelnyy, V. Artelnyy, P. Korotin, A. Sokov, E. Sokov</i> | |
| BLENDER NOISE | 706 |
| <i>B. M. Spessert, M. Fischer, B. Kühn</i> | |
| MEASUREMENT OF PERFORATE IMPEDANCE..... | 714 |
| <i>K. Peat</i> | |
| COMPARISON OF METHODS FOR MEASURING THE SOUND ABSORPTION COEFFICIENT OF MATERIALS | 722 |
| <i>J. Blanco, S. Quintana, M. D. Fernández, I. González, J. A. Ballesteros, L. Rodríguez</i> | |
| MEASUREMENT PROCEDURE FOR THE ACOUSTIC ANALYSIS OF THE CONSTRUCTION PROCESS OF A HOUSING BLOCK | 730 |
| <i>M. J. Ballesteros, S. Quintana, M. D. Fernández, J. A. Ballesteros, I. González, L. Rodríguez</i> | |
| ACOUSTIC PATTERN OF THE PANEL SAWS FAMILY | 738 |
| <i>M. D. Fernández, J. A. Ballesteros, I. Suárez, S. Quintana, I. González, L. Rodríguez</i> | |
| DIFFRACTION AROUND CORNERS AND OVER WIDE BARRIERS IN ROOM ACOUSTIC SIMULATIONS | 746 |
| <i>J. H. Rindel, G. B. Nielsen, C. L. Christensen</i> | |
| APPLICATION OF DISCRETE WAVELET TRANSFORMS (DWT) AND THE SINGULAR VALUE DECOMPOSITION (SVD) FOR ROTATING MACHINERY FAULTS | 754 |
| <i>T. Benkedjouh, Y. Saadouni, S. Rechak</i> | |
| WAVE PROPAGATION IN PERIODIC TRUSS BEAMS WITH MEMBERS OF DIFFERENT MATERIALS..... | 762 |
| <i>Y. Xiao, B. R. Mace, X. Wen</i> | |
| ANALYSIS OF THE ACOUSTIC ENERGY OF HELMHOLTZ RESONANCE | 770 |
| <i>H. Onitsuka, Y. Shiozawa</i> | |
| COMPARISON OF CLASSICAL AND MODERN THEORIES OF LONGITUDINAL WAVE PROPAGATION IN ELASTIC RODS | 778 |
| <i>M. Shatalov, I. Fedotov, H. M. Tenkan, J. Marais</i> | |
| STUDY ON VIBRATION AND POWER FLOWS IN AN L-SHAPED PLATE SYSTEM..... | 786 |
| <i>G. P. Feng, H. X. Huo</i> | |
| THE STUDY OF COMBINED ACOUSTIC LINERS FOR TURBOFAN NOISE REDUCTION | 794 |
| <i>Y. Khaletskiy, V. Povarkov, R. Shipov</i> | |
| ERRORS OF EXPERIMENTAL AND NUMERICAL MODELS IN VIBRATION ANALYSIS OF STRUCTURES | 802 |
| <i>M. Wesolowski, E. Barkanov</i> | |

| | |
|--|------|
| MULTI-BODY INSIDE DAMPING OF HOLLOW BLADES | 810 |
| <i>D. Schirrock, A. Hartung</i> | |
| RELATIONSHIP BETWEEN VIBRATION ENERGY AND WEAR CONDITION OF BALL BEARINGS BASED ON REYE'S HYPOTHESIS | 818 |
| <i>M. Cocconcelli, R. Rubin</i> | |
| AN NEW CONSTITUTIVE RELATION ERROR FORMULATION FOR UPDATING ACOUSTICAL MODELS | 826 |
| <i>A. Progneaux, P. Bouillard, P. Ladevèze</i> | |
| SACRED GEOMETRY AND THE ENGLISH CHURCH BELL | 834 |
| <i>R. Perrin, G. M. Swallowe</i> | |
| BUILDING RESPONSE AT FOUNDATION, WALLS, COLUMNS AND FLOORS DUE TO GROUND VIBRATION – SIMPLIFIED CALCULATION BASED ON EXPERIENCE WITH DETAILED MODELS AND MEASUREMENTS | 842 |
| <i>L. Auersch</i> | |
| PASSIVE ISOLATION ELASTIC SYSTEMS INTENDED FOR SHOCK AND SEISMIC ACTION | 850 |
| <i>P. Bratu</i> | |
| MODEL FOR NEOPRENE ELASTIC ELEMENTS INTENDED FOR BASE ISOLATION | 857 |
| <i>P. Bratu, A. Mihalcea</i> | |
| EFFECT OF SOUND TRANSFER FUNCTION ON THE EQUIVALENT PERCEPTION BETWEEN A VISUAL IMAGE WITH A FEELING OF DEPTH AND ITS ASSOCIATED SOUND | 865 |
| <i>H. Hasegawa, T. Ito, I. Yuyama, M. Kasuga, M. Ayama</i> | |
| PU PROBE BASED IN SITU IMPEDANCE MEASUREMENTS OF A SLOTTED PANEL ABSORBER | 872 |
| <i>E. Brandao, E. Tijs, H. De Bree</i> | |
| EVALUATION OF THE DISSIPATION ENERGY CAPACITY IN CASE OF DAMPING SYSTEMS CONSISTING ON NEOPRENE ELEMENTS | 880 |
| <i>P. Bratu</i> | |
| VIBROACOUSTIC SIMULATION OF A TRIPLE GLAZED WINDOW AS AN EXAMPLE OF A MULTILAYERED STRUCTURE | 888 |
| <i>C. Nguyen, S. J. Pietrzko</i> | |
| ASSESSMENT OF SOUND PROPAGATION MODELLING FROM A WIND TURBINE SITE AT SEA | 896 |
| <i>B. L. Andersson, K. Bolin, A. Cederholm, I. Karasalo</i> | |
| TRANSIENT ACOUSTIC SCATTERING FROM A SMALL UNDERWATER VEHICLE IN SHALLOW WATER | 904 |
| <i>I. Karasalo</i> | |
| ASPECTS ON REVERBERATION MODELLING AND INVERSION WITH PHYSICAL SCATTERING KERNELS | 912 |
| <i>S. Ivansson, L. Abrahamsson, I. Karasalo, M. Ainslie</i> | |
| NOISE LEVELS PRODUCED BY FARMING PROCESSES | 920 |
| <i>D. C. Karamousantas, A. G. Kanakis, B. C. Dalamagas</i> | |
| ULTRASONIC TRANSMISSION THROUGH PLATES WITH SUBWAVELENGTH HOLE ARRAYS | 928 |
| <i>H. Estrada, F. Meseguer, P. Candelas, A. Uris, F. Belmar, F. J. G. De Abajo</i> | |
| SPECTRAL APPROACHES FOR ROOM ACOUSTICAL SIMULATION | 936 |
| <i>M. Pospiech, M. Buchschmid, G. Müller</i> | |
| MUSICAL INSTRUMENTS TREATED AS NOISE SOURCES FOR THE EVALUATION OF SOUND INSULATION OF PARTITIONS | 944 |
| <i>J. Gil</i> | |
| ACTIVE MODE LOCALIZATION CONTROL OF A PERIODIC VIBRATORY SYSTEM | 952 |
| <i>N. Tanaka</i> | |
| EXPERIMENTAL STUDY OF SOUND PROPAGATION IN OPEN DUCT WITH VARIABLE GEOMETRY | 960 |
| <i>S. Weyna</i> | |
| NOISE FROM WASTE WATER PIPES IN APARTMENT HOUSES | 968 |
| <i>A. Homb</i> | |
| AMPLITUDE ADAPTED TIME WAVEFORM REPPLICATION FOR FATIGUE TESTING WITH PNEUMATIC ARTIFICIAL MUSCLE ACTUATORS | 975 |
| <i>K. Deckers, P. Guillaume, D. Lefebre</i> | |
| INTER-COMPANY RESTAURANTS IN OFFICE BUILDINGS: LOOKING FOR A BETTER SOUNDSCAPE | 983 |
| <i>M. Serra, M. Asselineau</i> | |
| MICROPHONE POSITIONING OPTIMIZATION FOR CONDITIONING INVERSE TONAL AEROACOUSTIC PROBLEMS | 991 |
| <i>F. Preseznik, G. Steenackers, P. Guillaume</i> | |
| ACOUSTIC DESIGN ARTEFACTS AND METHODS FOR URBAN SOUNDSCAPES | 999 |
| <i>B. Hellström</i> | |
| ENHANCING THE RECONSTRUCTION OF IN-DUCT SOUND SOURCES USING A SPECTRAL DECOMPOSITION METHOD | 1007 |
| <i>T. Bravo, C. Maury</i> | |
| NUMERICAL INVESTIGATION OF SOUND PROPAGATION IN ANNULAR DUCTS WITH INSTALLATION PARTS | 1015 |
| <i>L. Panek, N. Schönwald, C. Richter, J. Abdel Hay, F. Thiele</i> | |
| A NUMERICAL APPROACH TO MODEL ACTIVE CONTROL OF VIBRATION AND NOISE | 1023 |
| <i>S. Ringwlski, U. Gabbert</i> | |

| | |
|---|------|
| VALIDATING INSERTION LOSS PREDICTIONS FOR HVAC SILENCERS..... | 1031 |
| <i>R. Kirby, D. Herries, K. Amott</i> | |
| PROPOSAL TO IMPROVE THE ACOUSTIC QUALITY OF THE MAIN HALL OF CATANIA UNIVERSITY..... | 1039 |
| <i>F. Patania, A. Gagliano, A. Galesi, F. Nocera</i> | |
| INFLUENCE OF ELECTRIC FIELD ON THERMOACOUSTIC TRANSFER FUNCTION OF FLAT PREMIXED FLAME..... | 1048 |
| <i>E. N. Volkov, V. N. Kornilov, L. P. H. De Goey</i> | |
| COMBINED ACTIVE NOISE CONTROL AND AUDIO IN A LIGHT JET..... | 1056 |
| <i>O. Pabst, T. Kletschkowski, D. Sachau</i> | |
| USING LIGHTWEIGHT MORTARS TO MINIMIZE IMPACT SOUND TRANSMISSION | 1064 |
| <i>F. G. Branco, L. Godinho, J. Tavares</i> | |
| LOW POWER KEYWORD RECOGNISER FOR EMBEDDED AUTOMATIC SPEECH RECOGNITION | 1072 |
| <i>M. E. Dunnachie, P. W. Shields, D. H. Crawford, M. Davies</i> | |
| COMPARISON OF THE ACOUSTICS OF MOSQUES AND CATHOLIC CHURCHES | 1080 |
| <i>A. P. O. Carvalho, C. G. Monteiro</i> | |
| ON THE ESTIMATION OF LINEAR VISCOS DAMPING IN THE DUFFING OSCILLATOR..... | 1088 |
| <i>R. Ramlan, M. Brennan, B. Mace</i> | |
| EXPERIMENTAL ANALYSIS OF CONCRETE RESONATORS INCORPORATING ABSORBING MATERIALS..... | 1096 |
| <i>L. Morais, A. Pereira, L. Godinho</i> | |
| VIBRATIONS: THE KEY TO UNLOCKING THE SECRETS OF TERMITE FORAGING BEHAVIOUR..... | 1104 |
| <i>J. C. S. Lai, T. A. Evans</i> | |
| SOUND DESIGN OF HIGH SPEED RAILROAD CARS | 1112 |
| <i>N. Billström</i> | |
| NON-LINEAR ANALYSIS OF BRAKE SQUEAL | 1116 |
| <i>S. Oberst, J. C. S. Lai</i> | |
| ULTRASONIC DISTANCE AND VELOCITY MEASURE-MENT USING A PAIR OF LINEAR-PERIOD-MODULATED SIGNALS CODING BY MAXIMUM LENGTH SEQUENCES FOR AUTONOMOUS MOBILE ROBOTS..... | 1124 |
| <i>S. Hirata, T. Sato, M. K. Kurisawa, T. Katagiri</i> | |
| QUANTITATIVE SOUND QUALITY EVALUATION BY USING PHYSIOLOGICAL INFORMATION OF AUTONOMIC NERVOUS SYSTEM..... | 1132 |
| <i>M. Yamaguchi, M. Kuboki, H. Horita, T. Toi</i> | |
| COMMUNITY NOISE POLLUTION, ANNOYANCE AND STRESS: A NEW NEUROPSYCHOLOGICAL APPROACH..... | 1140 |
| <i>M. G. Mario, M. Gianluca</i> | |
| A MESHLESS MODEL FOR 3D SOUND PROPAGATION THROUGH ACOUSTIC ATTENUATORS AND EXPANSION CHAMBERS | 1144 |
| <i>P. A. Mendes, F. G. Branco, L. Godinho, Z. S. Rosa</i> | |
| ON THE USE OF NEAR-FIELD ACOUSTICAL HOLOGRAPHY TO STUDY THE TRANSIENT RADIATION OF IMPACTED PLATES | 1152 |
| <i>J. Blais, A. Ross</i> | |
| NONLINEAR ITERATIONS NORMAL ELASTIC WAVES IN CRYSTAL LAYER WITH MIXED CONDITIONS ON BORDERS..... | 1160 |
| <i>A. Kuslivaya, V. Storozhev</i> | |
| ACOUSTIC HEATING INDUCED IN A HIGHLY VISCOS FLUID..... | 1168 |
| <i>A. Perelomova, W. Pelc</i> | |
| TRANSIENT ANALYSIS OF A PIEZOELECTRIC TRANSDUCER BEAM FOCUSING ON IMPACT PARAMETERS | 1176 |
| <i>J. Chamberland-Lauzon, A. Ross</i> | |
| MULTIMEDIA ONLINE URBAN NOISE MONITORING SYSTEM | 1184 |
| <i>A. Czyzewski, J. Kotus, M. Szczodrak, B. Kostek</i> | |
| NOISE REDUCTION IN EXHAUST-HEAT BOILERS | 1192 |
| <i>S. Semin, V. Tupov</i> | |
| COMMANDO BOAT NOISE | 1200 |
| <i>K. R. Piskorski, J. A. Ejsmont</i> | |
| HIGHLY EFFECTIVE SUPPRESSION OF NOISE OF TRANSONIC FLOWS OF STEAM AT START-UP ON POWER BOILERS | 1208 |
| <i>V. Tupov, D. Chugunkov</i> | |
| SELECTION AND PREPARATION OF MULTICHANNEL ROOM IMPULSE RESPONSES FOR INTERACTIVE LOW-LATENCY RENDERING OF VIRTUAL ROOMS..... | 1216 |
| <i>W. Woszczyk, D. Ko, B. Leonard, D. Benson</i> | |
| STUDY ON OPERATIONAL MODAL ANALYSIS OF SHIP STRUCTURE BASED ON AMBIENT EXCITATION | 1224 |
| <i>D. Jiang, M. Hong, L. Zhou</i> | |
| A HALL HAVING BOTH FUNCTIONS AS CONFERENCE AND CONCERT HALL | 1232 |
| <i>S. Wu, Y. Zhao</i> | |
| SOUND POWER LEVEL MEASUREMENT OF YEHU, A CHINESE BOWED STRINGED INSTRUMENT | 1238 |
| <i>Y. Zhao, S. Wu, J. Qiu, H. Huang, L. Wu</i> | |

| | |
|---|------|
| SINGULAR FEATURES OF TRAVELING WAVE PROPAGATION IN ROTATING ELASTIC BODIES OF REVOLUTION IN FRICTIONAL CONTACT | 1245 |
| <i>O. N. Kirillov</i> | |
| VHDL AMS MODELLING OF AN ULTRASONIC SETUP FOR MATERIALS CHARACTERIZATION | 1253 |
| <i>D. Kouriche, R. Guelaz, N. Aouzale, A. Chitmalah</i> | |
| DAMAGE DETECTION OF AN OVERHANG CRACKED SHAFT BY FREQUENCY ANALYSIS | 1261 |
| <i>A. Farshidianfar, M. Hoseinzadeh, M. Raghebi</i> | |
| LOUDNESS OF FOUNTAIN AND ROAD TRAFFIC SOUNDS IN A CITY PARK | 1270 |
| <i>M. E. Nilsson, J. Alvarsson, M. Radsten-Ekman, K. Bolin</i> | |
| BIFURCATIONS AND CHAOTIC OSCILLATION OF SUPERSONIC AIRFOIL WITH HYSTERETIC NONLINEARITIES | 1277 |
| <i>M. Fang, Q. Feng</i> | |
| MODELING THE PERFORMANCE OF A NOVEL IMPACT DAMPER WITH FINE PARTICLES AS DAMPING AGENT | 1284 |
| <i>Y. Du, S. Wang</i> | |
| SEPARATION OF ROLLING BEARING VIBRATION BASED ON GENETIC ALGORITHM | 1290 |
| <i>A. Docekal, P. Krpata, R. Smid, M. Kreidl</i> | |
| HARMONIC BURST IN EXPONENTIALLY GRADED MATERIAL | 1298 |
| <i>A. Braunbruck</i> | |

VOLUME 3

| | |
|--|------|
| INVESTIGATION OF WOODEN FLOOR JUNCTION IN TERMS OF SOUND WAVE PROPAGATION | 1306 |
| <i>D. Bard</i> | |
| HOW TO RECEIVE SOUND THROUGH ULTRASOUND: THE INTERACTION BETWEEN ULTRASONIC AND AUDIO WAVES IN THE AIR | 1312 |
| <i>T. Merkel</i> | |
| SOUND RADIATION BY A VIBRATING CIRCULAR MEMBRANE EMBEDDED INTO RIGID BAFFLE IN THE VICINITY OF THE THREE-WALL CORNER | 1318 |
| <i>W. P. Rdzanek, W. J. Rdzanek, K. Szemela</i> | |
| SCATTERING OF A NORMALLY INCIDENT PLANE WAVE FROM PRESTRESSED CONCRETE CYLINDER PIPE | 1323 |
| <i>J. C. Lesage, A. N. Sinclair</i> | |
| ANALYTICAL APPROXIMATIONS FOR STICK-SLIP VIBRATION AMPLITUDES BASED ON A DISCRETIZATION METHOD | 1331 |
| <i>A. Nosrati, A. Farshidianfar</i> | |
| CONTROL OF SOUND RADIATION AND TRANSMISSION BY DISTRIBUTED PASSIVE PIEZOELECTRIC NETWORKS | 1339 |
| <i>G. Rosi, R. Paccapeli, J. Pouget, F. Dell'Isola</i> | |
| AN EXPERIMENTAL INVESTIGATION OF ACOUSTIC RADIATION OF SWIRLED JETS | 1346 |
| <i>S. Krasheninnikov, V. Maslov, A. Mironov</i> | |
| STUDY OF THE BARRIERS FOR THE MITIGATION OF RAILWAY VIBRATIONS | 1354 |
| <i>F. Ciriani, G. Leonardi, F. Scopelliti, M. Buonsanti</i> | |
| DESIGN OF SWITCHING AMPLIFIER USED IN NEGATIVE IMPEDANCE DISPOSAL FOR THE ACTIVE CONTROL OF TRANSDUCER'S ACOUSTIC IMPEDANCE | 1362 |
| <i>H. Lissek, R. Boulardet, M. Cernik, J. Vaclavik, P. Mokry</i> | |
| SHUNT LOUDSPEAKERS FOR MODAL CONTROL IN ROOMS | 1369 |
| <i>H. Lissek, R. Boulardet, P. Rene</i> | |
| EVALUATION OF STRUCTURAL POWER FLOW USING AN OPTIMIZED REGRESSIVE DISCRETE FOURIER SERIES | 1377 |
| <i>C. Vuyl, P. Guillaume, S. Vanlanduit, F. Preseznak, G. Steenackers</i> | |
| COMPARING STABILITY OF POROELASTIC PAVEMENTS WITH A CEMENT SCREED- AND A SANDBEDDING LAYER | 1385 |
| <i>D. Kokot</i> | |
| ACCELERATING EXPLICIT FINITE ELEMENT SIMULATIONS USING GRAPHICS PROCESSING UNITS (GPUS) | 1393 |
| <i>N. Gokhale, J. Cipolla, N. Abboud, P. Reynolds, R. Krause, I. Sandler</i> | |
| ACOUSTIC SIGNATURE OF TRAMS | 1401 |
| <i>F. Tomaszewski, B. Czechyra</i> | |
| OPTIMIZATION OF PARAMETERS OF ROAD SURFACES TO REDUCE NOISE BURDEN FROM TRANSPORT | 1408 |
| <i>R. Cholava, V. Krivanek</i> | |
| NOISE EMISSION DIRECTIVITY OF A SLOW MOVING VEHICLE | 1416 |
| <i>P. Mioduszewski</i> | |
| ACOUSTICAL CORRECTIONS CASE-STUDY FOR OPEN AND CLOSED OFFICES | 1424 |
| <i>J. B. Evans</i> | |
| ATTENUATION OF LOW FREQUENCY DUCT NOISE BY A FLUTE-LIKE SILENCER | 1432 |
| <i>L. Huang</i> | |

| | |
|--|------|
| A HIGH-PERFORMANCE NUMERICAL SIMULATION OF SOUND FIELD IN TIME DOMAIN USING MULTI-GPU SYSTEM | 1440 |
| <i>T. Tsuchiya, M. Otsuka</i> | |
| THE SONIC CHARACTER OF THE ARCHITECTURAL SPACE - A STUDY TOWARDS AN APPROACH OF SOUND AS A KEY CONCEPT IN ARCHITECTURAL DESIGN | 1448 |
| <i>F. E. Rodriguez-Manzo, E. Garay-Vargas</i> | |
| STUDY ON AN ESTIMATION METHOD FOR THE LOSS FACTOR OF A DRY LAMINATED PANE | 1456 |
| <i>S. Nakanishi</i> | |
| ADAPTIVE FUZZY NEURAL NETWORK CONTROL ON THE ACOUSTIC FIELD IN A 3-D ENCLOSURE WITH FLEXIBLE PANEL..... | 1464 |
| <i>S. R. Sepehr, A. Ohadi</i> | |
| ACTIVE ROBUST CONTROL OF GEOMETRICALLY NONLINEAR VIBRATION OF FGM PLATE WITH PIEZOELECTRIC SENSOR/ACTUATOR LAYERS | 1472 |
| <i>V. Fakhari, A. Ohadi</i> | |
| COMPARING LIVING FLOOR IMPACT SOUND WITH THE STANDARD FLOOR IMPACT SOURCE IN APARTMENT | 1480 |
| <i>H. K. Park, M. J. Song, G. G. Song, S. W. Kim</i> | |
| DEVELOPMENT OF A GENERIC 3D CELL FOR THE ACOUSTIC MODELLING OF INTAKE AND EXHAUST SYSTEMS | 1486 |
| <i>R. Fairbrother, S. Liu, A. Dolinar, G. Montenegro, A. Onorati</i> | |
| ON THE STABILITY OF THE GRASPING FUNCTION WITH ER FLUIDS | 1494 |
| <i>M. Ivanescu, M. Florescu, N. Popescu, D. Popescu</i> | |
| CORRELATION OF STRUCTURE-BORNE SOUND SIGNAL AND INTERNAL PIPING SURFACE CONDITION USING INTEGRATED KURTOSIS-BASED ALGORITHM FOR Z-NOTCH FILTER (I-KAZ) TECHNIQUE..... | 1502 |
| <i>M. Z. Nuawi, S. Abdullah, F. Lamin, A. R. Ismail, M. J. M. Nor</i> | |
| ASSESSMENT OF LINEAR PREDICTIVE BORDER PADDING FOR PNAH..... | 1510 |
| <i>I. Lopez, B. Roozen, H. Nijmeijer, R. Scholte</i> | |
| HARMONIC ROTOR VIBRATION WITH CONTROL IN A CAGE INDUCTION MACHINE | 1518 |
| <i>A. Laiho, K. Tammi, A. Arkkio</i> | |
| ACOUSTIC ABSORPTION OF GRANULAR MULTILAYERS MADE FROM TIRE RUBBER..... | 1527 |
| <i>A. Chettah, S. Chedly, M. Ichchou</i> | |
| TYPES OF CAR SOUND QUALITY CATEGORISED BY FREQUENCY DYNAMIC | 1536 |
| <i>N. Kubo</i> | |
| ACOUSTIC SOURCE IDENTIFICATION IN A T-JOINT AT LOW MACH NUMBERS | 1544 |
| <i>P. Martinez-Lera, C. Schram, W. D. Roeck, W. Desmet</i> | |
| PREDICTING PHASE SHIFT OF ELASTIC WAVES IN PIPES DUE TO FLUID FLOW AND IMPERFECTIONS | 1552 |
| <i>J. J. Thomsen, J. Dahl, N. Fuglede, S. Enz</i> | |
| COMPARATIVE STUDY OF NOISE EXPOSURE TO RESIDENTIAL AREA AT MALAYSIA | 1560 |
| <i>A. R. Ismail, M. J. M. Nor, M. F. M. Tahir, M. R. A. Mansor, M. Z. Nuawi</i> | |
| FLEXIBLE BEAMFORMING FOR SPEECH ENHANCEMENT USING STOCHASTIC SPATIAL INFORMATION | 1568 |
| <i>M. Mizumachi</i> | |
| HEARING WITH YOUR BODY: THE INFLUENCE OF WHOLE-BODY VIBRATIONS ON LOUDNESS PERCEPTION | 1576 |
| <i>S. Merchel, A. Leppin, E. Altinsoy</i> | |
| OPTIMIZATION OF A VIOLIN BRIDGE | 1585 |
| <i>Y. Yu, B. M. Kwak</i> | |
| THERMOACOUSTICS AND HEAT TRANSFER IN AN ENCLOSURE INDUCED BY A WALL HEATING | 1592 |
| <i>V. Polezhaev, S. Nikitin</i> | |
| THE DESIGN OF TOOLS FOR AURALIZATION AND ACOUSTIC SIMULATION TARGETED FOR ARCHITECTS AND CITY PLANNERS | 1600 |
| <i>P. Lunden, P. Becker</i> | |
| COMPARISON OF THREE MEASUREMENT TECHNIQUES FOR THE NORMAL ABSORPTION COEFFICIENTS IN FREE FIELD METHOD | 1605 |
| <i>K. Hiroswa, H. Nakagawa, M. Kon, A. Yamamoto</i> | |
| A MORPHOLOGICAL INDEX FOR FAULT DETECTION AND TRENDING IN DEFECTIVE GEARBOXES | 1613 |
| <i>K. C. Gryllias, C. T. Yiakopoulos, I. A. Antoniadis, R. Guminski, S. Radkowski</i> | |
| COMPARISON OF CRITERIA FOR OPTIMAL DEMODULATION OF DEFECTIVE ROLLING ELEMENT BEARINGS VIBRATION RESPONSE WITH COMPLEX SHIFTED MORLET WAVELETS (CSMW) | 1622 |
| <i>K. C. Gryllias, I. A. Antoniadis</i> | |
| LAN-XI – A NEW DATA ACQUISITION CONCEPT FOR SOUND AND VIBRATION MEASUREMENTS | 1630 |
| <i>N. Jacobsen</i> | |
| REFLECTION LOCATION IN PIPE BY ACOUSTIC METHOD | 1638 |
| <i>H. Shibayama, T. Araya, Y. Makabe, E. Okamura</i> | |
| THERMAL VIBRATIONAL CONVECTION OF A BINARY MIXTURE IN CONNECTED CHANNELS | 1645 |
| <i>V. A. Demin, A. F. Glukhov</i> | |
| P-U SOUND POWER MEASUREMENTS ON LARGE TURBO MACHINERY EQUIPMENT | 1652 |
| <i>E. Tijss, H. D. Bree, R. Bussov</i> | |

| | |
|---|------|
| A RECURSIVE LEAST SQUARES BASED CONTROL ALGORITHM FOR THE SUPPRESSION OF TONAL NOISE AND VIBRATION DISTURBANCES | 1658 |
| <i>S. Daley, I. Zazas</i> | |
| NOISE CONTROL OF COMMON BASE FRAME | 1666 |
| <i>K. Saarinen, L. Lamula, M. Aura, T. Karr</i> | |
| ULTRASONIC PROMOTION OF LACTIC FERMENTATION AND THE NUMBER OF LACTIC ACID BACTERIA IN MILK | 1674 |
| <i>N. Masuzawa, S. Koyama, F. Jikihara</i> | |
| NOISE ANNOYANCE OF 8-14 YEAR OLD CHILDREN – RESULTS OF THE GERMAN ENVIRONMENTAL SURVEY ON CHILDREN (GERES IV) | 1680 |
| <i>W. Babisch, C. Schulz, M. Seiwert, K. Becker, A. Conrad, C. Zigelski, M. Kolossa-Gehring</i> | |
| SIMULATION OF NOISE BARRIERS USING THE BOUNDARY ELEMENT METHOD | 1688 |
| <i>H. Waubke, W. Kreuzer, Z. Chen</i> | |
| ASSIGNMENT OF COMPLEX EIGENVALUES FOR STABILITY OF FRICTION-INDUCED VIBRATION THROUGH STATE-FEEDBACK CONTROL | 1695 |
| <i>H. Ouyang</i> | |
| COMPLEXITY OF ELASTIC MODES OF A CHAOTIC SILICON WAFER | 1703 |
| <i>O. Xeridat, P. Sebbah</i> | |
| ENGINE RADIATION SIMULATION UP TO 3 KHZ USING THE WAVE BASED TECHNIQUE | 1710 |
| <i>T. Mocsai, H. Priebisch, F. Diwoky, A. Hepberger</i> | |
| STUDIES WITH AN ELEPHANT BELL | 1718 |
| <i>G. M. Swallowe, L. Chalmers, R. Perrin, T. R. Moore, B. Deutsch</i> | |
| EIGENMODES OF A SLOTTED TUBE | 1726 |
| <i>L. Chalmers, D. Elford, G. M. Swallow, F. Kusmartsev, R. Perrin</i> | |
| A NEURAL NETWORK BASED ALGORITHM FOR CRACK DETECTION IN PLATES USING LAMB WAVES | 1734 |
| <i>M. H. Soorjee, A. Yousefi-Koma</i> | |
| SIMULATION OF ORGAN PIPES' ACOUSTIC BEHAVIOR BY MEANS OF VARIOUS NUMERICAL TECHNIQUES | 1742 |
| <i>P. Rucz, F. Augusztinowicz, P. Fiala</i> | |
| VIBRATION CHARACTERISTICS OF MASKLESS EXPOSURE MODULE IN PCB MANUFACTURING SYSTEM | 1750 |
| <i>J. Lee, W. Jang, M. Cho, C. Lee, S. Lee, J. Kim</i> | |
| OUTPUT-ONLY MODAL ANALYSIS OF SUBMERGED STRUCTURES EXCITED BY UNDERWATER SOUND | 1758 |
| <i>S. Engelke, L. Gaul</i> | |
| CLINICAL APPLICATION OF THE SYNCHRONIZED SENTENCE SET (S³) | 1766 |
| <i>K. S. Abouchakra, T. Letowski, J. Besing, J. Koehnke</i> | |
| A LINEAR NETWORK REPRESENTATION FOR THE DETERMINATION OF THE ACOUSTIC PROPERTIES OF LINED DUCTS CARRYING A NON-UNIFORM MEAN FLOW | 1774 |
| <i>W. D. Roeck, T. Toulorge, W. Desmet</i> | |
| AN ORIENTATION CALIBRATION PROCEDURE FOR TWO ACOUSTIC VECTOR SENSOR CONFIGURATIONS | 1782 |
| <i>T. G. H. Basten, H. E. D. Bree, D. R. Yntema</i> | |
| DOES THE CURRENT APPROACH OF "STRATEGIC NOISE MAPPING" SATISFY THE DEMANDS OF ACTION PLANS? | 1790 |
| <i>S. Shilton, A. Stimac</i> | |
| CORRELATIONS BETWEEN ROOM SHAPE AND ACOUSTICS IN RECTANGULAR CONCERT HALLS | 1791 |
| <i>A. K. Klosak, A. C. Gade</i> | |
| VIBRATION STABILITY OF FLEXIBLE ROBOTIC STRUCTURES THAT PERFORM AT HIGH ROTATION SPEED | 1799 |
| <i>D. Popescu, I. Pascu</i> | |
| ANNOYANCE PREDICTION MODEL FOR ASSESSING THE ACOUSTIC COMFORT AT THE OPERATOR STATION OF COMPACT LOADERS | 1807 |
| <i>E. Carletti, F. Pedrielli, C. Casazza</i> | |
| DEVELOPMENT AND VALIDATION OF STRUCTURAL MODAL ANALYSIS BY FREE VIBRATION RESPONSE ONLY: FREQUENCY DOMAIN METHOD | 1815 |
| <i>B. Wang, Y. Lin, T. Chao</i> | |
| ACOUSTO - A NEW OPEN-SOURCE PROJECT FOR ACOUSTIC SIMULATION | 1823 |
| <i>U. Iemma, V. Marchese, R. Gori</i> | |
| ACOUSTIC-ELECTRIC CHARACTERISATION OF LOUDSPEAKERS FOR LOW-COST THERMOACOUSTIC ELECTRICITY GENERATORS | 1831 |
| <i>Z. Yu, X. Mao, A. J. Jaworski</i> | |
| CONSTRUCTION AND TESTING OF A STEEL-WOOL REGENERATOR WITHIN A LOOPED TRAVELLING-WAVE THERMOACOUSTIC ENGINE | 1839 |
| <i>Z. Yu, A. Abduljalil, A. J. Jaworski</i> | |
| UPDATE OF THE SWISS SOURCE MODEL FOR ROAD TRAFFIC NOISE | 1847 |
| <i>F. Aballea, H. Lissek, S. Utz, P. Rene, P. Martin, L. Cosandey</i> | |

| | |
|--|------|
| ACTIVE LOW-FREQUENCY MODAL NOISE CANCELLATION FOR ROOM ACOUSTICS: AN EXPERIMENTAL STUDY..... | 1854 |
| <i>X. Falourd, H. Lissek, P. Rene</i> | |
| PLIF MEASUREMENT OF THE TIME-RESOLVED TEMPERATURE FIELD DISTRIBUTION AROUND THE FINS OF A THERMOACOUSTIC HEAT EXCHANGER IN OSCILLATORY FLOW | 1861 |
| <i>L. Shi, Z. Yu, A. J. Jaworski</i> | |
| MULTIPLE INCOHERENT SOUND SOURCE LOCALIZATION USING A SINGLE VECTOR SENSOR..... | 1869 |
| <i>T. G. H. Basten, H. E. D. Bree, W. F. Druyvesteyn, J. W. Wind</i> | |
| VORTEX FORMATION AT THE END OF THE PARALLELPLATE STACK IN THE STANDING-WAVE THERMOACOUSTIC DEVICE | 1877 |
| <i>L. Shi, Z. Yu, A. J. Jaworski</i> | |
| NON-DIMENSIONAL PARAMETERS CONTROLLING THE BEHAVIOUR OF OSCILLALTORY FLOWS AROUND STACKS OF PARALLEL PLATES IN THERMOACOUSTIC DEVICES..... | 1885 |
| <i>X. Mao, L. Shi, A. J. Jaworski</i> | |
| THE SOUND FIELD GENERATED FROM A LONG LINE SOURCE MOVING WITH A VARIABLE SPEED..... | 1893 |
| <i>P. L. Lee, J. H. Wang</i> | |
| DEVELOPMENT OF A DYNAMIC ROTATING TURBINE BLADE MODEL..... | 1901 |
| <i>J. Sun, L. Kari</i> | |
| A HERMITE-COONS BOUNDARY ELEMENT METHOD | 1909 |
| <i>U. Iemma, L. Burghignoli</i> | |
| REFRIGERATOR NOISE AND VIBRATION CONTROL AND OPTIMIZATION | 1916 |
| <i>A. Dobrucki, B. Zoltogorski, P. Pruchnicki, R. Bolejko, M. Baran</i> | |
| COMBUSTION INSTABILITIES IN TWO-DIMENSIONAL RESONATORS: THEORY | 1924 |
| <i>M. Heckl</i> | |
| THREE DIMENSIONAL FREE VIBRATION ANALYSIS OF FUNCTIONALLY GRADED THICK, VARIABLE THICKNESS, ANNULAR PLATES..... | 1932 |
| <i>V. Tajeddini, A. Ohadi</i> | |
| COMBINED EVALUATION OF THE NOISE AND VIBRATION AT A TRAVERTINO QUARRY | 1940 |
| <i>G. A. Degan, D. Lippiello, S. Lorenzetti, F. Multari, M. Pinzari</i> | |
| ACTIVE CONTROL OF VIBRATION AND SOUND RADIATION OF RECTANGULAR PLATE WITH PIEZOCERAMIC ELEMENTS..... | 1948 |
| <i>M. Kozupa, J. Cieslik, W. Baiko</i> | |
| ACOUSTIC COMPUTERIZED TOMOGRAPHY USING ARBITRARY ARRANGEMENT OF TRANSDUCERS | 1953 |
| <i>A. Minamide, K. Mizutani, N. Wakatsuki</i> | |

VOLUME 4

| | |
|--|------|
| NOVEL VIBROACOUSTIC METHOD FOR SENSORLESS MEASUREMENT OF COGGING TORQUE OF PERMANENT MAGNET SYNCHRONOUS MOTORS..... | 1961 |
| <i>T. Kimpian, F. Augusztinowicz</i> | |
| TOWARDS COMMERCIAL IMPLEMENTATION OF CAA FOR NOISE PREDICTION OF REAL WORLD PROBLEMS..... | 1969 |
| <i>S. Caro</i> | |
| MANUFACTURING PROCESS OPTIMIZATION OF RESILIENT MATERIALS MADE FROM RECYCLED TYRE GRANULES..... | 1985 |
| <i>F. Asdrubali, G. Baldinelli, F. D'Allesandro, S. Shiavoni, J. M. Kenny, A. Iannoni</i> | |
| NON-LINEAR NOISE PREDICTION MODEL FOR LOW MACH NUMBER JETS..... | 1993 |
| <i>A. Salgado, A. Agarwal</i> | |
| DETERMINATION OF THE VIBRATION REDUCTION INDEX IN A SCALE MODEL WITH FLEXIBLE ELEMENTS BY NAH | 2001 |
| <i>J. Alba, E. Escuder, R. D. Rey, J. Ramis</i> | |
| CHARACTERISATION OF STRUCTURE-BORNE SOUND SOURCES USING WALLS AND FLOORS AS RECEPTION PLATES..... | 2009 |
| <i>J. Scheck, F. Mack, H. Fischer, B. Gibbs</i> | |
| IDENTIFICATION OF A PROBABILISTIC MODEL OF THE GEOMETRICAL AND MECHANICAL PROPERTIES FOR A NONHOMOGENEOUS CORTICAL BONE USING IN VIVO MEASUREMENTS IN ULTRASONIC RANGE..... | 2017 |
| <i>C. Desceliers, C. Soize, Q. Grimal, M. Talmant, S. Naili</i> | |
| METHODOLOGY TO EVALUATE THE EFFICIENCY OF ADDITIONAL DEVICES ON NOISE BARRIERS..... | 2024 |
| <i>I. Diez, P. Fernandez, M. Vazquez</i> | |
| ANTENNA AND RADOME DYNAMIC ANALYSIS..... | 2033 |
| <i>G. Miccoli, L. Maestrelli, T. Bagnoli</i> | |
| PROBABILISTIC MODELING OF ACOUSTIC SOUND PROPAGATION IN ROOMS WITH UNCERTAIN WALL ABSORPTION AND SOURCE CHARACTERISTICS | 2041 |
| <i>B. Bartha, M. A. Vas, P. Fiala</i> | |
| INVESTIGATION OF STRUCTURE-BORNE SOUND TRANSMISSION FOR A RESILIENTLY-SUPPORTED STAIRCASE LANDING | 2049 |
| <i>E. Taskan, J. Scheck, H. Fischer</i> | |

| | |
|--|------|
| AN EXPERIMENTAL STUDY OF LOCALIZATION AND EXTRACTION OF MULTIPLE DISJOINT SOUND SOURCES : THE HARMONIC SEPARATION METHOD IN THE UNDER-DETERMINED CASE | 2057 |
| <i>P. Marmaroli, X. Falourd, H. Lissek</i> | |
| SPEECH ANALYSIS IN THE CONTEXT OF THE PREVENTION OF VOICE DISORDERS | 2064 |
| <i>P. Zwan, B. Kostek</i> | |
| VALIDATION OF CAA PREDICTION OF NOISE RADIATED FROM TURBOFAN INTAKES | 2072 |
| <i>J. Astley, I. Achunche, R. Sugimoto</i> | |
| RECONSTRUCTION OF THE FORCES EXERTED BY AN ENGINE ON ITS ENGINE MOUNTS | 2081 |
| <i>M. Lavoie, A. Fillon, A. Ross</i> | |
| FLOW-ACOUSTIC CONCEPT MODELING OF HVAC DUCT NETWORKS USING A DYMOLA/MODELICA FRAME WORK | 2089 |
| <i>H. Kuhnel, A. Haumer, T. Baumle, U. Reisenbichler, C. Reichl, G. Karlowatz</i> | |
| BROADBAND NOISE PREDICTION OF TRAILING EDGE NOISE CAUSED BY A TURBULENT BOUNDARY LAYER USING AN IMPROVED DELAYED DETACHED EDDY SIMULATION (IDDES) | 2096 |
| <i>B. Greschner, F. Thiele, J. Grilliat, M. C. Jacob</i> | |
| DEDICATED TESTRIG FOR ACOUSTIC CHARACTERIZATION OF AUTOMOTIVE SILENCERS | 2108 |
| <i>J. Lavrentjev, H. Rammal</i> | |
| WHAT EXACTLY IS TIME INFINITY FOR ACOUSTICAL PARAMETERS? | 2116 |
| <i>C. Hak, H. Vertgall</i> | |
| CONVEX COMBINATION OF ADAPTIVE FILTERS FOR ANC | 2124 |
| <i>M. Ferrer, M. D. Diego, A. Gonzalez, G. Pinyero</i> | |
| BIFREQUENCY EXCITATION EFFECT ON CAVITATION THRESHOLD AND ACTIVITY: NONLINEAR ASPECT AND INFLUENCE OF THE DIFFERENCE FREQUENCY | 2132 |
| <i>I. Salettes, B. Gilles, J. Bera, P. Blanc-Benon</i> | |
| ACOUSTICS OF ANNULAR DUCTS WITH IMPEDANCE WALLS | 2140 |
| <i>J. M. G. S. Oliveira</i> | |
| ACTIVE LUBRICATION APPLIED TO INTERNAL COMBUSTION ENGINES - EVALUATION OF CONTROL STRATEGIES | 2146 |
| <i>E. Estupinan, I. Santos</i> | |
| WAVELET APPROACH FOR ANALYSIS OF DYNAMIC RESPONSE OF TIMOSHENKO BEAM ON RANDOM FOUNDATION | 2154 |
| <i>Z. Hryniewicz, P. Kozioł</i> | |
| EXPERIMENTAL STUDY OF ACOUSTIC MODE TRANSMISSION THROUGH C-SHAPED BYPASS-DUCT SECTIONS OF AERO-ENGINES | 2162 |
| <i>R. Bauers, U. Tapken, L. Enghardt, C. Stohr</i> | |
| AEOLIAN TONE AND THREE-DIMENSIONAL WAKE VORTEX FROM SWEEP PLATE | 2170 |
| <i>H. Hayashi, S. Yoshitake, S. Sasaki, T. Fukano</i> | |
| MEASUREMENT TECHNIQUES USED TO VERIFY THE CAUSE AND NATURE OF LOW-FREQUENCY NOISE IN ROOMS | 2178 |
| <i>M. Gendreau</i> | |
| THE EFFECT OF VARYING ACOUSTIC PRESSURE ON VIBRATION ISOLATION PLATFORMS SUPPORTED ON AIR SPRINGS | 2186 |
| <i>M. Gendreau</i> | |
| ANALYTICAL AND EXPERIMENTAL STUDY OF EMBEDDED DAMPING ELEMENTS IN COMPOSITE | 2194 |
| <i>M. Sola, M. Jette, E. R. Fotsing, M. Cimmino, A. Ross, E. Ruiz</i> | |
| ACOUSTICAL HOLOGRAPHY FOR THE MEASUREMENT OF TRANSIENT POWER FLOW IN A THIN PLATE DUE TO AN IMPULSIVE LOADING | 2202 |
| <i>A. Oey, J. Ih</i> | |
| VIBRATIONS OF COUPLED CYLINDRICAL-CONICAL SHELLS | 2209 |
| <i>M. Caresta, N. Kessissoglou</i> | |
| STUDY ON APPLICATION OF SIMULTANEOUS EQUATIONS METHOD TO MULTIPLE CHANNEL ACTIVE NOISE CONTROL SYSTEMS | 2217 |
| <i>K. Fujii, Y. Okamoto, K. Kashihara, M. Muneyasu</i> | |
| AN EFFECT OF BACK GROUND MUSIC FOR MASKING NOISE IN ROOM ACOUSTICS: AN INTERACTION BE-TWEEN BGM AND INDOOR INTERIOR | 2225 |
| <i>Y. Goto</i> | |
| IS THE PRIVACY INDEX A GOOD INDICATOR FOR ACOUSTIC COMFORT IN AN OPEN PLAN AREA? | 2230 |
| <i>P. Chigot, M. Jarosz</i> | |
| HIGH-ORDER INTERFACE FOR CFD AND CAA SIMULATION | 2238 |
| <i>X. Chen, X. Zhang</i> | |
| UNCERTAINTY OF DIFFERENCE MEASURES OF SPEED LEVEL FOR THE VALIDITY OF THE METHOD OF MEASURE | 2246 |
| <i>D. R. Romina, A. Jesus, E. Eva, E. Vicente, P. Jose</i> | |
| NOISE CONTROL MEASURES APPLIED AT THE CONSTRUCTION OF NEW ROAD INFRASTRUCTURE IN SOCHI | 2253 |
| <i>M. Butorina, N. Minina</i> | |
| PHYSICAL AND STATISTICAL ASPECTS OF THE SPB EN CPX METHODS | 2260 |
| <i>M. Duskov, R. Westerveld, W. V. Keulen</i> | |
| FINITE DOUBLE WALL ACOUSTIC TRANSMISSION WITH THERMOVISCOUS EFFECTS | 2266 |
| <i>H. I. Hussain, J. L. Guyader</i> | |

| | |
|---|------|
| NOISE GENERATION DUE TO IMPULSE EXCITATION..... | 2274 |
| <i>D. N. Manik</i> | |
| VIBRATION EFFECTS ON BUILDING DEVELOPMENT RECORDED IN THE POLISH COOPER ORE MINING REGION | 2281 |
| <i>J. Kompala, H. Passia, A. Szade, Z. Motyka</i> | |
| IDENTIFICATION OF THE DYNAMICAL BOW/STRING FRICTION INTERACTION FORCE FROM VIBRATORY MEASUREMENTS USING INVERSE METHODS..... | 2286 |
| <i>V. Debut, C. Bersac, J. Antunes</i> | |
| BROADBAND INTERACTION NOISE SIMULATIONS USING SYNTHETIC TURBULENCE..... | 2294 |
| <i>M. Dieste, G. Gabard</i> | |
| ANALYSIS AND EXPERIMENT OF VIBRATION TRANS-MISSION FOR HELICAL GEAR SYSTEM BY THE SPEC-TRAL METHOD..... | 2302 |
| <i>C. I. Park</i> | |
| DAMPING LAYOUT DESIGN OPTIMIZATION OF STRUCTURAL-ACOUSTIC SYSTEMS CONSIDERING TEMPERATURE AND MATERIAL VARIABILITY..... | 2310 |
| <i>B. C. Jung, D. Lee, B. D. Youn</i> | |
| STATISTICAL THRESHOLD FOR BLIND UNDERWATER DETECTION OF PROPELLOR CRAFT USING CYCLOSTATIONARITY..... | 2318 |
| <i>J. Antoni, D. Hanson</i> | |
| ACOUSTIC DURABILITY OF LOW NOISE ROAD SURFACES | 2326 |
| <i>H. Dijkink</i> | |
| VERIFICATION OF AN EMPIRICAL PREDICTION METHOD FOR SUBWAY INDUCED VIBRATION USING A COUPLED FE-BE MODEL | 2333 |
| <i>H. Verbraeken, G. Lombaert, G. Degrande</i> | |
| STRUCTURAL-ACOUSTIC SENSITIVITY ANALYSIS OF PROPULSION SYSTEM PARAMETERS FOR A COUPLED FE/BE MODEL OF A SUBMARINE..... | 2341 |
| <i>S. Merz, R. Kinns, N. Kessissoglou</i> | |
| IDENTIFICATION OF STRUCTURE-BORNE SOUND PATHS OF SERVICE EQUIPMENT IN BUILDINGS USING STRUCTURAL-ACOUSTIC RECIPROCITY..... | 2349 |
| <i>Pieter Schevenels, Arne Dijckmans, Peter J. G. Van Der Linden, Gerrit Vermeir</i> | |
| MONITORING 25 SILENT ROADS OVER 10 YEARS IN THE MUNICIPALITY OF GRONINGEN | 2357 |
| <i>W. Van Keulen</i> | |
| VIBRATION TUNING OF A PLATFORM SUSPENDED BY HYBRID SHAPE-MEMORY HELICAL SPRINGS | 2361 |
| <i>C. Lee, T. Yang</i> | |
| A NOTE ON THE WAVENUMBER-FREQUENCY DECOMPOSITION OF A CURVED SURFACE | 2369 |
| <i>B. A. Cray</i> | |
| BLOCKED FORCE OF STRUCTURE-BORNE SOURCES USING A CALIBRATED RECEPTION PLATE..... | 2377 |
| <i>B. Gibbs, G. Seiffert</i> | |
| REDUCTION OF BEARING VIBRATIONS WITH SHUNT DAMPING..... | 2383 |
| <i>H. Atzrodt, D. Mayer, T. Melz</i> | |
| A FRAMEWORK FOR NUMERICAL MODELING AND SIMULATION OF SHUNT DAMPING TECHNOLOGY | 2390 |
| <i>M. Kurch, C. Klein, D. Mayer</i> | |
| BLIND SOURCE SEPARATION IN THE CEPSTRUM DOMAIN APPLICATION TO THE SOUND POWER MEASUREMENT OF MACHINES | 2398 |
| <i>J. A. Ballesteros, M. D. Fernandez, S. Quintana, I. Gonzalez, L. Rodriguez</i> | |
| ON THE USE OF LINEAR AERO-ACOUSTIC METHODS TO PREDICT WHISTLING..... | 2406 |
| <i>M. Abom, M. Karlsson, A. Kierkegaard</i> | |
| EXPERIENCES ON SWITCHED SHUNT CONTROL ON RADIATING ELASTIC PLATE STRUCTURES | 2414 |
| <i>M. Ciminello, L. Lecce</i> | |
| VIBRATION MONITORING IN STEEL PLANTS- IRON MAKING PROCESS | 2422 |
| <i>S. Kharputikar</i> | |
| SEISMO-ACOUSTIC WAVES GENERATED BY AN OBJECT IMPACTING ON THE SEABED | 2430 |
| <i>C. Aubeny, K. Rao, H. Schmidt</i> | |
| THEORETICAL AND EXPERIMENTAL STUDY OF BALL-TYPE AUTOMATIC BALANCER FOR ECCENTRIC RIGID ROTORS | 2438 |
| <i>M. Wang, C. Lu</i> | |
| RIPPLED-SPECTRUM RESOLUTION BY HUMAN HEARING : BASELINES, INFLUENCE OF MASKING, AND DICHOTIC RELEASE FROM MASKING | 2446 |
| <i>A. Supin</i> | |
| RESEARCH OF MINIMAL LEVELS OF BACKGROUND NOISE AND VIBRATION | 2453 |
| <i>A. A. Bazhenov</i> | |
| DYNAMICS OF AN ULTRASONIC IMPACT TOOL WITH AN INTERMEDIATE STRIKER | 2460 |
| <i>I. Vagapov</i> | |
| DYNAMIC ANALYSIS OF RAMSES II STATUE | 2468 |
| <i>T. Elnady, M. Rizk, A. Elsabagh, A. Hussein</i> | |
| ENVIRONMENTAL NOISE AND STRUCTURAL VIBRATION MEASUREMENTS ON A STEEL RAILWAY BRIDGE..... | 2476 |
| <i>H. Erol</i> | |

| | |
|---|------|
| SOUND DAMPING PROPERTIES OF PUR/NANO FABRIC SANDWICH STRUCTURES | 2484 |
| <i>L. Lapcik Jr., V. Studynka, M. Vasina, D. Fojtu, B. Lapcikova</i> | |
| STUDY OF MATERIAL STRUCTURE EFFECTS ON VIBRATION DAMPING..... | 2492 |
| <i>M. Vasina, L. Lapcik Jr., B. Lapcikova, V. Studynka</i> | |
| MEASUREMENTS AND ANALYSIS OF THE VIBRATION TO WHICH PASSENGERS ARE EXPOSED IN ISTANBUL METRO | 2499 |
| <i>H. Erol, V. Arli</i> | |
| THERMAL STABILITY AND DEGRADATION OF SOUND ABSORBING PUR BASED MATERIALS..... | 2507 |
| <i>B. Lapcikova, L. Lapcik Jr., M. Juricka, M. Vasina</i> | |
| ACOUSTIC PROPERTIES OF POLYMER-SHELLED ULTRASOUND CONTRAST AGENTS BULK VOLUME VS. MICROCAPILLARY..... | 2515 |
| <i>D. Grishenkov, L. Kari, T. B. Brismar, G. Paradossi</i> | |
| INSTANTANEOUS STREAMING IN NONLINEAR VISCOUS FLUID FLOWS | 2523 |
| <i>A. Perelomova, P. Wojda</i> | |
| EXPERIMENTAL STUDIES ON ACOUSTIC ATTENUATION AND PRESSURE LOSS CHARACTERISTICS OF PERFORATED PIPES IN AN EXPANSION CHAMBER | 2530 |
| <i>H. Erol, O. Saf</i> | |
| LOEWE-ZENTRUM ADRIA – A MULTIDISCIPLINARY RESEARCH PROJECT ON THE ADVANCEMENT OF ACTIVE SYSTEMS..... | 2538 |
| <i>J. Bos, H. Hanselka, T. Bein</i> | |
| FOUR-POLE PARAMETERS OF A RECTANGULAR EXPANSION CHAMBER WITH YIELDING WALLS..... | 2546 |
| <i>M. L. Munjal, B. Venkatesham, M. Tiwari</i> | |
| ANALYSIS OF FAST KURTOGRAM PERFORMANCE IN CASE OF HIGH LEVEL NON-GAUSSIAN NOISE | 2554 |
| <i>T. Barszcz, A. Jablonski</i> | |
| NONLINEAR VIBRATIONS OF CIRCULAR CYLINDRICAL SHELL CONVEYING FLOWING FLUID..... | 2562 |
| <i>M. Amabili, K. Karagiozis, M. P. Paidoussis</i> | |
| SELF-TUNING OF LOCAL FEEDBACK LOOPS FOR ACTIVE VIBRATION CONTROL..... | 2570 |
| <i>M. Zillett, S. J. Elliott, P. Gardonio</i> | |
| PREDICTING TARGET ECHO STRENGTH OF MARINE MAMMALS | 2578 |
| <i>L. Gilroy, D. Brennan, R. Byers</i> | |
| COMPARISON OF ADVANCED SIGNAL ANALYSIS TECHNIQUES FOR BEARING FAULT DETECTION | 2586 |
| <i>A. Klepka, T. Barszcz, A. Jablonski</i> | |
| THE GLOBAL AND PARTIAL SYSTEM CONDITION ASSESSMENT IN MULTIDIMENSIONAL CONDITION MONITORING..... | 2594 |
| <i>C. Cempel</i> | |
| MITIGATION OF TRAFFIC-INDUCED GROUND VIBRATION BY INCLINED WAVE BARRIERS— A THREE-DIMENSIONAL NUMERICAL ANALYSIS..... | 2602 |
| <i>L. Andersen, A. H. Augustesen</i> | |
| ACTIVE VIBRATION CONTROL DESIGN WITH REAL-CODED GENETIC ALGORITHM OPTIMISATION | 2610 |
| <i>S. Julai, M. O. Tokhi</i> | |

VOLUME 5

| | |
|---|------|
| CORRELATION STUDY BETWEEN FATIGUE AND VIBRATION SIGNAL USING NEWLY DEVELOPED STATISTICAL ANALYSIS: I-KAZ | 2618 |
| <i>M. Z. Nuawi, N. Ismail, S. Abdullah, A. R. Ismail</i> | |
| MANAGEMENT SYSTEM IN LABORATORY – AN OPPORTUNITY OR AN OBSTACLE FOR VIBROACOUSTIC RESEARCH? | 2625 |
| <i>Z. Dabrowski, G. Klekot</i> | |
| MODELLING OF BOLTED JOINTS FOR THE SIMULATION OF THE SOUND RADIATION | 2633 |
| <i>J. Neher, B. Wender</i> | |
| AIRBORNE ACOUSTIC VELOCITY MEASUREMENTS IN ENCLOSED AND OPEN AIR CONDITIONS USING MINIMAL ARTIFICIAL SEEDING AND PHOTON CORRELATION SPECTROSCOPY: CURRENT ISSUES AND FUTURE CHALLENGES | 2641 |
| <i>T. Koukoulas, P. Theobald, R. Gilham</i> | |
| CHARACTERIZATION OF POROElastIC MATERIALS WITH A BAYESIAN APPROACH | 2648 |
| <i>J. Chazot, J. Antoni, E. Zhang</i> | |
| APPLICATION OF DITHER CONTROL OF CHAOS TO A CHAOTIC PERMANENT MAGNET SYNCHRONOUS MOTOR | 2656 |
| <i>S. Chang</i> | |
| IN-DUCT SOURCE CHARACTERIZATION FOR MULTIPLE SOURCES..... | 2664 |
| <i>H. Boden</i> | |
| INVESTIGATION ON TRANSONIC TONE IN SUPERSONIC NOZZLE | 2672 |
| <i>M. Yonamine, J. Sungjae, T. Aoki</i> | |
| EVALUATION OF CAR INTERIOR SOUND QUALITY BASED ON PSYCHOACOUSTICS ANALYSIS..... | 2679 |
| <i>J. Ou, J. Yao, E. Yang, G. Deng</i> | |
| DYNAMIC RESPONSES OF BEAMS MOUNTED WITH A SPRING-MASS SYSTEM | 2686 |
| <i>H. Liu, S. Chang</i> | |

| | |
|---|------|
| NOISE IMPACT MODELLING OF IPPC INDUSTRIAL ACTIVITIES FOR PISA STRATEGIC NOISE MAPPING | 2694 |
| <i>G. Licitira, P. Gallo</i> | |
| THE GEARBOX VIBRATION LOAD SUSCEPTIBILITY AS THE MEASURE OF ITS CONDITION-APPROACHES AND PROCEDURES FOR DIAGNOSTIC RELATION DISCOVERY..... | 2702 |
| <i>W. Bartelmus, R. Zimroz</i> | |
| MODE LOCALIZATION BY RIGID SPLICES AND ITS EFFECTS ON PROPAGATIONS IN LINED DUCTS | 2710 |
| <i>W. Bi, V. Pagneux, D. Lafarge, Y. Auregan</i> | |
| "QUIET TRAM TRACK" INFRASTRUCTURE SOLUTIONS AT ATHENS TRAMWAY NETWORK FOR SQUEALING NOISE ATTENUATION | 2717 |
| <i>K. Vogiatzis, P. Vanhacker, P. Carels</i> | |
| THE BLUFF BODY STABILIZED PREMIXED FLAME IN AN ACOUSTICALLY RESONATING TUBE: COMBUSTION CFD AND MEASURED PRESSURE FIELD..... | 2725 |
| <i>J. Kok, S. Matarazzo, A. Pozarlik</i> | |
| NOISE & VIBRATION EVALUATION OF A FLOATING SLAB IMPLEMENTATION IN THE KERAMIKOS ARCHAEOLOGICAL AREA AT ATHENS METRO NETWORK | 2733 |
| <i>K. Vogiatzis</i> | |
| ENVIRONMENTAL NOISE AS AN IMPORTANT LEGAL FACTOR IN THE REHABILITATION OF THE ACOUSTIC URBAN ENVIRONMENT..... | 2741 |
| <i>S. Chaikali, K. Vogiatzis, N. Eliou</i> | |
| ROAD TRAFFIC NOISE MONITORING PROGRAM & MITIGATION MEASURES AT THE ATHENS RING MOTORWAY | 2749 |
| <i>N. Eliou, K. Vogiatzis</i> | |
| DYNAMIC RESPONSE ANALYSIS OF AN ONSHORE LNG-STORAGE TANK INTERACTION SYSTEM SUBJECT TO IMPACT OR EARTHQUAKE LOADS | 2756 |
| <i>M. Tan, Y. P. Xiong, J. T. Xing</i> | |
| VISUALIZATION OF THE FLOW THROUGH MODULATED IRREGULAR GLOTTAL GAPS..... | 2764 |
| <i>C. Kirmse, M. Triep, C. Brucker, M. Dollinger, M. Stingl</i> | |
| A NUMERICAL STUDY ON MECHANISM OF AERODYNAMIC NOISE REDUCTION BY POROUS MATERIAL | 2772 |
| <i>M. Suzuki, T. Sueki, T. Takaishi, K. Nakade</i> | |
| MONITORING OF ROAD TRAFFIC NOISE IN OPERATING SECTIONS OF EGNATIA MOTORWAY | 2779 |
| <i>T. Valkouma, K. Vogiatzis</i> | |
| A NEW PERTURBATION ALGORITHM FOR STRONGLY NONLINEAR OSCILLATORS | 2787 |
| <i>M. Pakdemirli, M. M. F. Karahan, H. Boyaci</i> | |
| BIFURCATION AND CHAOS CHARACTERISTICS FOR SPIRAL BEVEL GEAR TRANSMISSION SYSTEM..... | 2795 |
| <i>G. Li, Y. Li, L. Zheng</i> | |
| QUIET ROAD TRAFFIC – SECOND PHASE OF THE GERMAN NATIONAL NOISE MITIGATION PROJECT..... | 2803 |
| <i>K. Glaeser, G. Schwalbe, M. Zoller</i> | |
| MINIMALLY RADIATING ARRAYS FOR MOBILE DEVICES | 2811 |
| <i>S. J. Elliott, H. Murfet, K. R. Holland</i> | |
| VIBRATION ANALYSIS OF A MEMS RING-BASED RATE SENSOR BY THE RAY TRACING METHOD | 2818 |
| <i>B. Chouwion, S. McWilliam, C. Fox, A. Popov</i> | |
| FLEXURAL VIBRATION OF PROPELLER SHAFTS USING DISTRIBUTED LUMPED MODELING TECHNIQUE | 2826 |
| <i>M. H. Abolbashari, A. Farshidianfar, S. Soheili</i> | |
| VIBRATION REDUCTION FOR STREAM PIPELINE BY SUPPORTS OPTIMIZATION..... | 2834 |
| <i>J. Zhou, N. Ta, Z. Rao</i> | |
| PREDICTION OF STRUCTURE-BORNE NOISE DURING CONSTRUCTION OF NEW FACILITIES NEAR EXISTING WILDLIFE EXHIBITS | 2838 |
| <i>R. A. Carman</i> | |
| MEASUREMENT AND PREDICTION OF THE ACOUSTIC PERFORMANCE OF MUFFLERS FOR SLEEP APNOEA DEVICES | 2846 |
| <i>P. Jones, N. Kessissoglou</i> | |
| A HYBRID DESIGN OPTIMIZATION METHOD USING ENRICHED CRAIG-BAMPTON APPROACH | 2854 |
| <i>A. Perdahcioglu, M. H. M. Ellenbroek, A. De Boer</i> | |
| A TWO STEP VISCOETHERMAL ACOUSTIC FE METHOD | 2862 |
| <i>R. Kampinga, Y. Wijnant, A. De Boer</i> | |
| GREEN'S MATRIX AND BOUNDARY INTEGRAL EQUATIONS FOR ANALYSIS OF WAVE PROPAGATION IN ELASTIC HELICAL SPRINGS..... | 2870 |
| <i>S. Sorokin</i> | |
| DETERMINATION OF THE BASIC PARAMETERS AND CHARACTERISTICS OF SEMI-ANECHOIC ROOM | 2878 |
| <i>M. Weisz, J. Tuma, R. Klecka</i> | |
| FREE VIBRATION ANALYSIS OF SYMMETRICALLY LAMINATED CYLINDRICAL PANELS VIA EXTENDED KANTOROVICH METHOD | 2886 |
| <i>F. Aljani, F. Bakhtiari-Nejad, H. Arvin, M. Mohammadi</i> | |
| ASPECTS OF LAMB WAVE GENERATION AND TRANSMISSION | 2894 |
| <i>N. Constantin, S. Sorohan, M. Gavan, V. Anghel</i> | |

| | |
|---|------|
| GENERAL SOLUTION ALGORITHM FOR THREE-TO-ONE INTERNAL RESONANCES OF A CUBIC NONLINEAR VIBRATION MODEL | 2902 |
| <i>B. B. Ozhan, M. Pakdemirli</i> | |
| SOUND QUALITY EVALUATION OF BOILERS DURING THEIR START CYCLE USING FREE VERBALISATION TECHNIQUES..... | 2911 |
| <i>F. Bessac, S. Decurninge, E. Parizet</i> | |
| ACTIVE NOISE REDUCTION AND VIBRATION CONTROL IN LOCOMOTIVE CABS - ISSUES, IMPACTS, AND MOTIVATIONS FOR RAIL OPERATIONS WORLDWIDE..... | 2919 |
| <i>D. J. Maguire</i> | |
| ACOUSTIC COMFORT AND SOUND PREFERENCES OF HEARING IMPAIRED STUDENTS IN INDOOR SPACES..... | 2927 |
| <i>Y. Smirnova, J. Kang</i> | |
| MEASURING TRANSVERSE MOTION OF VIBRATION SHAKERS..... | 2935 |
| <i>L. Wu</i> | |
| DESIGN SENSITIVITY ANALYSIS AND OPTIMIZATION OF ZWICKER'S LOUDNESS USING THE ADJOINT VARIABLE METHOD | 2943 |
| <i>K. Koo, S. Wang</i> | |
| VIBRATION ANALYSIS OF AN ELECTRIC MOTOR WITH MECHANICAL AND ELECTROMAGNETIC INTERACTION | 2951 |
| <i>H. Im, J. Chung</i> | |
| FINITE ELEMENT ANALYSIS OF A THREE-DIMENSIONAL CATENARY SYSTEM FOR A HIGH-SPEED RAILWAY | 2958 |
| <i>K. H. Lee, Y. H. Cho, J. Chung</i> | |
| A FAULT DIAGNOSIS ON ROTATING MACHINERY USING THE MAHALANOBIS TAGUCHI SYSTEM..... | 2967 |
| <i>J. Jeong, S. Park, I. Yang, Y. Lee, J. Oh</i> | |
| CHARACTERISING THE HIGH-FREQUENCY DYNAMIC STIFFNESS OF RAILWAY BALLAST | 2974 |
| <i>D. Herron, C. Jones, D. Thompson, D. Rhodes</i> | |
| STRUCTURE BORNE SOUND INVESTIGATION OF A LIGHT WEIGHT FLOOR WITH THE HELP OF MARKOV CHAIN WALKING PATTERNS | 2982 |
| <i>D. Bard, J. Claesson</i> | |
| SPEED OF SOUND IN PIPELINE WITH MINERAL OIL..... | 2988 |
| <i>L. Hruzik, M. Vasina, R. Sikora</i> | |
| RECIPROCATING COMPRESSOR PULSATION STUDY AND OPTIMUM DEVICE ARRANGEMENT | 2994 |
| <i>A. Almasi</i> | |
| CROSSHEAD AND PISTON VIBRATION FORCES IN RECIPROCATING MACHINES | 3002 |
| <i>A. Almasi</i> | |
| CONDITION MONITORING OF RECIPROCATING MACHINE BASED ON RECORDED NOISY VIBRATION DATA..... | 3010 |
| <i>A. Almasi</i> | |
| STRUCTURAL NOISE LOAD FROM ELEVATORS IN RESIDENTIAL (A WAY TO THE REDUCTION OF STRUCTURAL NOISE). . | 3016 |
| <i>I. Dombi, M. Bite, P. Bite</i> | |
| PERIODIC ASSEMBLY OF MULTI-COUPLED PARALLEL PLATES: VIBRATION PROPAGATION AND ACOUSTIC RADIATION..... | 3019 |
| <i>G. Gosse, C. Pezerat, F. Bessac</i> | |
| THE EFFECT OF VOIDS AROUND UNDERGROUND RAILWAY TUNNELS ON GROUND VIBRATION | 3027 |
| <i>S. Jones, H. Hunt</i> | |
| THEORETICAL AND EXPERIMENTAL INVESTIGATIONS ON DAMPERS PERFORMANCES FOR SUPPRESSION OF THERMOACOUSTIC OSCILLATIONS | 3035 |
| <i>N. Noiray, B. Schuermans</i> | |
| CAVITATION NOISE SPECTRA GENERATED BY HIGH INTESITY FOCUSED ULTRASOUND (HIFU)..... | 3045 |
| <i>N. V. Dezhkunov, V. L. Lanin, D. Valerio, N. Alexandr</i> | |
| EXPERIMENTAL STUDY FOR PASSIVE CONTROL OF SOUND TRANSMISSION THROUGH A DOUBLE GLAZED WINDOW USING OPTIMALLY TUNED HELMHOLTZ RESONATORS | 3051 |
| <i>Q. Mao, S. Pietrzko</i> | |
| IMPROVEMENT OF EXPERIMENTAL SPATIAL MATRIX IDENTIFICATION BY VIRTUAL MEASUREMENT POINT CONCEPT..... | 3059 |
| <i>M. Okuma, R. J. Kloepper</i> | |
| MAGNITUDE ESTIMATION OF PITCH: A COMPARISON OF SUBJECTS WITH ABSOLUTE AND RELATIVE PITCH..... | 3067 |
| <i>A. Miskiewicz, A. Rakowski</i> | |
| GENERATION OF A PRIVATE SOUND ZONE BY USING ACOUSTIC DIFFERENCE CONTROL AND THE DESIGN METHOD OF THE ACOUSTIC ZONE BASED ON ARRAY BEAM PATTERN | 3073 |
| <i>D. Kim, Y. Shin, A. Afram, S. Wang, M. Shin, S. Q. Lee, H. Kim, K. Park</i> | |
| LOUDSPEAKER ARRAY SIMULATION CONSIDERING TRANSFER CHARACTERISTICS OF AN INDIVIDUAL LOUDSPEAKER ARRAY ELEMENT | 3081 |
| <i>D. Kim, Y. Shin, A. Afram, S. Wang</i> | |
| ELECTROMAGNETIC DESIGN OF AN INNOVATIVE MAGNETO-RHEOLOGICAL DAMPER FOR ALL TERRAIN VEHICLE | 3089 |
| <i>L. Zheng, C. Li, J. Pan, Y. Li</i> | |

| | |
|--|------|
| EFFECTS OF WINDWARD SHAPE OF RECTANGULAR BAR ON THE GENERATION OF AERODYNAMIC SOUND..... | 3097 |
| <i>Y. Hayashi, M. Miyata</i> | |
| PASSIVE DAMPING OF COMPOSITE STRUCTURES WITH EMBEDDED SHUNTED MACROPIEZOFIBER PATCHES | 3105 |
| <i>V. Cokonaj, E. C. Rodriguez, A. M. Aguirre</i> | |
| ISOLATION OF VIBRATIONS DUE TO SPEAKERS IN AUDIO-VISUAL ELECTRONIC DEVICES WITHOUT DETERIORATING SOUND | 3112 |
| <i>J. Sun, K. Kim</i> | |
| ACTIVE VIBRATION CONTROL OF A FLEXIBLE PLATE USING RECURSIVE LEAST SQUARE WITH DIRECTIONAL FORGETTING FACTOR | 3120 |
| <i>S. M. Salleh, M. O. Tokhi</i> | |
| THE ROLE OF STRUCTURAL FOUNDATIONS IN TRANSMISSION OF VIBRATION FROM UNDERGROUND RAILWAYS..... | 3128 |
| <i>K. Kuo, H. Hunt</i> | |
| EXPERIMENTAL ACOUSTIC CHARACTERIZATION OF A WET VACUUM CLEANER | 3136 |
| <i>C. Buratti, E. Moretti, M. Urbani</i> | |
| TEMPERATE APPROXIMATION OF THE BASQUE TXISTU..... | 3144 |
| <i>A. Agos-Esparza, M. J. Elejalde-Garcia, E. Macho-Stadler, A. Amilibia-Alarcia, I. Imatz-Vizcarra</i> | |
| PSYCHOACOUSTIC STUDY OF ATTACK TRANSIENTS IN ACCORDION | 3152 |
| <i>R. Llanos-Vazquez, A. Agos-Esparza, E. Macho-Stadler, M. J. Elejalde-Garcia</i> | |
| EXPLICIT MAC NEAL MODEL REDUCTION USING ACCELERATED MODAL FORMULAE | 3160 |
| <i>J. Lagache, S. Assaf</i> | |
| VIBRATION ANALYSIS OF A ROTOR-BEARING SYSTEM WITH MAGNETORHEOLOGICAL SQUEEZE FILM DAMPERS CONSIDERING TEMPERATURE RISE IN MR-SFD | 3168 |
| <i>H. Ghaednia, A. Ohadi</i> | |
| A COMPARATIVE STUDY OF NEAR-FIELD ACOUSTIC HOLOGRAPHY AND INTENSITY TECHNIQUES APPLIED TO A LOUDSPEAKER SOURCE | 3176 |
| <i>R. Gault, R. Cooper, M. Boyle, J. Wang, M. Tournour</i> | |
| H_a ESTIMATION OF THE ENVELOPE MODULATING SIGNAL FOR GEARBOX FAILURE DIAGNOSIS | 3184 |
| <i>E. Sekko, Z. Daher</i> | |
| BAYESIAN OCEAN ACOUSTIC SOURCE TRACKING WITH ENVIRONMENTAL UNCERTAINTIES..... | 3192 |
| <i>S. E. Dosso</i> | |
| NUMERICAL OPTIMISATION OF PIEZOCOMPOSITE MATERIAL PROPERTIES USING 3D FINITE-ELEMENT MODELLING | 3200 |
| <i>J. Djiewierz, A. Gachagan, R. L. O'Leary, S. N. Ramadas</i> | |
| A COMPARISON BETWEEN ACOUSTIC LINER CHARACTERIZATION METHODS AND CALCULATIONS | 3208 |
| <i>B. Nennig, M. B. Tahar, J. Ville, E. Piot, F. Simon, M. Taktak</i> | |
| SOUND ATTENUATION IN DUCT LINED WITH POROELASTIC MATERIAL SUBMITTED TO GRAZING FLOW : A MODE MATCHING APPROACH | 3217 |
| <i>B. Nennig, E. Perrey-Debain, M. B. Tahar</i> | |
| TWO POINT FAR FIELD CORRELATIONS AND THE STRUCTURE OF JET NOISE SOURCES | 3224 |
| <i>R. E Musafir</i> | |
| INVESTIGATION CONCERNING DYNAMIC PROPERTIES OF AN ACTIVE BORING BAR REGARDING ITS PERFORMANCE BY MEANS OF "1-D" FINITE ELEMENT MODELS | 3232 |
| <i>T. Smirnova, H. Akesson, L. Hakansson, I. Clasesson, T. Lago</i> | |
| ATMOSPHERIC TURBULENT SCATTERING OF BROADBAND ACOUSTIC SIGNALS | 3240 |
| <i>S. Bradley</i> | |
| BEATING DIFFRACTION, THE NEMESIS OF ATMOSPHERIC ACOUSTIC WIND PROFILERS..... | 3246 |
| <i>S. Bradley, S. Von Hunerbein</i> | |
| ACOUSTICS OF A CABINETLESS TRANSPARENT SPEAKER..... | 3254 |
| <i>Y. Chiu, C. Chen, J. Yeh, Y. Chang</i> | |
| DEVELOPMENT OF NEW TYPE OF INSULATOR FOR STEREOPHONIC EQUIPMENT MADE BY POLYMERIC MATERIAL | 3262 |
| <i>R. Ina, K. Nishimura</i> | |

VOLUME 6

| | |
|--|------|
| VIBRATION AND SOUND TRANSMISSION LOSS ACROSS A SANDWICH BEAM WITH THE MICRO AND MACRO INCLUSIONS..... | 3270 |
| <i>M. Melnyk, B. Diveyev, M. J. Crocker</i> | |
| CRACK IDENTIFICATION IN TIMOSHENKO BEAM USING LOCAL MAXIMA LINES OF WAVELET COEFFICIENTS | 3279 |
| <i>A. H. Zamaniyan, A. Ohadi</i> | |
| MOTION AND VIBRATION CONTROLS FOR CLEAN IMAGE CAPTURES OF ROBOTIC SYSTEM FOR AUTOMATED BRIDGE INSPECTION..... | 3287 |
| <i>J. S. Lee, I. Hwang, Y. Choi, H. S. Lee, S. H. Hong</i> | |

| | |
|---|------|
| ROAD TRAFFIC NOISE MAPPING IN HONG KONG - NOVEL ENHANCEMENT AND DEVELOPMENT | 3295 |
| <i>A. Lui, C. Law, M. Yeung, C. Lee</i> | |
| MONITORING OF PAINT BREAKDOWN USING THE ELECTROMECHANICAL IMPEDANCE METHOD | 3303 |
| <i>R. Paurobally, X. Liu</i> | |
| SIMULATION OF NONLINEAR ULTRASONIC STANDING WAVES IN BUBBLY LIQUID..... | 3311 |
| <i>C. Vanhille, C. Campos-Pozuelo</i> | |
| FIELD EXPERIENCE ON MEASUREMENTS WITH THE ACOUSTIC CAMERA | 3318 |
| <i>T. Kloow</i> | |
| ACOUSTICAL CHARACTERIZATION OF SCREENS AND PERFORATED PLATES | 3326 |
| <i>L. Jaouen, F. Becot</i> | |
| AN OPTIMIZATION PROCESS EXPERIENCE FOR HVAC NOISE EMISSION AND FLOWS DISTRIBUTION INSIDE A PASSENGER'S TRAIN WAGON..... | 3334 |
| <i>M. Viscardi, N. Rusciano, M. Iadevaia, D. Siano</i> | |
| COMPARISON OF NOISE REDUCTION METHODS USING A 1D-MODEL..... | 3342 |
| <i>N. Hovelmann, D. Sachau, K. Kochan</i> | |
| MAXIMIZATION OF THE ACOUSTIC ENERGY DIFFERENCE BETWEEN LISTENING AND NON- LISTENING REGIONS | 3350 |
| <i>M. Shin, S. Q. Lee, H. Kim, K. Park, D. Kim, S. Wang</i> | |
| CONTROL OF ACOUSTIC RADIATION PATTERN USING FORCED ACOUSTIC DIPOLE FOR INDIVIDUALIZED SOUND FIELD IN MOBILE APPLICATIONS | 3358 |
| <i>M. Shin, S. Q. Lee, H. Kim, K. Park</i> | |
| ACTIVE CONTROL OF SOUND TRANSMISSION USING MOMENT ACTUATORS..... | 3366 |
| <i>O. Jiricek, P. Svec, V. Jandak, M. Brothaneck</i> | |
| STRUCTURAL DAMAGE DIAGNOSIS AND ISOLATION USING ARTIFICIAL NEURAL NETWORKS BASED ON NON-PARAMETRIC SUBSPACE RESIDUAL..... | 3373 |
| <i>K. Saeed, N. Mechbal, G. Coffignal, M. Verge</i> | |
| NUMERICAL INVESTIGATION OF ELASTIC WAVE PROPAGATION IN LAYERED MICROSTRUCTURES..... | 3381 |
| <i>I. A. Veres, S. G. Pierce</i> | |
| A PARAMETRIC INVESTIGATION OF THE ACOUSTICAL PERFORMANCE OF SIMPLE NOISE BARRIER TOP EDGE DEVICES | 3389 |
| <i>D. J. Oldham, C. A. Egan</i> | |
| THE DEVELOPMENT OF A PRACTICAL TOP EDGE DEVICE FOR A NOISE BARRIER | 3397 |
| <i>D. J. Oldham, C. A. Egan, M. J. Espada</i> | |
| ACTIVE NOISE AND VIBRATION CONTROL IN TURBOFAN AIRCRAFT: EXPERIMENTS AND RESULTS FROM THE MESEMA PROJECT | 3405 |
| <i>E. Monaco, L. Lecce, G. De Maria, C. Natale, S. Pirozzi, C. May</i> | |
| SOLVING LARGE INDUSTRIAL ACOUSTIC MODELS WITH THE FAST MULTIPOLE METHOD..... | 3413 |
| <i>R. Hallez, K. De Langhe</i> | |
| NOISE IMPACT OF INNOVATIVE BARRIERS DEDICATED TO FREIGHT TRAINS IN URBAN AREAS | 3421 |
| <i>F. Margiocchi, F. Poisson, M. Baulac, J. Defrance, P. Jean</i> | |
| A 3D FDTD SCHEME FOR ANALYSIS OF THE ELASTIC WAVE FIELDS IN SOLIDS..... | 3427 |
| <i>J. Frances, J. Ramis, J. Vera, E. Segovia</i> | |
| AN APPLICATION OF NONLINEAR COMPENSATION TO SIX-AXIS VIBRATION ISOLATION SYSTEM USING ZERO- POWER CONTROL | 3435 |
| <i>M. E. Hoque, T. Mizuno, Y. Ishino, M. Takasaki</i> | |
| AN EFFICIENT WAVE BASED METHOD FOR THREE-DIMENSIONAL HELMHOLTZ PROBLEMS IN UNBOUNDED DOMAINS | 3443 |
| <i>B. Bergen, B. Van Genechten, D. Vandepitte, W. Desmet</i> | |
| SPACE-TIME DOMAIN RAYLEIGH AND CONICAL WAVES EXCITED BY TRANS-RAYLEIGH TRAINS..... | 3451 |
| <i>B. J. Kooij</i> | |
| MODELING OF PIANO STRING AND ANALYSIS OF PIANO TONE USING NON-HARMONIC ANALYSIS | 3459 |
| <i>M. Kodera, S. Hirobayashi</i> | |
| TRANSFER PATH ANALYSIS WITHIN A TGV DUPLEX COACH..... | 3467 |
| <i>P. Franck, L. Thierry, B. Sandrine, V. Nicolas</i> | |
| PASSIVE STRUCTURAL ACOUSTIC CONTROL OF THE SMART PLATE – FEM SIMULATION | 3475 |
| <i>M. S. Koziel, J. Wicik</i> | |
| VIBRATION-BASED DAMAGE DETECTION IN MULTILAYER COMPOSITE MATERIAL..... | 3481 |
| <i>W. Szkudlarek, M. Kahsin, M. Luczak, B. Peeters, M. Kurowski, K. Branner, K. Martyniuk, M. Wasilczuk</i> | |
| CONDITION MONITORING OF BLDC MOTOR BASED ELECTROMECHANICAL LINEAR ACTUATORS | 3489 |
| <i>G. Sreedhar Babu, A. S. Sekhar, A. Lingamurthy</i> | |
| PARAMETRIC INVESTIGATIONS OF THE SYNTHETIC JET ACTUATOR FOR DRAG AND FLOW SEPARATION REDUCTION | 3497 |
| <i>M. Kurowski, B. Peeters, M. Luczak, W. Szkudlarek, P. Flaszynski</i> | |
| VIBROACOUSTIC CONTROL OF HONEYCOMB SANWICH PANEL USING MFC SMART PATCHES | 3505 |
| <i>J. Ro, Y. Y. Lee, B. S. Chang</i> | |
| DAMPING ESTIMATION AND DYNAMIC ANALYSIS OF A COMPOSITE SHAFT - ROTOR SYSTEM..... | 3513 |
| <i>A. Gupta, A. S. Sekhar, R. Velmurugan</i> | |
| DEVELOPMENT OF NOISE BARRIER ANALYSIS PROGRAM | 3521 |
| <i>H. Kim, J. Kim, H. Kang, B. Kim, S. Kim</i> | |

| | |
|---|------|
| A NUMERICAL FEM-FDTD MODEL TO CHARACTERIZE LAMINATED FLOORS..... | 3529 |
| <i>J. R. Soriano, J. F. Monllor, E. S. Eulogio, J. M. G. Borrell</i> | |
| ENHANCEMENT OF NOISE LEGISLATION BY MEANS OF PSYCHOACOUSTICS | 3537 |
| <i>A. Achgelis, H. Beckmann</i> | |
| APPLYING MODAL ANALYSIS FOR COMPARING VARIOUS FE MODELS OF HUMAN PELVIC BONE..... | 3545 |
| <i>M. Werner, M. Quickert, H. Kunze, C. Voigt, F. Hoffinan, H. Steinke</i> | |
| MODELING OF SOUND TRANSMISSION THROUGH AIR INLETS | 3553 |
| <i>P. Jean</i> | |
| 3 CYLINDERS PETROL ENGINES TAILPIPE SOUND QUALITY PROCESSED THROUGH AN ORIGINAL HEARING MODEL..... | 3561 |
| <i>N. Driot, D. Wiemeler, P. Garcia</i> | |
| VIBRATION OF SHORT CARBON NANOTUBES USING GENERALIZED DIFFERENTIAL QUADRATURE RULE | 3569 |
| <i>P. Soltani, P. Bahar, A. Farshidianfar</i> | |
| AN INITIAL STUDY ON APPLYING ACTIVE NOISE CONTROL TO AN INSULATED BOX FAN USED IN VENTILATION SYSTEM APPLICATIONS | 3577 |
| <i>M. Larsson, S. Johansson, S. M. Muddala, A. E. M. Gafar, L. Hakansson, J. Tarkka, M. Sandor</i> | |
| APPLICATION OF GENERALIZED QUADRATURE RULE TO VIBRATION OF A CURVED CARBON NANOTUBE ON ELASTIC FOUNDATION | 3585 |
| <i>P. Soltani, M. R. Saadati, A. Farshidianfar</i> | |
| EXHAUST SYSTEM SOUNDS | 3593 |
| <i>P. Garcia, B. Fuhrmann, N. Driot, D. Wiemeler</i> | |
| NUMERICAL PREDICTION OF COMBUSTION INDUCED VIBRO-ACOUSTICAL INSTABILITIES IN A GAS TURBINE COMBUSTOR | 3603 |
| <i>A. Pozarlik, J. Kok</i> | |
| LIFT-OVER CROSSINGS AS A SOLUTION TO TRAM-GENERATED GROUND-BORNE VIBRATION AND RE-RADIATED NOISE: A CASE STUDY..... | 3611 |
| <i>J. Talbot</i> | |
| ASSESSMENT OF THE ACCURACY OF DAMPING ESTIMATION FOR LIGHTLY DAMPED STRUCTURES | 3619 |
| <i>H. Koruk, K. Y. Sanliturk</i> | |
| TRACK QUALITY EXTRAPOLATION FOR RAILWAY VEHICLE PASS-BY NOISE..... | 3627 |
| <i>A. Frid, S. Leth</i> | |
| PERFORMING NOISE SOURCE LOCALIZATION IN CABIN ENCLOSURES | 3635 |
| <i>F. Deblauwe, K. Janssens, M. Robin</i> | |
| NUMERICAL ITERATIVE ANALYSIS FOR VEHICLE-BRIDGE DYNAMIC INTERACTION..... | 3643 |
| <i>A. Feriani, M. G. Mulas</i> | |
| LOW NOISE MUFFLER DESIGN FOR THE CONSTRUCTION EQUIPMENTS CONSIDERING THE FLOW NOISE AND THE HIGHER ORDER MODE EFFECT | 3651 |
| <i>H. Kim, Y. Kim, W. Joo, J. Bae</i> | |
| INTERIOR HVAC NOISE IN RAILWAY VEHICLES – MEETING INCREASING DEMANDS | 3659 |
| <i>J. Wandell, L. Baures, B. Stegemann</i> | |
| DESIGN OF A COMBUSTION TEST RIG WITH HIGH AMPLITUDE FORCING CAPABILITIES FOR NONLINEAR FLAME TRANSFER FUNCTION MEASUREMENTS | 3667 |
| <i>S. Schimek, J. P. Moeck, C. O. Paschereit</i> | |
| A FAST SOLUTION OF THE 3D HELMHOLTZ EQUATION BY BEM AND INTERPOLATED TRANSFER FUNCTIONS..... | 3675 |
| <i>O. Zaleski, O. V. Estorff</i> | |
| INTRODUCTION OF RESIDUAL MODES CONCEPT IN THE PATCH TRANSFER FUNCTIONS METHOD TO MODEL THE STRUCTURE-ACOUSTIC COUPLING IN HEAVY FLUID..... | 3683 |
| <i>M. Aucejo, L. Maxit, N. Totaro, J. Guyader</i> | |
| PERFORMANCE OF EARMUFFS IN CANNON FIRING NOISE | 3691 |
| <i>J. Zera, F. Mlynski, E. Kozlowski</i> | |
| HOW TO REDUCE THE ROAD NOISE IN DETACHED HOUSES WITH FRONT PORCH? | 3695 |
| <i>M. Mirowska, E. Walerian, R. Janczur, M. Czechowicz</i> | |
| NOISE REDUCTION IN A DUCT USING PASSIVE/SEMIACTIVE SHUNT LOUDSPEAKERS | 3703 |
| <i>S. Pietrzko, Q. Mao</i> | |
| FULL FIELD MEASUREMENT OF TRANSIENT LAMB WAVE PROPAGATION IN CARBON FIBRE REINFORCED PLASTICS USING DIGITAL SHEAROGRAPHY | 3711 |
| <i>A. Hildebrand, O. Focke, C. V. Kopylow</i> | |
| ADVANCED VIBRO-ACOUSTIC SIMULATIONS CONSIDERING DRAPING EFFECTS OF 3D TEXTILE-REINFORCED STRUCTURES | 3719 |
| <i>W. Hüfenbach, M. Dannemann, F. Kolbe, S. Friebel, J. Franeck</i> | |
| TWO STEP OPTIMIZATION OF SECONDARY SOURCES AND ERROR TRANSDUCERS IN GLOBAL ACTIVE NOISE CONTROL IN ENCLOSURES..... | 3726 |
| <i>J. I. Palacios, J. Romeu, A. Balastegui</i> | |
| CATDBTREN PROJECT: NEW PREDICTION TOOL OF VIBRATION IMPACT FOR RAILWAY INFRASTRUCTURES | 3734 |
| <i>J. Romeu, A. Balastegui, R. Arcos, A. Sanchez, J. I. Palacios, G. Alarcon</i> | |

| | |
|--|------|
| THE UNCERTAINTY OF PURE TONE MEASUREMENTS IN REVERBERATION ROOMS BELOW THE SCHROEDER FREQUENCY | 3742 |
| <i>F. Jacobsen, A. R. Molares</i> | |
| IMPROVEMENT OF THE INTERIOR ACOUSTICS OF A PASSENGER CAR BY ACTIVE STRUCTURAL CONTROL | 3750 |
| <i>A. Dantele, T. Rittenschöber</i> | |
| SPECTRAL ANALYSIS OF TRACHEOESOPHAGEAL AND ESOPHAGEAL SPEECH SIGNAL | 3756 |
| <i>M. Miesikowska, L. Radziszewski, S. Bien, S. Okla</i> | |
| A SCIENTIFICALLY VALID HEARING-LOSS SIMULATOR FOR EDUCATIONAL/TRAINING PURPOSES | 3762 |
| <i>L. Marshall, P. M. Zurek, J. G. Desloge, J. Jorgensen</i> | |
| CORRELATION OF FIELD MEASUREMENTS FOR FOOTSTEP FORCE PULSE WITH FEA MODEL FOR VIBRATION RESPONSE OF A BUILDING FLOOR | 3766 |
| <i>J. E. Phillips</i> | |
| THE FLUTTER STUDY OF SUPERSONIC WING-BODY COMBINATION | 3774 |
| <i>Q. Weizhuo, F. Mingxia</i> | |
| HIGH PERFORMANCE MOLECULAR INTERACTION MONITORING USING PIEZOELECTRIC CHEMICAL SENSING PLATFORM | 3780 |
| <i>S. Lim, H. J. Yim, Y. Shin, M. Yeo</i> | |
| NOISE REDUCTION USING HIGH-RESOLUTION FREQUENCY ANALYSIS | 3785 |
| <i>K. Yamamoto, S. Hirobayashi</i> | |
| NUMERICAL AND EXPERIMENTAL COMPARISON OF THE DYNAMIC PROPERTIES OF ENCLOSURES WITH AND WITHOUT HOLE | 3793 |
| <i>O. David-West, J. Wang, R. Gault, R. Cooper</i> | |
| STATISTICAL PERFORMANCE ESTIMATION OF A MULTIBODY SYSTEM BASED ON DESIGN VARIABLE SAMPLES | 3802 |
| <i>C. K. Choi, H. H. Yoo</i> | |
| HOW DOES THE LOUDSPEAKER ARRANGEMENT AFFECT THE PERSONAL AUDIO SYSTEM CHARACTERISTICS? | 3810 |
| <i>J. Chang, M. Song, J. Park, Y. Kim</i> | |
| THE STUDY OF METHOD FOR ELIMINATING THE ACOUSTIC RESONANCE IN PIPING SYSTEM OF BOILER FEED WATER PUMP | 3818 |
| <i>C. Bae, J. Gu, Y. Kim, H. Kim</i> | |
| IDENTIFICATION OF ACOUSTIC BOUNDARY CHARACTERISTICS OF AN ENCLOSED SOUND FIELD USING THE FUNDAMENTAL SOLUTIONS | 3825 |
| <i>K. Kamiya, H. Kato</i> | |
| THE INVESTIGATION OF THE TRANSMISSION OF LOW FREQUENCY VIBRATION FROM THE SHIP'S MECHAN-ISMS INTO THE SEA WATER | 3832 |
| <i>K. Listewnik, I. Gloza</i> | |
| MODAL ANALYSIS OF A ROTATING PACKET BLADE SYSTEM HAVING A CRACK | 3840 |
| <i>S. M. Kwon, H. H. Yoo</i> | |
| ANALYSIS OF VIBRATION CHARACTERISTICS OF FULL VEHICLE MODEL USING SUBSTRUCTURE SYN-THESIS METHOD | 3848 |
| <i>B. S. Kim, H. H. Yoo</i> | |
| MATHEMATICAL MODEL OF DISTRIBUTION OF THE IMPACT IMPULSE IN THE LOWER FINITENESS OF A PERSON WITH A LEG ON BEARING WITH ALLOWANCE FOR ELEMENT DEFORMABILITY | 3856 |
| <i>A. V. Chigarev, A. V. Borisov</i> | |
| AN INVERSE SOLUTION WITH DETERMINATION OF THE MOST INFLUENCING PARTS OF A SOURCE WITH RESPECT TO A CERTAIN AREA OF INTEREST IN THE FIELD USING BEM | 3859 |
| <i>B. Soenarko, D. Setiadikarunia, J. Ih</i> | |
| CYCLOSTATIONARITY IN SOUND AND VIBRATION: PECULIARITIES, SUCCESSES AND PERSPECTIVES | 3866 |
| <i>J. Antoni</i> | |
| A PARAMETER-EFFECT STABILITY INVESTIGATION OF FRICTION-DRIVEN OSCILLATING SYSTEMS | 3873 |
| <i>A. A. Atai, E. M. Miandoab, S. Mirjavadi, A. Babakhani</i> | |
| A NEW METHOD FOR AXIAL P-V PROBE CALIBRATION | 3880 |
| <i>G. Sacchi, D. Stanzial</i> | |
| ACOUSTIC BRIGHTNESS/CONTRAST CONTROL PERFORMANCE DUE TO TRANSFER FUNCTION ERRORS | 3887 |
| <i>J. Park, M. Song, J. Chang, Y. Kim</i> | |
| NONLINEAR STEADY-STATE VIBRATION ANALYSIS OF A BEAM WITH BREATHING CRACKS (FINITE ELEMENT ANALYSIS BASED ON THE MIXED VARIATIONAL PRINCIPLE) | 3895 |
| <i>K. Kamiya, T. Yoshinaga, K. Yasuda</i> | |
| PERFORMANCE LIMITATIONS BY STRUCTURES OF CONTROL SOURCES IN ACTIVE NOISE CONTROL SYSTEMS OF DUCTS | 3903 |
| <i>Y. Kobayashi, H. Fujio, N. Jinbo, Y. Hara</i> | |
| USE OF BISPECTRAL MEASURES IN THE VIBROACOUSTIC DIAGNOSIS OF GEARS | 3911 |
| <i>M. Jasinski, S. Radkowski</i> | |

| | |
|---|------|
| RESOLUTION ENHANCEMENT OF NAH BY PAPOULIS-GERCHBERG ALGORITHM..... | 3919 |
| <i>B. Lim, J. Kim</i> | |

VOLUME 7

| | |
|--|------|
| SHAPE OPTIMIZATION OF REACTIVE MUFFLER AND ITS EFFECT ON I.C. ENGINE ACOUSTIC PERFORMANCE..... | 3927 |
| <i>S. Allam</i> | |
| EFFECTS OF CHANNEL CARRIERS (VOCODERS) ON CHINESE SPEECH RECOGNITION IN CONTINUOUS INTERLEAVED SAMPLING (CIS) AND ADVANCED COMBINATION ENCODING (ACE) SIMULATION OF COCHLEAR IMPLANT..... | 3939 |
| <i>C. Wu, K. Huang, L. Ho</i> | |
| FLEXURE VIBRATION OF THE ORTHOTROPIC THIN WALLED CYLINDRICAL SHELL WITH MASSIVE INCLUSIONS..... | 3947 |
| <i>M. Sukhorolsky, T. Shopa</i> | |
| COMBINED EVOLUTIONARY NON-DETERMINISTIC METHODS FOR LAYERED PLATES MECHANICAL PROPERTIES IDENTIFICATION..... | 3956 |
| <i>B. Diveyev, I. Butyter, N. Shcherbyna</i> | |
| THE VIBRATIONAL CHARACTERISTICS OF NANO-IMPRINTING STAGES WITH RESPECT TO SUPPORTER TYPES..... | 3964 |
| <i>S. H. Lee, J. S. Lee, J. I. Jeong, S. H. Lim, H. J. Yim</i> | |
| OPTIMAL PLACEMENT OF PIEZOELECTRIC PATCH ACTUATORS FOR SOUND FIELD CONTROL INSIDE 3D CAVITY..... | 3971 |
| <i>M. Hanifzadegan, A. Ohadi</i> | |
| ABSORPTION COEFFICIENTS OF STANDING AUDIENCES IN HALLS | 3979 |
| <i>N. W. Adelman-Larsen, C. Jeong</i> | |
| B-SCAN IMAGING FOR QUALITY ESTIMATION OF SPOT WELDS IN REAL TIME..... | 3989 |
| <i>M. Korzeniowski, A. Ambroziak, P. Kustron</i> | |
| NUMERICAL PREDICTION OF SOUND TRANSMISSION THROUGH SHELLS AND PLATES..... | 3996 |
| <i>R. Piscoya, M. Ochmann</i> | |
| NOISE MAPPING – EXPERIENCE, RESULTS, SPECIFIC FEATURES | 4004 |
| <i>D. I. Popescu, I. F. Moholea</i> | |
| ACOUSTIC MULTipoles WITH COMPLEX SOURCE POINTS | 4011 |
| <i>M. Ochmann, R. Piscoya</i> | |
| MODELING THERMOACOUSTIC INSTABILITIES IN AN ANNULAR RIJKE TUBE: ASYMMETRIES AND STANDING AND SPINNING MODES..... | 4018 |
| <i>J. P. Moeck, C. O. Paschereit</i> | |
| AN ALTERNATING AIR-FLOW METHOD FOR MEASURING THE RESISTIVITY OF POROUS MATERIALS..... | 4026 |
| <i>R. Dragonetti, C. Ianelli, F. Mercogliano, R. Romano</i> | |
| MR DAMPER FOR CONTROLLING CHAOS IN SYSTEMS WITH LIMITED POWER SUPPLY | 4034 |
| <i>E. M. Miandoab, M. Haire-Yazdi</i> | |
| APPLICATION OF ACOUSTIC HOLOGRAPHY FOR - HUMAN-COMPUTER INTERACTION | 4042 |
| <i>W. Rolshofen</i> | |
| COMPARISON OF THE THEORETICAL AND EXPERIMENTAL MODELS OF CIRCULAR PLATE FOR ACTIVE VIBRATION CONTROL..... | 4049 |
| <i>L. Leniowska, P. Kos</i> | |
| NOVEL TEST BED FOR VIBRATION TRANSMISSION THROUGH ROLLING AND SLIDE BEARINGS | 4057 |
| <i>R. Kruk, P. Dietz, A. Lohrengel, G. Schafer, D. Thoden</i> | |
| EVOLUTION OF THERMO-ACOUSTIC TRANSFER FUNCTION OF SINGLE BUNSEN TYPE FLAMES: AN EXPERIMENTAL STUDY | 4062 |
| <i>M. Manohar, V. N. Kornilov, L. P. H. D. Goey</i> | |
| ACOUSTICAL LIFETIME OF POROUS ASPHALT IN GERMANY | 4069 |
| <i>W. Bartolomaeus</i> | |
| IMPULSE DAMPER FOR CONTROLLING FRICTIONDRIVEN OSCILLATOR WITH LIMITED POWER SUPPLY | 4077 |
| <i>E. M. Miandoab, A. Yousefi-Koma, S. Farokhi</i> | |
| STRUCTURAL HEAT MONITORING AND DAMAGE DETECTION BASED ON DECOMPOSITION OF THE STRUCTURAL ODS | 4085 |
| <i>C. Zang</i> | |
| FLUID-STRUCTURE-INTERACTIONS AND SOUND EMISSION CHARACTERISTICS OF DISTRIBUTION TRANSFORMERS..... | 4093 |
| <i>M. Ertl, G. Hipszki</i> | |
| THE PRESENT STATE AND FUTURE DEVELOPMENTS IN MACHINE DIAGNOSTICS AND PROGNOSTICS | 4101 |
| <i>R. B. Randall</i> | |

| | |
|---|------|
| VERIFICATION AND VALIDATION OF A FLUID-STRUCTURE INTERACTION MODEL USED TO CHARACTERIZE SOUND ATTENUATION BY A PERIODICALLY SPACED ARRAY OF CYLINDER ELEMENTS | 4109 |
| A. G. Cartaxo, M. M. Neves, S. N. Y. Gerges, J. L. B. Coelho | |
| REAL TIME SPECTRUM ANALYZER ANALYSIS AND EVALUATION OF STRING INSTRUMENTS | 4117 |
| R. Choa, J. Khurgin, F. Choa | |
| STAND-OFF CHEMICAL DETECTION USING ACOUSTIC BEAM FORMING & PHOTOACOUSTIC SENSING | 4125 |
| A. Graninger, X. Chen, F. Choa | |
| PREDICTABILITY STUDY OF NON ACOUSTICAL PARAMETERS OF POROUS MATERIALS USING GLOBAL SENSITIVITY ANALYSIS BASED ON RANDOM SAMPLING COUPLED WITH THE KOLMOGOROVSMIRNOV TEST | 4133 |
| M. Garoum, R. Idchabani, M. Rhachi, M. Tajayouti, A. M. Arranz | |
| IMPROVEMENT ON THE DETERMINATION OF VIBRATION VELOCITY RATINGS IN LARGE POWER TRANSFORMERS | 4140 |
| W. Lee, S. Lee, B. Kim, Y. Bae, J. Lee | |
| MODELING OF SOUNDING LAYERED MARINE BOTTOM | 4148 |
| G. Grelowska, E. Kozaczka | |
| FEATURE VECTOR SELECTION IN SPEAKER RECOGNITION | 4154 |
| E. Bielinska | |
| EXPERIMENTAL INVESTIGATION OF TRAM TRACK VIBRATION | 4162 |
| S. Lakusic, V. T. Lakusic, M. Bogut | |
| TRANSMISSIBILITY IN MULTIPLE DEGREE OF FREEDOM SYSTEMS: AN OVERVIEW | 4170 |
| N. Maia | |
| SOURCE IDENTIFICATION AND NOISE REDUCTION OF A COMPRESSOR AT GRASSO | 4178 |
| N. B. Roozen, J. V. D. Oetelaar, A. Geerlings, T. Vliegenthart | |
| NOISE INDUCED VIBRATION OF A THIN PROJECTION SCREEN | 4186 |
| N. B. Roozen, L. Yperlaan | |
| A NUMERICAL STUDY ON MULTIMODE SOUND ATTENUATION IN LINED DUCTS | 4192 |
| R. Sugimoto, J. Astley | |
| EXPERIMENTAL EVALUATION OF RUK VIBRATION THEORY AND STANDARDIZED METHOD TO ESTIMATE DAMPING PROPERTIES OF SOME LIGHTWEIGHT MATERIALS | 4200 |
| J. P. Arenas, R. Pereira, E. Zumelzu | |
| VIBRATIONS AND RE-RADIATED SOUND IN THE VICINITY OF MAGLEV-LINES AND METHODS FOR THEIR REDUCTION | 4207 |
| G. Muller, S. Lutzenberger | |
| ACOUSTICAL RENDERING OF SONOGRAMS | 4215 |
| A. Cerniglia | |
| ANALYSIS OF PLUSE WAVE PROPAGATION IN THE ANTARCTIC OCEAN USING PARABOLIC EQUATION METHOD | 4219 |
| T. Tsuchiya, T. Anada, N. Endoh | |
| MODELLING OF DARWIN'S DESCRIPTION OF COASTAL EVOLUTION OF CATASTROPHIC TSUNAMI | 4225 |
| S. U. Galiev, G. D. Mallinson | |
| ROBUST VIBRATION CONTROL WITH LIMITED AUTHORITY ADAPTATION | 4233 |
| Z. Ogonowski | |
| ACOUSTICAL INVISIBILITY | 4241 |
| Y. Bobrovnikskii | |
| UNINTENDED CONSEQUENCES: DUE TO THE LACK OF STANDARDS FOR SPEAKER IDENTIFICATION AND OTHER FORENSIC PROCEDURES | 4246 |
| H. Hollien, W. Majewski | |
| ON THE DISCRETE AND CONTINUOUS SPECTRUM OF WAVES IN SHEARED SWIRLING INHOMOGENEOUS FLOW | 4252 |
| L. C. Campos, P. Serrao | |
| ON THE SCATTERING OF SOUND BY JUNCTIONS OF BENT AND TWISTED TUBES | 4260 |
| L. M. B. C. Campos, P. G. T. A. Serrao | |
| SWEPT SINE AGAINST MLS FOR ROOM ACOUSTIC MEASUREMENTS WITH MUSIC SIGNALS AS BACKGROUND NOISE | 4268 |
| J. P. Paulo, J. L. B. Coelho | |
| EFFECTS OF THE STEAM EXCITATION FORCE TO THE VIBRATION BEHAVIOURS OF THE TURBOMACHINERY | 4279 |
| Z. Cai, N. Feng, G. Meng | |
| VIBRATIONAL SOURCE STRENGTH CHARACTERIZATION OF MINIATURE LOUDSPEAKERS USED IN HEARINGAIDS | 4287 |
| L. Friis, M. J. H. Jensen | |
| ANALYSIS OF MAJOR FACTORS AND GUIDELINE FOR ROAD TRAFFIC NOISE PREDICTION | 4295 |
| D. Kang, J. Lee, J. Gu | |
| ON A FEW RECENT ADVANCES OF FINITE ELEMENT METHODS FOR THE HELMHOLTZ EQUATION | 4301 |
| H. Beriot, M. Tournour, G. Massa | |
| ULTRASONIC LAPAROSCOPIC METHOD AND DEVICE, OPERATING IN EDGE MODE | 4310 |
| I. Malinowski, S. S. Lobodzinski, R. Pasniczek | |

| | |
|---|------|
| A COUPLED NUMERICAL MODEL TO SIMULATE SOUND PROPAGATION IN MEDIA WITH SMOOTH VARIATIONS OF PROPERTIES | 4316 |
| <i>L. Godinho, A. Tadeu</i> | |
| IMPROVED ACOUSTICAL WAVE PROPAGATOR TECH-NIQUE FOR ACOUSTIC-STRUCTURE INTERACTION IN A DUCT SILENCER STRUCTURE WITH/WITHOUT MEMBRANE | 4324 |
| <i>S. Peng, L. Cheng, L. Huang, Z. Peng, L. Li</i> | |
| VOWELS RECOGNITION USING VIDEO AND AUDIO DATA WITH AN APPLICATION TO LARYNGECTOMEES' VOICE ANALYSIS | 4332 |
| <i>R. Pietruch, A. Grzanka, W. Konopka</i> | |
| NOISE CONTROL FOR EJECTORS IN A VACUUM DISTILLATION UNIT | 4340 |
| <i>V. Rastelli, N. Montbrun, B. Bossio, V. Rastelli</i> | |
| VIBRATION CONTROL ON A TRANSFER TOWER. A CONCEPT ENGINEERING SOLUTION | 4347 |
| <i>V. Rastelli, N. Montbrun, B. Bossio</i> | |
| INTRODUCTION | 4355 |
| <i>M. Weryk, E. Rogalewski</i> | |
| ENERGETIC METHODS OF DESCRIBING STRUCTURAL DEGRADATION OF CONSTRUCTIONAL MATERIALS | 4362 |
| <i>H. Kazmierczak, T. Pawlowski, J. Kromulski</i> | |
| CONTROL OF UNSTABLE SHAFT VIBRATION OF A VERTICAL MOTOR BY BEARING REDESIGN | 4370 |
| <i>D. Nam, D. Lim, S. Lee</i> | |
| STUDY OF HUMAN COMFORT UNDER THERMAL AND VIBRATORY ENVIRONMENT USING PHYSIOLOGICAL INDICES | 4376 |
| <i>M. K. Bhiwapurkar, V. H. Saran, V. K. Goel, N. Mansfield, M. Berg</i> | |
| PREDICTION OF LOCK-IN RANGE BY SPECTRAL ANALYSIS, AND ANALYTICAL VERIFICATION OF THE GRIFFIN PLOT | 4384 |
| <i>A. Farshidianfar, H. Zanganeh</i> | |
| ACTIVE WAVE CONTROL OF A RECTANGULAR PANEL USING SMART SENSORS | 4392 |
| <i>H. Iwamoto, N. Tanaka</i> | |
| PREDICTION OF NOISE EMITTED DURING LOW SPEED MANEUVRING | 4400 |
| <i>J. A. Ejsmont, G. Ronowski</i> | |
| MODE-DECOMPOSITION ANALYSIS OF THE BROADBAND NOISE DUE TO INFLOW TURBULENCE CASCADE INTERACTION BY USING TIME-DOMAIN COMPUTATIONAL AEROACOUSTIC TECHNIQUES | 4408 |
| <i>S. Kim, C. Cheong</i> | |
| LEARNING ABOUT ACOUSTICAL PROPERTIES THROUGH COMPUTER-SIMULATED SOUND SOURCES | 4416 |
| <i>S. Lakatos, P. R. Cook, G. P. Scavone</i> | |
| PSYCHOACOUSTIC EVALUATION OF LISTENER LOCALIZATION ACCURACY FOR BROADBAND AND CONVENTIONAL REVERSING ALARMS | 4423 |
| <i>S. Lakatos, G. G. Miller</i> | |
| SOUND QUALITY EVALUATIONS OF MACHINERY AND AUTOMOBILES | 4431 |
| <i>M. J. Crocker, C. Bechet, R. Zhou, L. He</i> | |
| DUCT ARRAY SYSTEM FOR MEASURING TRAFFIC NOISE UNDER UNFAVOURABLE CONDITIONS | 4439 |
| <i>T. B. J. Campmans, W. V. Keulen, C. Weel</i> | |
| AUDITORY-INSPIRED ESTIMATION OF JITTER AND SHIMMER SPECTRA | 4447 |
| <i>H. R. Dajani, C. Giguere, W. Wong, H. Kunov</i> | |
| PORTABLE MULTICHANNEL ACTIVE NOISE CONTROLLER | 4455 |
| <i>K. Czyz</i> | |
| NOISE AND VIBRATIONAL SOURCE IDENTIFICATION TECHNIQUES AND THEIR APPLICATION TO MACHINERY DIAGNOSTIC | 4463 |
| <i>P. Esparcieux</i> | |
| HOT-STREAM IN-SITU ACOUSTIC IMPEDANCE MEASUREMENTS ON VARIOUS AIR-FILLED CAVITY AND POROUS LINERS | 4471 |
| <i>E. R. Rademaker, H. M. M. V. D. Wal, E. G. M. Geurts</i> | |
| IDENTIFICATION OF CRACK IN GEARS | 4479 |
| <i>A. Belsak, J. Flaska</i> | |
| AN ANALYSIS OF THE CONVERGENCE PROPERTIES OF DIFFERENT HARMONIC CONTROL ALGORITHM IMPLEMENTATIONS | 4483 |
| <i>I. Zazas, S. Daley</i> | |
| MANAGEMENT AND REDUCTION OF NOISE IN CITIES | 4491 |
| <i>J. L. B. Coelho, D. Alarcao</i> | |
| FREE VIBRATION ANALYSIS OF COMPOSITE SAND-WICH BEAMS WITH VISCOELASTIC CORE | 4497 |
| <i>S. Assaf</i> | |
| FIXED-PARAMETER CONTROL OF NON-STATIONARY ACOUSTIC NOISE | 4505 |
| <i>M. Latos, M. Pawelczyk</i> | |
| DYNAMIC STRUCTURE CHANGE OF A MULTICHANNEL FXLMS-BASED ACTIVE NOISE CONTROL SYSTEM | 4513 |
| <i>M. Wilk, M. Pawelczyk</i> | |
| TRACKING CAPABILITIES OF ANC ALGORITHMS WITH NONUNIFORM SIGNAL SAMPLING | 4521 |
| <i>K. Czyz</i> | |

| | |
|---|------|
| APPLYING ADAPTATION FOR ACTIVE NOISE CONTROL: BENEFITS AND A PITFALL | 4529 |
| <i>M. I. Michalczyk</i> | |
| MULTI-CHANNEL SYSTEMS CREATING LOCAL ZONES OF QUIET IN ENCLOSURES | 4537 |
| <i>M. I. Michalczyk</i> | |
| DEVELOPMENT OF AN EXTERNAL BALCONY WINDOW SELECTION PROGRAM ACCORDING TO THE CHANGES IN THE OUTDOOR NOISE LEVEL..... | 4545 |
| <i>K. Kim, H. Choi, K. Yang, J. Go</i> | |
| EVALUATION OF THE SOUND INSULATION PERFORMANCE OF WINDOWS INSTALLED IN THE BALCONIES OF APARTMENTS..... | 4553 |
| <i>K. Yang, K. Kim, H. Choi, J. Go</i> | |
| A NOVEL LVQ CLASSIFICATION METHOD FOR CRACK DETECTION IN PLATES USING LAMB WAVES..... | 4561 |
| <i>M. H. Soorgee, A. Yousefi-Koma, S. Afshar</i> | |
| BIAS EFFECT OF SELF-INDUCED TURBULENCE ON THE STALL-FLUTTER LIMIT OF AN AIRFOIL SECTION | 4569 |
| <i>M. H. Hansen</i> | |
| WIDEBAND PIEZOELECTRIC ENERGY HARVESTER FOR CONDITION MONITORING IN POWER PLANT APPLICATION | 4577 |
| <i>H. Salleh, N. M. Rashid</i> | |

VOLUME 8

| | |
|--|------|
| THE MEASUREMENT OF THE SOUND QUALITY IN URBAN ENVIRONMENTS | 4585 |
| <i>J. M. Barrigón-Morillas, R. Moraleda-Marcos, P. Romero-Jorge, S. Leon-López, V. Gómez-Escobar, J. A. Méndez-Sierra, R. Vilchez-Gómez, F. J. Carmona Del Río</i> | |
| EFFECT OF CALCULATION PARAMETERS ON THE MODEL OF URBAN NOISE..... | 4593 |
| <i>J. M. Barrigón-Morillas, V. Gómez-Escobar, I. Rodrigues-Pérez, R. Vilchez-Gómez, F. J. Carmona Del Río, J. A. Méndez-Sierra</i> | |
| RESEARCH ON SUBJECTIVE NOISE IN POZUELO DE ALARCÓN, SPAIN | 4600 |
| <i>M. Ausejo, M. Recuero, M. D. C. Morillo</i> | |
| APPROACHES FOR EFFICIENT EXCITATION SIMULATION IN THE AREA OF ACOUSTIC VEHICLE DEVELOPMENT | 4608 |
| <i>A. Dunsí, A. Rabofsky, R. Kollau, W. Reinalter, S. Poxhofer</i> | |
| PIEZOAUTUATORS IN ACTIVE CONTROL OF JOURNAL BEARINGS..... | 4616 |
| <i>L. Smutný, J. Skuta, R. Klecka, J. Tuma, J. Simek</i> | |
| COMPARISON BETWEEN IMPLEMENTATIONS OF EUROPEAN NOISE MAPPING METHODS | 4624 |
| <i>S. Kephalaopoulos, M. Paviotti</i> | |
| BIAS VOLTAGE CONTROL FOR RESONANCE FREQUENCY TRACKING IN ELECTROSTATIC MEMS SENSORS..... | 4632 |
| <i>C. Kharraji, E. Colinet, A. Voda</i> | |
| DIAGNOSTIC EVALUATION OF SYNTHETIC SPEECH USING SPEECH RECOGNITION..... | 4640 |
| <i>M. Černák, M. Rusko, M. Trnka</i> | |
| TWO APPROACHES FOR IMPORTING AERODYNAMIC SOURCES USING Lighthill TENSOR | 4646 |
| <i>R. Takayama, Y. Kurokawa, H. Murakata, J. Manera, C. Kato</i> | |
| ANALYSIS PROBLEM IN ACOUSTIC HOLOGRAPHY | 4653 |
| <i>C. Park, J. Jeon, Y. Kim</i> | |
| DEVELOPMENT OF EFFICIENT METHOD FOR THE PREDICTION OF NONLINEAR TRANSMISSION LOSS OF A SIMPLE EXPANSION MUFFLER | 4661 |
| <i>D. Kim, C. Cheong</i> | |
| ACOUSTIC HOLOGRAPHY APPLICATION FOR THE SOURCE IDENTIFICATION ON A GAS TURBINE | 4669 |
| <i>F. A. D. N. C. Pinto, W. D. S. Pacheco</i> | |
| RE-DISTRIBUTION OF THE ENERGY IN A SYSTEM UNDER DISCRETE FREQUENCY ACTIVE VIBRATION CONTROL..... | 4677 |
| <i>S. A. Pope, S. Daley</i> | |
| MODELLING MULTI-MODAL SOUND TRANSMISSION FROM POINT SOURCES IN DUCTS WITH FLOW USING A WAVE-BASED METHOD | 4685 |
| <i>G. J. Bennett, C. J. O'Reilly, H. Liu, U. Tapken</i> | |
| COMPUTER MODELLING OF THE ACOUSTIC FIELD BY EXAMPLE OF THE SELECTED KRAKÓW FACILITIES | 4694 |
| <i>W. Ciesielska, A. Golas</i> | |
| APPLICATION OF HIGHER-ORDER SPECTRA IN ON-LINE IDENTIFICATION FOR ANC SYSTEMS | 4702 |
| <i>T. Glowka</i> | |
| PERIODIC LOAD ALLEVIATION ON HORIZONTAL AXIS WIND TURBINE BLADES USING CYCLIC PITCH REGULATION | 4710 |
| <i>K. Kim, C. Lee, J. Lee</i> | |
| FINITE ELEMENT MODEL UPDATING USING PASSAGE MATRICES | 4718 |
| <i>F. Asma</i> | |
| FREQUENCY RESPONSE CORRELATION FUNCTION FOR DAMAGE DETECTION | 4726 |
| <i>F. Asma</i> | |

| | |
|--|------|
| DEVELOPMENT OF THE SIX DEGREE-OF-FREEDOM ACTIVE VIBRATION ISOLATION SYSTEM USING A PHASE COMPENSATED VELOCITY SENSOR..... | 4734 |
| <i>Y. Kim, S. Kang, K. Park, S. Kim</i> | |
| SUBJECTIVE RESPONSE FOR IMPULSIVE SOUND OF FIREARMS IN KOREA..... | 4742 |
| <i>S. I. Chang, D. S. Kim, D. J. Kim, J. M. Kim, H. Y. Lee, C. S. Lee</i> | |
| STUDY ABOUT NOISE STANDARD FOR URBAN RAILROAD FACILITIES IN KOREA..... | 4750 |
| <i>S. I. Chang, J. H. Son, K. M. Kim, J. W. Han, T. H. Park, W. Y. Lee, J. H. Kim</i> | |
| THE SOUND HERITAGE OF A NEW TOWN : AMBIANCE SHOCKS IN CONTEMPORARY URBANISM | 4758 |
| <i>G. Chelkoff</i> | |
| PARAMETRIC BLIND IDENTIFICATION OF THE TRANSFER FUNCTION FROM VIBRATION MEASUREMENTS BASED ON SECOND ORDER CYCLOSTATIONARITY | 4766 |
| <i>K. A. Sghir, M. E. Badaoui, M. Thomas, F. Guiller, M. Bakrim, D. Abouajdine</i> | |
| THE BEAMFORMING TECHNIQUES THROUGH THE VISUAL TOOLS | 4774 |
| <i>B. Markovic</i> | |
| CHARACTERIZATION OF RAYLEIGH DAMPING PARAMETERS OF POST-CURED, HYBRID METHACRYLIC MATERIALS USED IN STEREOLITHOGRAPHY SYSTEMS | 4782 |
| <i>T. Burns, A. Beeson</i> | |
| USING LOCAL MODAL STIFFNESS FOR DAMAGE DETECTION IN A CANTILEVER PLATE | 4789 |
| <i>H. Moradi, M. M. Rezaei, M. Sadighi, A. Tajalli</i> | |
| METHODS AND POSSIBILITIES TO DEVELOP A SONIC IDENTITY FOR AN ART PAVILION - A CASE STUDY..... | 4797 |
| <i>L. Burn</i> | |
| A COMPARISON BETWEEN THE PERFORMANCE OF THE MONOLITHIC PIEZOCERAMICS PATCHES AND MACRO-FIBER COMPOSITES PATCHES FOR ACTIVE STRUCTURAL AND ACOUSTIC CONTROL..... | 4805 |
| <i>F. Morais, J. S. D. Costa</i> | |
| CHANGE DETECTION FOR HEALTH MONITORING | 4813 |
| <i>P. Sherman</i> | |
| VIBRATION ENERGY DISTRIBUTION IN PLATES WITH ASYMMETRICAL RIBS..... | 4821 |
| <i>J. Cieslik</i> | |
| DETECTION OF ULTRASONIC CLOSER FLAWS USING NONLINEAR SIGNAL PROCESSING | 4827 |
| <i>A. Benammar, R. Drai, A. Guessoum</i> | |
| ACTIVE VIBRATION DAMPING IN A MAGNETIC LEVITATION SYSTEM USING LMS ALGORITHM | 4834 |
| <i>K. Plaza, M. Pawelczyk</i> | |
| A REAL TIME AURALIZATION SYSTEM BASED ON AN ACCELERATED IMAGE SOURCE/RADIOSITY METHOD | 4842 |
| <i>D. Alarcao, J. L. B. Coelho</i> | |
| NUMERICAL SIMULATION OF SOUND GENERATION DUE TO JET'S INSTABILITIES BY HIGHLY ACCURATE MULTIOPERATORS SCHEMES | 4850 |
| <i>A. I. Tolstykh, M. V. Lipavskii, A. D. Savel'Ev, D. A. Shirobokov</i> | |
| LAYOUT OF ENGINE EXHAUST SYSTEM FOR LOWNOISE IDLING CONDITION | 4858 |
| <i>J. Ih, C. Choi, T. Kim, S. Jang, H. Kim, A. Delaigue</i> | |
| PID CONTROL WITH GENETIC TUNING OF A SINGLELINK FLEXIBLE MANIPULATOR | 4864 |
| <i>B. A. Zain, M. O. Tokhi, S. Salleh</i> | |
| DESIGN OF A PROTOTYPE HEADSET FOR NOISE REDUCTION AND ABRUPT SOUND DETECTION USING DSP TMS320C6713 DSK FOR INDUSTRIAL APPLICATION..... | 4872 |
| <i>K. V. M. Prashanth, V. Sridhar</i> | |
| LOW-FREQUENCY PRESSURE CHAMBER SYSTEM FOR DETERMINATION OF LOW-FREQUENCY RESPONSE OF ACOUSTIC MEASURING EQUIPMENT | 4879 |
| <i>D. Dobrowska, T. Wasala, T. Zmierczak</i> | |
| NOISE FROM CONSTRUCTION SITES: A NEW SOFTWARE FOR ACOUSTIC SIMULATION AND RESTITUTION | 4885 |
| <i>A. Philippe, C. Mathieu, A. Marie</i> | |
| INVESTIGATION INTO MODELING OF MULTIPERFORATED MUFFLERS..... | 4893 |
| <i>T. Elnady, S. Elsaadany, M. Abom</i> | |
| DESIGN STUDY OF SMALL SCALE THERMOACOUSTIC HEAT ENGINE..... | 4901 |
| <i>N. M. Arafa, M. A. Nouh, E. Abdel-Rahman</i> | |
| DESIGN STUDY OF ANHARMONIC STANDING WAVE THERMOACOUSTIC HEAT ENGINE | 4908 |
| <i>M. A. Nouh, N. M. Arafa, K. Larsson, E. Abdel-Rahman</i> | |
| APPLICATION OF FORCE-LIMITED CONTROLLED METHOD IN VIBRATION TESTING OF THE SATELLITE..... | 4916 |
| <i>J. Zhang, Z. Yue, S. Xiang</i> | |
| VIBRO-ACOUSTIC ANALYSIS OF NASA'S SPACE SHUTTLE LAUNCH COMPLEX 39, PAD A FLAME TRENCH WALL | 4924 |
| <i>G. F. Tanacs, S. Sounderrajan, A. M. Gosselin, R. N. Margasahayam</i> | |
| PREDICTION OF TRANSMISSION NOISE IN TURBOCHARGER..... | 4932 |
| <i>H. Hosoya, K. Hayashi, H. Nishino, H. Suzuki</i> | |
| RESEARCH ON HIGH FREQUENCY PERFORMANCE OF LARGE REVERBERATION CHAMBER..... | 4939 |
| <i>S. Xiang, L. Geng, X. Li, J. Zhang</i> | |

| | |
|---|------|
| FAULT DETECTION ALGORITHM FOR SUSPENSION INSULATORS BY USING FREQUENCY RESPONSE FUNCTION..... | 4947 |
| <i>K. Oh, J. Park, J. Lee, B. Cho</i> | |
| PARAMETRIC MODEL REDUCTION OF SYSTEMS FOR ACTIVE NOISE CONTROL..... | 4955 |
| <i>J. Mohring, A. Wirsén, J. Stoev, S. Lefteriu, M. Kurch, N. Mercan</i> | |
| DEFINITION OF THE HARDEST CONDITION OF BROADBAND RANDOM VIBRATION..... | 4963 |
| <i>I. Ovchinnikov, V. Stepnev, P. Brancovich</i> | |
| ULTRASONIC IMAGING USING MULTITONE NONLINEAR CODING..... | 4970 |
| <i>A. Nowicki, J. Wojcik</i> | |
| ACTIVE CONTROL IN VEHICLES AND IN THE INNER EAR | 4981 |
| <i>S. J. Elliot</i> | |
| STATE OF THE ART BEAMFORMING SOFTWARE AND HARDWARE FOR APPLICATIONS..... | 4996 |
| <i>S. N. Y. Gerges, W. D. Fonseca, R. P. Dougherty</i> | |
| ACOUSTIC AND VIBRATION EXPOSURE AND COMFORT INSIDE URBAN AND EXTRA-URBAN TRANSPORTATION SYSTEMS | 5013 |
| <i>L. Maffei</i> | |
| APPROACHES FOR STRUCTURE-BORNE SOUND SOURCE CHARACTERISATION | 5027 |
| <i>B. A. T. Petersson</i> | |
| THE APPLICATION OF FAULT SIMULATION TO MACHINE DIAGNOSTICS AND PROGNOSTICS | 5042 |
| <i>R. B. Randall</i> | |
| TRANSMISSION AND GEARBOX NOISE AND VIBRATION PREDICTION AND CONTROL | 5056 |
| <i>J. Tuma</i> | |
| A SEMI-ANALYTICAL MODEL FOR THE PREDICTION OF BROADBAND NOISE DUE TO ROTOR-WAKE INTERACTION IN CONTRA-ROTATING PROPFANS..... | 5072 |
| <i>V. P. Blandeau, P. F. Joseph</i> | |
| ICAN – INSTRUCTION FOR THE CALCULATION OF AIRCRAFT NOISE AND FOR NOISE MAPPING AROUND AIRPORTS..... | 5080 |
| <i>W. Probst, B. Huber, B. Vogelsang</i> | |
| IS PRACTICAL STRUCTURE BORNE SOUND CHARACTERISATION FEASIBLE? | 5086 |
| <i>G. Pavic</i> | |
| THE ACOUSTICS AND SPEECH INTELLIGIBILITY QUALITY OF KAMPUNG LAUT MOSQUE, KOTA BHARU, KELANTAN, MALAYSIA..... | 5094 |
| <i>R. Rosman, M. N. Dimon</i> | |
| OPERATIONAL ACOUSTIC MODAL ANALYSIS USING TRANSMISSIBILITY MEASUREMENTS | 5102 |
| <i>C. Devriendt, F. Preseziak, G. D. Sitter</i> | |
| AN APPROACH TO ACTIVE NOISE CONTROL | 5111 |
| <i>M. E. Bardisi</i> | |
| TRAMWAY OPERATING EXCITATIONS IN OPERATIONAL MODAL ANALYSIS – FIRST APPROACH..... | 5119 |
| <i>B. Czechyna</i> | |
| SOUND TRANSMISSION MEASUREMENTS: THE STANDARD METHOD – COMMENTS ON ITS OBJECTIVITY AND A PROPOSAL TO IMPROVE ON | 5125 |
| <i>H. P. Verhas</i> | |
| TRAPPED MODES ON MICRO AND MACRO LEVEL..... | 5133 |
| <i>D. Indeitsev, Y. Mochalova</i> | |
| DESIGN OF A STANDING-WAVE THERMOACOUSTIC ENGINE | 5141 |
| <i>C. Gardner, C. Lawn</i> | |
| ESTIMATION OF YEARLY AVERAGE SOUND LEVEL, $L_{AEQ\ T}$, IN URBAN AREA | 5149 |
| <i>R. Makarewicz</i> | |
| APPLICATION OF NUMERICAL METHODS TO GEARBOX VIBROACTIVITY ASSESSMENT | 5157 |
| <i>A. Wilk, B. Lazarz, H. Madej, P. Folega, G. Perun</i> | |
| RESEARCH ON POWER FLOW TRANSMISSIBILITY OF VIBRATION ISOLATION SYSTEM | 5164 |
| <i>H. Sun, X. Li</i> | |
| WIND RESOURCE ASSESSMENT OF KOREAN PENIN-SULA FOR OFFSHORE WIND FARM DESIGN | 5172 |
| <i>K. Oh, J. Kim, K. Kang, J. Lee, K. Ryu</i> | |
| NEAR-FIELD ACOUSTIC HOLOGRAPHY APPLIED TO A LOUDSPEAKER PSEUDO ENGINE SOURCE | 5180 |
| <i>R. Gault, R. Cooper, O. David-West, J. Wang, M. Tournour</i> | |
| SONDING OF THE SEABED OF THE GULF OF GDANSK BY THE MEANS OF THE PARAMETRIC SONAR | 5189 |
| <i>E. Kozaczka, G. Grelowska, S. Kozaczka</i> | |
| A NEW GENERATION OF VIBRATION FIELD PROGRAMMABLE SENSORS AN EFFECTIVE APPROACH FOR MACHINERY PROTECTION AND MONITORING | 5197 |
| <i>G. Zusman</i> | |
| E-LEARNING METHODS IN ACTIVE NOISE EDUCATION AND RESEARCH | 5204 |
| <i>J. Moscinski</i> | |
| FEATURES DERIVED FROM DIFFERENTIAL POWER SPECTRUM IN AUTOCORRELATION DOMAIN FOR CONTINUOUS SPEECH RECOGNITION..... | 5211 |
| <i>S. H. Akhlagh, H. Marvi</i> | |
| UNCERTAINTY OF HIGH ENERGY IMPULSE SOUND MEASUREMENT AND CALCULATION OF SOUND LEVEL AT DISTANT LOCATIONS FROM THE SOURCE | 5217 |
| <i>T. Wszolek, M. Klaczyński</i> | |

| | |
|---|------|
| SELECTED METHODS OF VOICE QUALITY ASSESSMENTS AFTER VOCAL TRACT INJURY | 5223 |
| <i>W. Wszolek, M. Kłaczynski, M. Konior</i> | |
| PREDICTION OF THE SOUND PRESSURE FIELDS ON SPACE VEHICLES AND GROUND..... | 5229 |
| <i>M. J. Crocker, C. Bechet, W. Smith, K. Kirk</i> | |
| DETECTION OF SUDDEN STIFFNESS CHANGES FOR HEALTH MONITORING OF STRUCTURAL SYSTEMS..... | 5237 |
| <i>M. P. Singh, S. S. Bisht</i> | |
| Author Index | |