

ROMANIAN ACADEMY
Department of Technical Sciences

ACADEMY OF TECHNICAL SCIENCES

**COMMISSION OF ACOUSTICS
OF ROMANIAN ACADEMY**



**THE ANNUAL SYMPOSIUM OF THE INSTITUTE
OF SOLID MECHANICS
SISOM 2017
and
Symposium of Acoustics
Bucharest, May 18-19, 2017**

Session 1



Session 3



Session 2



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Session 1 – Mechanical Modeling and Experiment, Wear investigations of materials, Biomechanics

- (1M) Polidor BRATU, Mihai CIUNCANU, Adriana STUPARU, Sorin POPA, Gheorghe VOICU
Comparative analysis methods of the efficiency of the anti-seismic systems realised with composite rheological connections
- (2M) Dan Alexandru IORDACHE, Radu Nicolae DOBRESCU
Study of the information concept and of the information quality
- (3M) Tudor SIRETEANU, Stefanov DIMITAR, Ana-Maria MITU, Gheorghe GHIȚĂ, Nicolae POP
Systems for vibration control and seismic protection with variable dry friction
- (4M) Lucian PETRACHE, Viorel ANGHEL, Ștefan SOROHAN
Analysis using FEM of the axial - torsion buckling of a thin walled beam having cruciform profile
- (5M) Mircea LUPU
Studies and applications of absolute stability and control of the nonlinear dynamical systems
- (6M) Bogdan CIORUȚA, Tudor SIRETEANU, Nicolae POP
A smooth friction model for dynamical systems
- (7M) Dan DUMITRIU, Veturia CHIROIU, Mihai CIUNCANU
An inverse problem for a general Stewart platform

- (8M) Lucian CĂPITANU, Liliana-Laura BĂDIȚĂ, Constantin ȚIGĂNEȘTEANU, Virgil FLORESCU
Friction and contact stress analysis during the fretting fatigue
- (9M) Cristian RUGINĂ, Veturia CHIROIU, Valerica MOȘNEGUȚU
Analysis and modeling of electrical discharge machining (EDM) parameters
- (10M) Iulian GIRIP, Luciana MAJERCSIK, Rodica IOAN, Ligia MUNTEANU
On the propagation of evanescent waves in sonic composites
- (11M) Ion BULAC
The influence of the technical deviations of the shafts cardan cross over the efforts from the kinematic pairs of the cardan joints mechanism
- (12M) Simona Dumitru PETRE, Dan DUMITRIU, Veturia CHIROIU
On the optimum design of Stewart platforms with applications
- (13M) Daniel BALDOVIN, Dan DUMITRIU, Simona BALDOVIN
New model of shock absorbers with stealing energy
- (14M) Sorin POPA
Analysis of the seismic damping capacity of the elastomeric isolators corresponding to the discrete changes of physical mechanical properties of the constitutive elements
- (15M) Ion BULAC
The influence of the technical deviations of the shafts cardan cross on the dynamic response of the two-shafts transmission

(16M) Daniela BARAN, Mihaela PETRE
Structural loads for stress analysis of aeronautical structures

(17M) Adriana STUPARU
The evaluation of dynamic disturbances on one piston engine

(18M) Nicolae IACOB
Dynamic simulation of vibration generated by diesel generator engine of cruise ship.

(19M) Simona Dumitru PETRE
Centre of mass trajectory fuzzy compensator for biped robots

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Session 2 – Robotics

(1R) Ionel STAREȚU, Cătălin MOLDOVAN

Bending sensors used to command a virtual anthropomorphic gripper for robots.

(2R) Alexandru VLĂDEANU, Gabriela VLĂDEANU

The control of the bucket position at the excavators equipped with sensors of length at the hydraulic cylinders

(3R) Marcel MIGDALOVICI, Sergiu CONONOVICI, Luige VLĂDĂREANU, Victor VLĂDĂREANU, Daniela BARAN, Gabriela VLĂDEANU, Yongfei FENG

On environment's multi-legged 3D walking robot stable evolution.

(4R) Marcel MIGDALOVICI, Sergiu CONONOVICI, Luige VLĂDĂREANU, Grigore SECRIERU, Victor VLĂDĂREANU, Nicolae POP, Alexandru VLĂDEANU, Daniela BARAN, Gabriela VLĂDEANU, Yongfei FENG

On environment's dynamic system mathematical model and on possibilities to improve stable evolution.

(5R) Doina MARIN, Mihaiela ILIESCU

Machining vibrations in milling process

- (6R) Constantin POPESCU, Gabi ROȘCA-FARTAT, Nicolae PANĂ
*Remote control robot for decommissioning horizontal fuel channels of nuclear reactor.
Part I - Details of the operations outside to the fuel channel.*
- (7R) Constantin POPESCU, Gabi ROȘCA-FARTAT, Nicolae PANĂ
*Remote control robot for decommissioning horizontal fuel channels of nuclear reactor.
Part II - Details of the operations inside to the fuel channel.*
- (8R) Yongfei FENG, Luige VLADAREANU, Fei CHEN, Yaxin DU, Hao YAN, Hongbo WANG
Research on Passive Training Pattern of New Applicable Lower Limb Rehabilitation Robot
- (9R) Said BROUMI, Assia BAKALI, Mohamed TALEA, Florentin SMARANDACHE, Ali HASSAN
Generalized Single Valued Neutrosophic Graphs of First Type
- (10R) Mihaiela ILIESCU, Luige VLADAREANU, Ioana PINTILIE, Doina MARIN, Marius PANDELEA,
Marian LAZAR,
*Mechatronic system for deposition of ultra-thin films with various materials' physical-chemical
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- (11R) Octavian MELINTE, Luige VLADAREANU, Alexandru GAL, Victor VLADAREANU,
Mihaiela ILIESCU,
Six Wheel-Drive robot control using VIPRO Platform

- (12R) Mihnea Alexandru MOISESCU, Ioan Stefan SACALA, Ioan DUMITRACHE,
Simona Iuliana CARAMIHAI
Robotic Systems Architecture for Intelligent Cyber - Agricultural Enterprise
- (13R) Ionel-Alexandru GAL, Luige VLADAREANU, Octavian MELINTE and Yongfei FENG
Simulation and control of a new mechanical structure for induction hardening of metallic profiles using virtual tools
- (14R) N. POP, L. VLADAREANU, Miorița UNGUREANU, V. VLADAREANU, B. CIORUTA
The optimal control for achieving minimum jerk trajectory of a walking robot
- (15R) Vlad-Alexandru GROSU, Hongbo WANG, Yongfei FENG, Victor VLADAREANU,
Alexandru GAL, Doina MARIN, Mihai RADULESCU
Extensions of SPLINE interpolation techniques applied in serial robotic manipulators
- (16R) Eduard MITITELU, Victor VLADAREANU, Octavian MELINTE, Barbu VALENTIN, Ionel MIHAI,
Marius PANDELE
Deep learning with tree classification for decisional processes on autonomous robots

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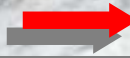
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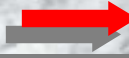
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Session 3 – Technical Acoustics and Vibration, Speech Technology

(1A) Mariana Cristina STAN, Luminita ANGHEL

Technical solutions for increasing acoustic comfort in an open space office

(2A) Mihai Valentin PREDOI

Ultrasonic guided waves used to assess plate bonding quality

(3A) Florin CURELARU

Nonparametric analysis for the speaker verification tasks on handheld devices with limited training data

(4A) Laurențiu CRISTEA

Finite element modelling of acoustic induced vibrations reduction on rectangular plates with piezoelectric boundary layer active control

(5A) Mariana Cristina STAN

Architectural Acoustics Parameters

(6A) Svetlana SEGĂRCEANU, Tiberius ZAHARIA

Mixtures of principal component analyzers for speaker identification systems

(7A) Mihaela PICU, Laurențiu PICU

An analysis upon the hand arm vibrations which reach the head

- (8A) Tudor BURLAN-ROTAR, Gabriel DUMITRU, Alina Ioana PRELIPCEANU
Considerations on electromagnetic humidity contact less measurements in simple brickwork walls and wooden walls
- (9A) Liliana CĂINICEANU, Alina-Ioana PRELIPCEANU
Experimental research of the fundamental characteristics of different high power audio devices equipped with NdFeB permanent magnets in the anechoic chamber
- (10A) Alina-Ioana PRELIPCEANU, Liliana CĂINICEANU
Experimental contributions of high power audio devices equipped with NdFeB permanent magnets testing using WT3 tester software in the anechoic chamber.
- (11A) Rodica DUDĂU BUNEȘ, Liliana CĂINICEANU
Experimental research on the calibration editor used in calibration of the soundcheck test device and the microphone calibration procedure
- (12A) Nicolae ORĂȘANU, Andrei CRĂIFALEANU, Cristian DRAGOMIRESCU
Influence of the shape on the resonance frequency of Helmholtz resonators
- (13A) Luminita VOICULESCU
Torsional vibrations of a fly wheel system assembled on an elastic shaft
- (14A) Ovidiu VASILE
Analysis of the minimal function method for controlling the damping of viscoelastic systems
- (15A) Toma ZAPLAIC, Sorina ILIUTA, Mihnea MAGHETI, Mihai ZAPLAIC
Evaluation of noise levels generated by a belt conveyor system for limestone transportation

(16A) Crăița CARP-CIOCARDIA, Carmen SAFTA, Mihai SCHEAUA, Ioan MAGHEȚI
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