04-Sep-25

Thurs.8:30 - 9:00	**Secretariat open**

time	room		Audit. GA		
	Chairperson(s)		Zuzana Dimitrovová	Presenter	
Thurs.9:00 - 10:00	Plenary		DAMPING AND ENERGY HARVESTING PROPERTIES OF ADVANCED ELASTIC METAMATERIALS Mahmoud I. Hussein	**Mahmoud I. Hussein**	MH

Thurs.10:00 - 10:20	**Coffee break**

time	room		Audit. GA		
	Chairperson(s)		Zuzana Dimitrovová	Presenter	
Thurs.10:20 - 11:20	Plenary		VOLTAGE CONTROLLED TOPOLOGICALLY PROTECTED WAVE PROPAGATION IN DIELECTRIC MEMBRANE-TYPE ACOUSTIC METAMATERIALS Chee Wah Lim	**Chee Wah Lim**	CWL

time	room		Audit. 202		
	Chairperson(s)			Presenter	
Thurs.11:20 - 11:40	RMT:	54	THE VIBRATION INVESTIGATION OF UNBALANCED ROTORS SUPPORTED BY SUPERCONDUCTING BEARINGS Jaroslav Zapoměl and Jan Kozánek	**Jaroslav Zapoměl**	54
Thurs.11:40 - 12:00	RMT:	27	STRUCTURAL DYNAMIC ANALYSIS OF A FLEXIBLE DISC COUPLING Rafael Zaniboni, Felipe Tuckmantel and Katia Cavalca	**Felipe Tuckmantel**	27
Thurs.12:00 - 12:20	VMM:	117	CONTROLLED SELF-SUSTAINED RECTILINEAR MOTION FOR LEVITATED OBJECTS Luke Mclaughlin, Cristinel Mares and Tadeusz Stolarski	**Luke Mclaughlin**	117
Thurs.12:20 - 12:40	VMM:	6	A NOVEL WEARABLE ASSISTIVE TECHNOLOGY DEVICE FOR PARKINSON'S DISEASE HAND TREMOR. Sivadasan Mambeta, Ratna Kumar K, Jagdeesha T and Amit Kumar Singh	**Amit Kumar Singh**	6

time	room		Audit. 201		
	Chairperson(s)			Presenter	
Thurs.11:20 - 11:40	VBC:	72	ENHANCING BUILDING RESILIENCE USING OPTIMIZED PASSIVE CONTROL SYSTEMS FOR SEISMIC MITIGATION Adel Bali, Amir Reza Elahi, Mohamed Abderraouf Louar, Mahdi Abdeddaim, Alessandro Cardoni and Gian Paolo Cimellaro	**Adel Bali**	72
Thurs.11:40 - 12:00	VBC:	120	DESIGN OF ADVANCED PIEZOELECTRIC VIBRATION CONTROL ELECTRONICS Vladimir Skrivanek, Ondrej Rubes and Zdenek Hadas	**Vladimir Skrivanek**	120
Thurs.12:00 - 12:20	VBC:	176	INVESTIGATION OF OPTIMIZED LTMDI CONFIGURATIONS FOR SUPPRESSING EDGEWISE BLADE VIBRATIONS Vishal D Sonkusare and Kamal Krishna Bera	**Vishal D Sonkusare**	176
Thurs.12:20 - 12:40	GT5:	262	REINFORCEMENT LEARNING FOR CONTINUOUS ACTIVE VIBRATION SUPPRESSION IN DYNAMIC SYSTEMS Ramkumar P and Naveen Raj Rajamani	**Ramkumar P**	262

time	room		Room 110		
	Chairperson(s)			Presenter	
Thurs.11:20 - 11:40	NVS:	161	MULTIMODAL VIBRATIONS OF NONLINEAR THERMOELASTIC BIMATERIAL BEAM Simona Doneva, Jerzy Warminski and Emil Manoach	**Simona Doneva**	161
Thurs.11:40 - 12:00	NVS:	94	NUMERICAL ANALYSIS OF WIND-INDUCED STOCHASTIC AND HARMONIC EXCITATIONS ON SLENDER STRUCTURES Jiří Náprstek and Cyril Fischer	**Cyril Fischer**	94
Thurs.12:00 - 12:20	NVS:	97	LINEAR AND NONLINEAR VIBRATION OF MICRO-CANTILEVER IN RAREFIED GAS FLOW Emil Manoach, Kiril Shterev and Simona Doneva	**Emil Manoach**	97
Thurs.12:20 - 12:40	NVS:	23	RESPONSE OF REINFORCED CONCRETE FRAMES TO AN ACCIDENTAL ACTION Sergei Savin, Natalia Fedorova and Vitaly Kolchunov	**Sergei Savin**	23

time	room		Room 107		
	Chairperson(s)			Presenter	
Thurs.11:20 - 11:40	AMI:	33	INNOVATION AS GENERATOR OF NEW METALLIC PERCUSSION MUSICAL INSTRUMENTS Voichita Bucur and Mariana Domnica Stanciu	**Mariana Domnica Stanciu**	33
Thurs.11:40 - 12:00	AMI:	116	EXPERIMENTAL INVESTIGATIONS ON MODAL RESPONSES OF VIOLINS WITH DIFFERENT ROMANIAN WOOD SPECIES BACK PLATES Silviu Marian Nastac, Mariana Domnica Stanciu and Maria Violeta Guiman	**Silviu Marian Nastac**	116
Thurs.12:00 - 12:20	AMI:	90	ACOUSTIC ANALYSIS OF VIOLINS WITH DIFFERENT VARNISHES SYSTEMS Doru Ursutiu, Alina Maria Nauncef, Vasile Ghiorghe Gliga and Mariana Domnica Stanciu	**Mariana Domnica Stanciu**	90
Thurs.12:20 - 12:40	AMI:	118	COMPARATIVE ANALYSES OF VIOLIN BACK PLATE MODAL RESPONSES BETWEEN TROPICAL AND ROMANIAN TONE WOODS Silviu Marian Nastac, Long Way, Mariana Domnica Stanciu, Maria Violeta Guiman, Chi-Wen Chen, Yo-Wei Wang, Guan-Ting Zheng and Yu-Kang Lin	**Silviu Marian Nastac**	118

Thurs.12:40 - 14:00	**Lunch**

time	room / Chairperson(s)		Audit. 202	Presenter	
Thurs.14:00 - 14:20	RMT:	113	MATHEMATICAL MODELLING AND VIBRATIONAL ANALYSIS OF AN UNBALANCED AND MISALIGNED MAGNETICALLY LEVITATED COUPLED ROTOR SYSTEM Thangjam Seemashwori Devi and Prabhat Kumar	**Thangjam Seemashwori Devi**	113
Thurs.14:20 - 14:40	GT14:	182	AUTOMATED RAIL WHEEL TREAD DEFECT DETECTION USING DEEP LEARNING ALGORITHM FOR CONDITION-BASED MAINTENANCE Ankit Kumar, Kushagra Pant, Sanjay Vishwakarma and Suraj Prakash Harsha	**Ankit Kumar**	182
Thurs.14:40 - 15:00	GT10:	185	LINEAR STABILITY ANALYSIS OF HYDROMAGNETIC CHANNEL FLOW IN A BRINKMAN POROUS MEDIUM Amit Kumar Pandey and Abhijit Das	**Amit Kumar Pandey**	185
Thurs.15:00 - 15:20	GT11:	13	MODAL ANALYSIS OF FUNCTIONALLY ORIENTED FABRIC LAMINATE WITH 20 MM WIDE CARBON STRIPS AND A 20 MM NOTCH Radek Zbončák	**Radek Zbončák**	13
Thurs.15:20 - 15:40	GT11:	259	CHARACTERISATION OF VISCOELASTIC FOAM CORES THROUGH STRUCTURAL VIBRATION TESTING AND DMA Fat'Hi Mohamed, Emmanuel Valot, Girolamo Di Cara, Michele D'Ottavio and Aurelio Araujo	**Fat'Hi Mohamed**	259
Thurs.15:40 - 16:00	GT11:	78	AN EXPERIMENTAL PROCEDURE FOR THE MODEL PARAMETRIC IDENTIFICATION OF ISOTROPIC MATERIALS Stefano Amadori and Giuseppe Catania	**Stefano Amadori**	78

time	room / Chairperson(s)		Audit. 201	Presenter	
Thurs.14:00 - 14:20	GT5:	44	NONLINEAR DYNAMICS OF 2DOF MECHANICAL OSCILLATORS: INTERACTIONS OF PARAMETRIC EXCITATION AND DRY FRICTION Muhammad Junaid U Rehman, Grzegorz Kudra, Krzysztof Witkowski, Krystian Polczyński and Jan Awrejcewicz	**Muhammad Junaid U Rehman**	44
Thurs.14:20 - 14:40	GT5:	158	OPTIMAL PARAMETER SELECTION FOR A TUNED MASS DAMPER ATTACHED TO A DAMPED PRIMARY SYSTEM Yubin Gu, Navneet Kumar, Tim Waters and Daniil Yurchenko	**Yubin Gu**	158
Thurs.14:40 - 15:00	GT5:	188	IMPLEMENTATION AND EXPERIMENTAL STUDY OF A PERIODIC VIBRATION FILTER WITHIN AN APPLIED DEMONSTRATOR Theo Bonneval, Maxime Lanoy, Remy Tanays, Guilhem Michon and Adrien Pelat	**Theo Bonneval**	188
Thurs.15:00 - 15:20	GT5:	288	NUMERICAL SOLUTIONS FOR DUFFING EQUATION Raghad Eid	**Raghad Eid**	288
Thurs.15:20 - 15:40	GT5:	254	ATTENUATION BAND EXPANSION IN BEAMS - THEORY AND EXPERIMENTAL VALIDATION Ali Ihsan Adham, Vladislav Sorokin, Brian Mace and Andrew Hall	**Ali Ihsan Adham**	254
Thurs.15:40 - 16:00	GT5:	242	MODELING METHOD OF MULTI-SUPPORT CONTINUOUS BEAM FOR ELASTIC RINGS IN SQUEEZE FILM DAMPERS OF GAS TURBINES Cheng Luo, Dmitry Diligensky and Dmitry Novikov	**Cheng Luo**	242

time	room / Chairperson(s)		Room 110	Presenter	
Thurs.14:00 - 14:20	TND:	57	NUMERICAL CONTINUATION IN ROBUSTNESS ASSESSMENT OF NONLINEAR SYSTEMS Márton Szabó, Ákos Miklós and Giuseppe Habib	**Márton Szabó**	57
Thurs.14:20 - 14:40	TND:	66	DYNAMICS OF THE SPECIALIZED VEHICLE WITH TWO LEVEL SUSPENSION UNDER DIFFERENT KINDS OF EXTERNAL INFLUENCE Yuri Mikhlin, Oleksiy Larin, Yuliia Surganova, Galina Timchenko and Denis Fedotov	**Yuri Mikhlin**	66
Thurs.14:40 - 15:00	TND:	69	TRAPPING AND SCATTERING OF 2-DOF SYSTEM IN/ON A POTENTIAL WELL Yam Aksenton, Oleg Gendelman and Alexander Fidlin	**Yam Aksenton**	69
Thurs.15:00 - 15:20	TND:	92	BEAT-WAVES IN PARAMETRIC LATTICES: EFFECTS OF HETEROGENEITY AND BI-STABILITY Yuli Starosvetsky	**Yuli Starosvetsky**	92
Thurs.15:20 - 15:40	TND:	88	INTERMODAL TARGETED ENERGY TRANSFER IN TAUT STRING WITH A POINT OBSTACLE Evgenii Varshavchik and Oleg Gendelman	**Evgenii Varshavchik**	88
Thurs.15:40 - 16:00	TND:	71	PARTICLE ESCAPE FROM POTENTIAL WELL UNDER HIGH-FREQUENCY EXTERNAL FORCING Sarit Kotzer, Oleg V. Gendelman and Alexander Fidlin	**Sarit Kotzer**	71

time	room / Chairperson(s)		Room 107	Presenter	
Thurs.14:00 - 14:20	RWD:	59	IMPROVING THE NOISE AND VIBRATION PERFORMANCE OF SLAB TRACK RAILWAY SYSTEMS Sina Aghaie, Albert Lau and Asmus Skar Christiansen	**Sina Aghaie**	59
Thurs.14:20 - 14:40	RWD:	73	STUDY OF THE VERTICAL DYNAMICS OF A PLATFORM WAGON LOADED BY A REMOVABLE MODULE FOR LONG GOODS TRANSPORTATION Ján Dižo	**Ján Dižo**	73

Thurs.14:40 - 15:00	RWD:	205	NEW MODEL SOLUTION FOR VERTICAL VIBRATIONS IN TRANSITION ZONE Piotr Koziol and Dariusz Kudla	**Piotr Koziol**	205
Thurs.15:00 - 15:20	RWD:	109	SIMPLIFIED DYNAMIC ANALYSIS OF SPANISH HIGH-SPEED RAILWAY BRIDGES CONSIDERING BENDING AND TORSIONAL EFFECTS Nicola Tarque, Andrea Tapia, Alfredo Cámara, Khanh Nguyen and José María Goicolea	**José María Goicolea**	109
Thurs.15:20 - 15:40	RWD:	96	THE INFLUENCE OF STICK-SLIP FRICTION AND THE LOCK-IN PHENOMENA ON RAIL-WHEEL SQUEAL NOISE. Chandra Shekhar Prasad, Ludek Pesek, Sony Chindada and Vitezslav Bula	**Chandra Shekhar Prasad**	96
Thurs.15:40 - 16:00	RWD:	239	ANALYSIS OF THE LOADING CAPACITY OF A REMOVABLE MODULE FOR BULK CARGO TRANSPORTATION BY RAIL BASED ON THE EQUIVALENT DYNAMIC LOAD Alyona Lovska	**Alyona Lovska**	239

Thurs.16:00 - 16:20	**Coffee break**

time	room		Audit. 202		
	Chairperson(s)			Presenter	
Thurs.16:20 - 16:40	GT16:	282	DEVELOPMENT OF A HYDROPHONE FOR MEASURING THE PROPAGATION OF ACOUSTIC WAVES IN BIOLOGICAL TISSUES Anabela Pereira, Vanessa F. Cardoso, Marcos Martins, Nuno A.T.C. Fernandes, Shivam Sharma and Óscar Carvalho	**Shivam Sharma**	282
Thurs.16:40 - 17:00	GT7:	278	MODEL-FREE INPUT SHAPING FOR GENERATING PRESCRIBED PERIODIC RESPONSE IN A NONLINEAR SYSTEM Swapnil Mahadev Dhobale and Shyamal Chatterjee	**Swapnil Mahadev Dhobale**	278
Thurs.17:00 - 17:20	NGS:	223	DESIGN AND FABRICATION OF WAVE POWERED DESALINATION SYSTEM FOR ISLAND REGIONS Sudalaimuthu Suresh P, Janarthanan V, Brathikan V M and Krisnan K	**Brathikan V M**	223

time	room		Audit. 201		
	Chairperson(s)			Presenter	
Thurs.16:20 - 16:40	GT6:	42	VERIFICATION AND VALIDATION OF NUMERICAL AND REDUCED MODELS FOR ROLLING ELEMENT BEARINGS Ana Luiza Borim, Laís Carrer, Tiago Henrique Machado and Katia Lucchesi Cavalca	**Laís Carrer**	42
Thurs.16:40 - 17:00	GT6:	82	DYNAMIC ANALYSIS OF PLANETARY GEARBOX FAILURE UNDER ENVIRONMENT UNCERTAINTIES Edilberto Costa, Eduardo De Paula and Helio De Castro	**Edilberto Costa**	82
Thurs.17:00 - 17:20	GT6:	258	RANDOM VIBRATION ANALYSIS OF A CROSS-SECTIONALLY VARIED PIPE VIA THE SEMI-ANALYTICAL METHOD Hongda Xu and Xufang Zhang	**Hongda Xu**	258

time	room		Room 110		
	Chairperson(s)			Presenter	
Thurs.16:20 - 16:40	RWP:	231	MODELLING EFFECTS ON WAVE PROPAGATION IN ORIGAMI INSPIRED PHONONIC STRUCTURES Elisabetta Manconi, Marco Riboli, Alessandro Contini and Farzad Tatar	**Elisabetta Manconi**	231
Thurs.16:40 - 17:00	RWP:	220	NONLINEAR VIBRATIONS OF THIN-WALLED STRUCTURES WITH DISTRIBUTED PIEZOELECTRIC TRANSDUCERS FOR SENSING, ACTUATION, AND SHUNT DAMPING Jean-François Deü	**Jean-François Deü**	220
Thurs.17:00 - 17:20	RWP:	151	VIBRATIONS OF COMPOSITE SANDWICH SHELLS WITH FLEXIBLE HONEYCOMB CORE Yu.E. Surganova, Yu.V. Mikhlin and K.V. Avramov	**Yu.E. Surganova**	151

time	room		Room 107		
	Chairperson(s)			Presenter	
Thurs.16:20 - 16:40	IWM:	121	INFLUENCE OF 43 AND 53 GRADE ORDINARY PORTLAND CEMENT ON THE PERFORMANCE OF PRESTRESS CONCRETE BEAM UNDER IMPACT LOADING Ankur Sharma and Senthil Kasilingam	**Ankur Sharma**	121
Thurs.16:40 - 17:00	IWM:	168	EFFECT OF SPACING OF TANDEM AXLE LOAD ON THE DYNAMIC RESPONSE OF RIGID PAVEMENT RESTING ON PASTERNAK FOUNDATION Ashish Kishore, Hemant Chore and Vishwas Sawant	**Ashish Kishore**	168
Thurs.17:00 - 17:20	IWM:	201	NUMERICAL INVESTIGATION ON PERFORMANCE OF PREFABRICATED SEGMENTAL PRESTRESSED CONCRETE BEAMS UNDER IMPACT LOADING Rachit Sharma and Arghadeep Laskar	**Rachit Sharma**	201

Thurs.19:00 - 22:00	**Conference Banquet**