



CONFERENCE PROGRAM

DAY 1 (10.09.2026.) – Room 102		
09:30 – 10:00	Opening Ceremony	
10:00 – 11:30	Plenary Session (Chairs: Rui Zhu, Miha Brojan)	
	10:00 – 10:30	Vesna Mišković-Stanković - MATHEMATICAL MODELLING OF DIFFUSION PROCESSES IN SOFT BIOMATERIALS
	10:30 – 11:00	Hermann G. Matthies and Adnan Ibrahimbegović - SYNERGY OF MECHANICS AND STOCHASTICS AT MULTIPLE SCALES
	11:00 – 11:30	Daniel Balzani - MODELING OF ADAPTIVE AND ACTIVE MECHANISMS IN ARTERIES FOR THE SIMULATION OF PHARMACO-MECHANICAL INTERACTIONS
11:30 – 11:50	Invited Lectures (Chairs: Vesna Mišković-Stanković, Miha Brojan)	
	11:30 – 11:50	Marija Nefovska-Danilović - FRAMEWORK FOR VIBRATION ANALYSIS OF PLATES AND SHELLS BASED ON DYNAMIC STIFFNESS METHOD
11:50 – 12:15	Coffee Break	
12:15 – 13:30	General Session (Chairs: Saša Kenjereš, Marija Nefovska-Danilović)	
	12:15 – 12:30	Stefano Disca, Vincenzo Coscia - DISCRETE AND CONTINUOUS CHAOS FOR NON-CONSERVATIVE NONLINEAR COUPLED OSCILLATORS
	12:30 – 12:45	Eva Zupan, Dejan Zupan - DYNAMICS OF THREE-DIMENSIONAL BEAMS WITH CONSERVATION PROPERTIES
	12:45 – 13:00	Christian Zehetner, Christian Reisinger, Simon Mayr - LARGE DEFORMATIONS OF NONLINEAR ELASTIC CANTILEVERS – EFFICIENT SOLUTIONS OF BEAM THEORY WITH FOCUS ON REAL-TIME CAPABILITY
	13:00 – 13:15	Miha Brojan, Matej Bogataj, Andrej Košmrlj - STABILITY OF IMPERFECT SHELLS-EFFECTIVELY PLATES
	13:15 – 13:30	Sidorov V.N., M. V. Shitikova, Badina E.S., Klimushkin D.O. - ASSESSMENT OF ENERGY DISSIPATION IN THE ELEMENTS OF BAR STRUCTURES MODELLED WITH TIMOSHENKO APPROACH DURING NUMERICAL ANALYSIS OF THEIR RESISTANCE TO DYNAMIC LOADS
13:30 – 14:30	Lunch Break	



14:30 – 15:00	Plenary Session (Chairs: Jelena Svorcan)	
	14:30 – 15:00	Draga Pihler-Puzovic - WHEN MATERIALS BEND THE RULES: BUCKLING RESPONSE OF SLENDER STRUCTURES BORN OF CONSTITUTIVE NONLINEARITIES (online)
15:15 – 16:30	General Session (Chairs: Christian Zehetner, Srboljub Simić)	
	15:15 – 15:30	Saša Kenjereš, Frederieke Backelandt, Jonathan van der Meer, Ruipeng Xu - A DETACHED-EDDY SIMULATION STUDY OF TURBULENT AEROSOL DYNAMICS IN A DRY POWDER INHALER
	15:30 – 15:45	Isidora Rapajić, Srboljub Simić - LYAPUNOV-BASED STABILITY ANALYSIS OF AN EXTENDED WASHBURN'S MODEL
	15:45 – 16:00	G. Hasson, S. Støle-Hentschel, T. Vrećica, V. Shrira, and Y. Toledo - RETRIEVAL OF OCEAN SURFACE CURRENTS AND VERTICAL SHEAR FROM HF RADAR-OBSERVATIONS
	16:00 – 16:15	Milan M. Raković, Darko R. Radenković, Novica Z. Janković, Lazar M. Lečić, Đorđe S. Čantrak - APPLICATION OF A LASER DOPPLER ANEMOMETRY (LDA) SYSTEM FOR MEASUREMENTS IN TWO-PHASE BUBBLY FLOW
	16:15 – 16:30	Sara Julian-Bernat, Victor Roda-Casanova, Raul Martinez-Cuenca - FINITE ELEMENT ANALYSIS OF NODE FORCES IN AQUACULTURE NETS UNDER ENVIRONMENTAL
16:30 – 17:00	Break	
17:00 – 18.15	General Session (Chairs: Teodor Vrećica, Milan Raković)	
	17:00 – 17:15	Enej Istenič, Miha Brojan - THIN FILM FLOWS ON FLAT AND CYLINDRICAL SURFACES DURING CHEMICALLY INDUCED SOLIDIFICATION
	17:15 – 17:30	Luka Đermanović, Lazar Lečić, Novica Janković, Đorđe Čantrak - PRESSURE MEASUREMENT ON THE AXIAL FAN CASING
	17:30 – 17:45	Urh Štampihar Jazbec, Enej Istenič, Miha Brojan - STABILITY OF TAYLOR-COUETTE FLOW DURING PHASE TRANSITION
	17:45 – 18:00	Anjali Bhardwaj, Dharmendra Tripathi - MATHEMATICAL MODELING OF HYBRID CARREAU NANOFLUID FLOW DRIVEN BY MEMBRANE PUMPING WITH SLIP AND ROUGH SURFACES
	18:00 – 18:15	Santosh Kumar Rai, Nikhil Vivek Shrivastava, Farjana Siddiqua - THERMAL-HYDRAULIC AND STABILITY CHARACTERISTICS OF A CLOSED SUPERCRITICAL WATER NATURAL CIRCULATION LOOP

DAY 1 (10.09.2026.) – Room 301f	
12:15 – 13:30	Poster session (Room 301f)
	David Hernández-Figueirido, Victor Roda Casanova, Reda Sadik El Ghoufairi- DESIGN AND OPTIMIZATION OF TAPERED POLES USING NON-CONVENTIONAL MATERIALS: STRUCTURAL ASSESMENT AND COST-BASED DECISION FRAMEWORK
	Hammoudi Abderazek, Chahrazad Adiche, Amine Hamdi and Ivana Atanasovska - MULTI-OBJECTIVE AI-DRIVEN OF GEARBOX DESIGN
	T.V. Yakovleva, N. Gamaunov, A.V. Krysko, V.A. Krysko - SOME ISSUES IN MACHINE LEARNING ANALYSIS OF PATIENTS EXPOSED TO RADIATION
	Marija Stamenković Atanasov, Julijana Simonović - FREE VIBRATION OF ELASTICALLY COUPLED CURVED STRUCTURES
	Kozin V.A., Zhigalov M.V., Krysko V.A. - CHAOTIC DYNAMICS OF VISCOELASTIC FLEXIBLE PLATES RECTANGLE IN PLANE
	Nikola Vorkapic, Branko Kokotovic, Sasa Zivanovic - MATHEMATICAL MODELLING OF TOOL HOLDER DYNAMICS IN INTERNAL TURNING OPERATIONS
	Ahmed Draï, Benaoumeur Aour - ANALYTICAL ANALYSIS OF VIBRATION BEHAVIOR OF BIDIRECTIONAL COATED NANOBEAMS MADE OF FUNCTIONALLY GRADED MATERIALS
	Ivana Cvetkovic, Draga Pihler-Puzovic, Snezana Milicev, Davorka Jandrljic- LINEAR STABILITY OF GAS–LIQUID DISPLACEMENT IN A SOFT RADIAL HELE–SHAW CELL
	Vaso Manojlović, Marko Trifunović, Karlo Raić, Hongqiang Liu, Xing Han - MICRO-SCALE PELLET REDUCTION WITH MACHINE LEARNING MODELING FOR MULTISCALE HYDROGEN METALLURGY
	Milica Milić Janković, Radoslav Radulović - DYNAMIC ANALYSIS OF THE STRUCTURAL BEHAVIOR OF A COMPOSITE PROPELLER
	Ivana Atanasovska, Dejan Momčilović - NATURE-INSPIRED STRESS-RELIEVING SHAPES IN MACHINE DESIGN BASED ON ADAPTIVE TREE GROWTH
	Nevena Marković, Katarina Slavković, Marina Trajković-Milenković, Mihajlo Tošić - NUMERICAL ANALYSIS OF STRESS-STRAIN BEHAVIOR OF DNP-Cu IN COLD FORMING PROCESS
	Jovana Čvorić, Gvozden Jovanović, Vaso Manojlović, Dejan Momčilović, Alen Delić - INFLUENCE OF GREEN SAND THERMOPHYSICAL PROPERTIES ON SIMULATION OF DEFECTS DURING DUCTILE IRON CASTING
	L. Kotbia, H. Abderazek, M. Alima, L. Aabrina, B. Aihem, G. Azzeddine, H. Hamza, R. Wissem - VALORIZATION OF CLAYS IN THE PRODUCTION OF DENTAL CERAMICS: CHARACTERIZATION AND SINTERING
	Katarina Slavković, Nevena Marković and Marina Trajković Milenković - A MULTISCALE NUMERICAL APPROACH FOR MODELING CURTAIN WALL SYSTEMS AND THEIR STRUCTURAL INTERACTION
	Pavle Ljubojević, Milan Jakovljević, Andrija Eraković, Tatjana Lazović - ANALYTICAL MODELING OF PRELOADED BOLTED JOINTS UNDER COMBINED TENSILE–SHEAR LOADING

	Misa Stojicevic, Ivana Cvetkovic, Aleksandar Đorđević, Branislav Popkonstantinovic - DYNAMIC CHARACTERISTICS OF CLOCK PENDULUM COUPLED WITH GRAVITY ESCAPEMENT MECHANISM	
	Bratislav Stojiljković, Miloš Lazarević, Svetislav Marković, Dejan Momčilović - NIKOLA TESLA SENSE OF BEAUTY – FOUNTAIN PATENT	
13:30 – 14:30	Lunch Break	
15:30 – 16:30	General Session (Chairs: Marina Shitikova, Vladimir Dunić)	
	15:30 – 15:45	Vladimir Dunić, Miroslav Živković - THERMO-MECHANICAL PHASE-FIELD DAMAGE MODELING IN SHAPE MEMORY ALLOYS
	15:45 – 16:00	Ajith Kuriakose Mani, Arjun P Manoj, Cherian Joseph, Eldin Mathew Heaven Reji, and Sivasubramaniyan Palaniswamy - MECHANICAL RESPONSE AND REINFORCEMENT EFFECTS IN RAMIE FIBER-REINFORCED STYRENE BUTADIENE RUBBER COMPOSITES
	16:00 – 16:15	Jelena Djoković, Milan Grozdanović, Dejan Tanikić - INFLUENCE OF VIBRATION MODE ON THE SCREENING EFFICIENCY OF VIBROSIEVES
	16:15 – 16:30	Marina Shitikova, Konstantin Modestov - FRACTIONAL CALCULUS MODELLING OF VISCOELASTIC AUXETICS
16:30 – 17:00	Break	
17:00 – 18:15	General Session (Chairs: Dejan Zupan, Regina Saitova)	
	17:00 – 17:15	Marko Trifunović, Karlo Raić, Vaso Manojlović, Hongqiang Liu, Xing Han - MACRO-SCALE SIMULATION OF PELLET FLOW AND MULTI-GAS BEHAVIOR IN A HYDROGEN-BASED SHAFT FURNACE
	17:15 – 17:30	Zagorka Matić, Srboljub Simić - ON THE GENERALIZED MAXWELL-STEFAN MODEL WITH THERMAL DIFFUSION
	17:30 – 17:45	S. Saiyan, M. Shitikova - APPLICATION OF THE BEAM THEORY FOR DETERMINING THE EFFECTIVE ORTHOTROPIC MECHANICAL PROPERTIES OF AUXETIC METAMATERIALS
	17:45 – 18:00	Regina Saitova, A. Arutyunyan - MODELING HIGH- TEMPERATURE CREEP OF METALS UNDER EXTERNAL INFLUENCES
	18:00 – 18:15	Chengzhang Zhang, Taijia Guo and Zhiqiang Yang - A NOVEL MULTISCALE PHYSICS INFORMED NEURAL NETWORK FRACTURE MODEL FOR BRITTLE MATERIALS BASED ON TWO-SCALE ASYMPTOTIC HOMOGENIZATION

DAY 1 (10.09.2026.) – Room – MSANU Library on the 3rd floor		
12:15 – 13:15	General Session (Chairs: Hugo A.F.A. Santos, Marina Cetkovic)	
	12:15 – 12:30	Miloš Pešić, Vladimir Dunić, Vladimir Milovanović, Miroslav Živković - CONVERGENCE OF A CENTRAL DIFFERENCE APPROXIMATION TO THE ONE-DIMENSIONAL WAVE EQUATION IN EXPLICIT DYNAMICS
	12:30 – 12:45	Marko Gogic - FINITE ELEMENT APPROXIMATION OF NONLOCAL ELLIPTIC PROBLEMS DRIVEN BY SYMMETRIC LÉVY OPERATORS
	12:45 – 13:00	Marina Cetkovic - FREE vibrations OF POROUS FGP PLATES on Elastic Foundation USING LAYER WISE FINITE ELEMENT
	13:00 – 13:15	Hugo A.F.A. Santos - FINITE ELEMENT ANALYSIS OF FUNCTIONALLY GRADED NON-UNIFORM CURVED BEAMS
13:30 – 14:30	Lunch Break	
15:30 - 16:30	General Session (Chairs: Goran Pavlović, Stepa Paunović)	
	15:30 – 15:45	Goran Pavlović, Mile Savković, Marko Todorović, Nebojša Zdravković, Goran Marković - PARETO-BASED MULTI-OBJECTIVE OPTIMIZATION OF AN END 4 CARRIAGE FOR DOUBLE-GIRDER OVERHEAD CRANES
	15:45 – 16:00	Wei Li, Drazan Kozak - APPLICATION OF THE GA-GRBFNN ALGORITHM TO RELIABILITY PERFORMANCE OF A KIND OF STOCHASTIC DYNAMICAL SYSTEM
	16:00 – 16:15	Nekri Mounira, Chahrazad Adiche, Hammoudi Abderazek - A DUAL-MARKET MIXED-INTEGER OPTIMIZATION MODEL FOR BATTERY SCHEDULING WITH EXCLUSIVE MARKET PARTICIPATION
	16:15 – 16:30	Salima Kouici, Chahrazad Adiche, Hammoudi Abderazek - OPTIMIZED CYBERSECURITY INVESTMENT FOR INDUSTRY 4.0 USING ISO 27002 COMPLIANCE
16:30 – 17:00	Break	
17:00 – 18:15	General Session (Chairs: Dragan Milošević, Stepa Paunović)	
	17:00 – 17:15	Mustapha Faraji - LITHIUM-ION BATTERY THERMAL MANAGEMENT USING PHASE CHANGE MATERIALS FOR HEAT STORAGE: A NUMERICAL STUDY
	17:15 – 17:30	Lu Silong - RESEARCH AND PARAMETER IDENTIFICATION OF SMALL GENERATOR CHARGING PROCESS
	17:30 – 17:45	Boxiang Ma, Linzhe Du, Jian Sun - HYBRID NEURAL NETWORKS BASED INVERSE DESIGN OF INHOMOGENEOUS TETRACHIRAL HONEYCOMB FOR MULTIPLE FUNCTIONS
	17:45 – 18:00	Dragan Milošević - ARTIFICIAL INTELLIGENCE AS AN INTEGRATIVE LAYER IN MODELLING CHESS TRAINING
	18:00 – 18:15	M. Oubida, Z. El Maskauoi, I. El Hantati - A NON-INTRUSIVE GA-FE COUPLING FRAMEWORK FOR DISCRETE STRUCTURAL OPTIMIZATION OF STEEL STRUCTURES



DAY 2 (11.09.2026.) – Room 102		
09:30 – 10:00	Plenary Session (Chairs: Heiko Topol, Milan Cajić)	
	09:30 – 10:00	Rui Zhu, Xiao Wang, Jianlei Zhao, Ivana Kovacic - NONLINEAR METASTRUCTURES FOR LOW-FREQUENCY BROADBAND VIBRATION ISOLATIONS
10:00 – 10:40	Invited Lectures (Chairs: Heiko Topol, Milan Cajić)	
	10:00 – 10:20	David Lehký - MACHINE LEARNING-AIDED RELIABILITY-BASED OPTIMIZATION AND ASSESSMENT OF STRUCTURES
	10:20 – 10:40	Svetoslav Nikolov - APPLICATIONS AND DYNAMICS OF GYROSCOPE (online)
10:40 – 11:10	Coffee Break	
11:10 – 12:25	Special Session – Advances in Gear Technology and Power Transmission (Chairs: Victor Roda-Casanova, Santosh Patil)	
	11:10 – 11:25	J. Sanchez-Espiga - MODELLING AND ADVANCED SENSING IN PLANETARY GEAR LOAD SHARING: FROM THEORY TO INDUSTRIAL APPLICATIONS - Invited lecture
	11:25 – 11:40	Victor Roda-Casanova, Carlos M.C.G. Fernandes - CALCULATION OF THE FACE LOAD FACTOR IN SPUR AND HELICAL GEARS LOCATED IN INTERMEDIATE SHAFTS
	11:40 – 11:55	Mohit Jain and Santosh Patil - STUDY ON VISION-BASED AND UNCONVENTIONAL EXPERIMENTAL TECHNIQUES FOR PERFORMANCE ANALYSIS OF COMPOSITE POLYMER
	11:55 – 12:10	Mohit Jain and Santosh Patil - COMPARATIVE PERFORMANCE STUDIES OF DIFFERENT FIBER REINFORCED COMPOSITE POLYMER GEARS
	12:10 – 12:25	Christos Kalligeros, Panagiotis Vidakis, Vasilios Sarlis, Christos Papalexis, Ioannis Kalogeris, Vasilios Spitas - EXPERIMENTAL INVESTIGATION OF WEAR PERFORMANCE OF 3D-PRINTED POLYMER GEARS
12:30 – 12:45	Sponsor presentation - Mathematics, MDPI Journal	
13:00 – 14:00	Lunch Break	
14:00 – 14:45	Guided downtown walking tour (in English) – from the Mathematical Institute to the Faculty of Mechanical Engineering –	

DAY 2 (11.09.2026.) – Room 301f		
11:00 – 12:00	General Session (Chairs: Aleksandar Tomović, Nikola Mirkov)	
	11:00 – 11:15	Belić Nađa, Ristanović Milan, Lazarević Mihailo - MADGWICK SENSOR FUSION APPROACH FOR QUATERNION-BASED ORIENTATION ESTIMATION ON EMBEDDED PLATFORMS
	11:15 – 11:30	Nikola Nešić, Vuk Todorović, Nenad Vesić - ROBOT INVERSE KINEMATICS USING SUBPROBLEM DECOMPOSITION



	11:30 – 11:45	Nemanja Tanasković, Mihailo Lazarević, Damir Krklješ - KINEMATIC MODELLING AND BÉZIER-BASED TRAJECTORY GENERATION FOR A SECTOR-DRIVEN COMPLIANT ROBOTIC MECHANISM
	11:45 – 12:00	Uroš Ilić, Mihailo Lazarević, Emil Veg, Željko Despotović - DYNAMIC MODELLING OF COMPOSITE LEAF SPRINGS IN VIBRATORY CONVEYORS
	12:00 – 12:15	Stefano Disca - ON A CROSS COUPLING OF RULKOV NEURAL MAPS
12:15 – 13:00	Poster session (Room 301f)	
13:00 – 14:00	Lunch Break	
14:00 – 14:45	Guided downtown walking tour (in English) – from the Mathematical Institute to the Faculty of Mechanical Engineering –	

DAY 2 (11.09.2026.) – Faculty of Mechanical Engineering – Room 514		
15:00 – 16:30	Lab tour – Faculty of Mechanical Engineering –	
16:30 – 17:00	Break	
17:00 – 18:45	General Session (Chairs: Danilo Karličić, Bojan Čas)	
	17:00 – 17:15	Jan Zavodnik, Miha Brojan, Antonio DeSimone - ENVELOPE SURFACE DESCRIPTION OF BRAIDED MESH-SHELLS
	17:15 – 17:30	Sidorov V.N., Klimushkin D.O. - BUCKLING OF FRAME STRUCTURES UNDER DYNAMIC LOADS, TAKING INTO ACCOUNT INERTIAL COMPONENTS OF INTERNAL FORCES IN ELEMENTS
	17:30 – 17:45	Katarina Slavković, Ivana Djurišić, Nenad Vesić - MECHANICAL AND GEOMETRIC APPROACHES TO ALMOST GEODESIC GROWTH OF THE THIRD TYPE
	17:45 – 18:00	Peter Kočman, Bojan Čas - ON THE ANALYTICAL MODELLING OF THE INELASTIC BUCKLING LOAD OF FRAMES
	18:00 – 18:15	Sidorov V.N., Badina E.S., Tsarev R.O.- NONLOCAL APPROACH TO NUMERICAL MODELLING OF PLANE FRAME VIBRATIONS
	18:15 – 18:30	Jaka Tušek, Luka Porenta, Boštjan Brank, Miha Brojan - THIN- WALLED SUPERELASTIC NI-TI TUBES FOR ELASTOCALORIC APPLICATIONS
	18:30 – 18:45	Nevena Rosić, Milan Cajić, Danilo Karličić, Mihailo Lazarević - NATURAL FREQUENCY SPECTRA OF QUASIPERIODIC STRUCTURES WITH ELASTIC AND RIGID SEGMENTS
19:30 –	Conference dinner	

DAY 3 (12.09.2026.) – Room 102		
09:30 – 10:00	Plenary Session (Chairs: Hermann Matthies, Roberto Palma)	
	09:30 – 10:00	Heiko Topol- INSTABILITIES OF RESIDUALLY STRESSED TUBULAR STRUCTURES WITH MATERIAL VOLUME CHANGES: BULGING AND BEYOND
10:00 – 10:40	Invited Lectures (Chairs: Hermann Matthies, Roberto Palma)	
	10:00 – 10:20	Roberto Palma - A COSSERAT-SPIN CONTINUUM FRAMEWORK FOR MICROSTRUCTURED MATERIALS: MODELLING AND APPLICATIONS
	10:20 – 10:40	Aleksandar Tomović - APPLICATION OF SNMIP FOR VIBRATION ANALYSIS OF 3D PRINTED BEAMS
10:40 – 11:00	Break	
11:00 – 12:00	General session (Chairs: Mihailo P. Lazarević, Milan Šekularac)	
	11:00 – 11:15	Ivan Tomanović, Srđan Belošević, Aleksandar Milićević, Nenad Crnomarković, Andrijana Stojanović - STRATEGIES FOR IMPLEMENTATION OF EFFICIENT DOMAIN BOUNDARIES IN FULLY PARALLEL CFD CODES
	11:15 – 11:30	Milan Šekularac, Vidosava Vilotijević- ON A CFD APPROACH FOR MIXED CONVECTION HEAT TRANSFER REGIME
	11:30 – 11:45	Jelena Svorcan, Toni Ivanov, Milan Rakić and Marija Baltić - ESTIMATION OF THE AERODYNAMIC BENEFITS OF A WAVY UPPER SURFACE OF NACA 0012 AIRFOIL AT LOW REYNOLDS NUMBER
	11:45 – 12:00	Alexander Kuzmin - INSTABILITY OF TRANSONIC FLOW OVER NASA AIRFOILS WITH A DEPLOYED SPOILER
12:00 – 13:15	General session (Chairs: Ivan Tomanović, Nikola Mirkov)	
	12:00 – 12:15	Nikola Mirkov, Svetlana Konstantinova - A SYNTHETIC PHOTOPLETHYSMOGRAPHY WAVEFORM GENERATION WITH ADVANCED MODELLING OF MICRO-BIOMECHANICS EFFECTS
	12:15 – 12:30	Nenad Vesić, Ivana Djurišić and Andjelka Hedrih - LINEAR CONFORM MODEL OF CELLULAR GROWTH
	12:30 – 12:45	Ivana Djurišić, Ognjen Stefanović and Nenad Vesić - CELL ELECTRICITY CAUSED BY CHANGE IN GEOMETRY
	12:45 – 13:00	Ashvani Kumar and Dharmendra Tripathi - ANALYSIS OF PERISTALTIC FLOW OF COUPLE STRESS FLUID IN TUMOR-AFFECTED MICROCHANNELS
	13:00 – 13:15	Purnima Mishra, Dharmendra Tripathi and Kusum Sharma - PERISTALTIC TRANSPORT THROUGH TUMOR-OBSTRUCTION MODULATED BY DARCY-BRINKMANN EFFECT OF POROUS MEDIA



13:15 – 13:30	Ivana Atanasovska - PROMOTION OF ICME2024 SPECIAL JOURNAL ISSUE AND ANNOUNCEMENT OF THE ICME2026 PARTNER JOURNALS***
13:30 – 14:00	Closing Ceremony

DAY 3 (12.09.2026.) – Room 301f		
11:00 – 13:00	Special Session – Mathematical modeling of multibody systems interacting with medium (Chairs: Marat Dosaev, Yuriy Selyutskiy)	
	11:00 – 11:15	N. A. Oryol, O. Yu. Cherkasov - THE DUBINS PROBLEM WITH PENALTY ON CONTROL COSTS
	11:15 – 11:30	Aleksei Lozovoi, Alexey Tikhonov - ON THE MODIFIED METHOD OF COMPLEX AUTONOMIZATION
	11:30 – 11:45	M. Z. Dosaev - ON SELECTION OF PARAMETERS OF A VIBRO ROBOT
	11:45 – 12:00	Yury Selyutskiy, Andrei Holub, Boris Lokshin, Valery Zudov, Aleksandar Obradović - STABILIZATION OF RECTILINEAR FLIGHT OF A QUADROTOR WITH A SLUNG LOAD
	12:00 – 12:15	Ivan V. Alpatov - PHENOMENOLOGICAL APPROACH TO HUMAN CHEST DEFORMATION MODELING
	12:15 – 12:30	Mikhail Garbuz, Liubov Klimina, Vitaly Samsonov - DYNAMIC OF THE WIND POWERED PLANTIGRADE MACHINE
	12:30 – 12:45	Dunchenkin P.V., Krysko A.V., Zhigalov M.V., Krysko V.A. - COMPARATIVE ANALYSIS OF CLASSICAL (RAMP) AND NEURAL NETWORK METHODS OF TOPOLOGICAL OPTIMIZATION IN THE DESIGN OF MULTILAYER STRUCTURES
	12:45 – 13:00	Magomed Magomedov, Gairbek Magomedov - ACTIVE COMPENSATION OF ILLUSORY ROLL IN THE TsF-7 CENTRIFUGE USING A CASCADED PID CONTROLLER AND GALVANIC VESTIBULAR STIMULATION
13:30 – 14:00	Closing Ceremony – Room 102	

***This presentation will include the promotion of the Special Issue „*Mathematical Methods and Numerical Simulations in Engineering Mechanics*“, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science (ISSN 0954-4062), Volume 240, Issue 15, August 2026, which included the article “*Tribute to Academician Vladan D. Đorđević (1938–2022)*”, *Nevena D. Stevanović and Snežana S. Milićev*, and selected articles from the ICME2024 conference.



3rd International Conference on Mathematical
Modelling in Mechanics and Engineering
Mathematical Institute SANU, 10-12. September, 2026.



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SVECOM doo, Preduzeće za inženjering, spoljni u unutrašnji promet, Ustanička 128a/III, Beograd

Kompanija SVECOM DOO BEOGRAD osnovana je 1991. godine u Beogradu sa aktivnostima u oblasti energetike, rudarstva, ekologije, gasne detekcije i drugim granama industrije.

Ukupan broj zaposlenih je oko 30 od čega je 25 u stalnom odnosu, dok je 5-6 eksperata angažovano na raznim projektima. Najveći broj zaposlenih su inženjeri različitih profila, zatim ekonomisti i menadžeri.

U oblasti energetike sa češkim partnerima **ZVVZ** kao i **PSP** realizovali smo isporuku i ugradnju elektrofiltera na TE Kostolac, TE Ugljevik, kao i isporuku i ugradnju drobiličnih postrojenja u REIK Kolubara i Kostolac.

U oblasti rudarstva u saradnji sa jednim od najvećih svjetskih proizvođača specijalnih čeličnih konstrukcija **ArcelorMittal** i **Liberty Ostrava** (Češka) opremamo rudnike sa podzemnom eksploatacijom čeličnim lučnim profilima (rudarska podgrada).

U oblasti gasne detekcije saradjujemo sa kompanijama **Teledyne-Oldham Simtronics** Francuska vodećim svjetskim proizvođačem stabilnih sistema gasne detekcije za industriju, **Trolex** Engleska-vodećim svjetskim proizvođačem stabilnih sistema za detekciju gasova u rudnicima sa podzemnom eksploatacijom kao i sa **Industrial Scientific** USA. Vodećim svjetskim proizvođačem u oblasti mobilnih gasnih detektora.

Oblast delovanja je detekcija eksplozivnih i toksičnih gasova u rudnicima sa podzemnom eksploatacijom, industrijskim postrojenjima, čeličnanama, pogonima za proizvodnju veštačkog đubriva kao i skladištima tečnog naftnog gasa.

Iz oblasti gasne detekcije posedujemo sertifikat o akreditaciji izdat od ATS a kao i rešenje MUP a koji nam omogućava kontrolisanje instalacija posebnih sistema za detekciju eksplozivnih i zapaljivih gasova.



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axioms

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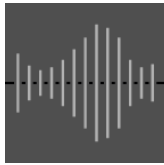
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3rd International Conference on Mathematical
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acoustics

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Editor-in-Chief: Prof. Dr. Stéphane Moreau, Université de Sherbrooke, Sherbrooke, Canada

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Award calls:

„Prof. Vladan Djordjevic“ award

- Authors aged up to 35 with contributions in the field of fluid mechanics presented in person are eligible for the „Prof. Vladan Djordjevic“ award for young scientists. The laureate of the award will be announced at the conference's closing ceremony.

„Outstanding presentation award“ (sponsored by Journal Acoustics, MDPI)

- Authors aged up to 35 whose contributions are presented in person are eligible for the „Outstanding presentation award“ for young scientists. The laureate of the award will be announced at the conference's closing ceremony.

"Special Session 2 - The best contribution awards"

- The contributions presented in the SS2 are eligible for the special discount on publication charges at the Special Issue „Advances in Gear Transmission Systems: Design, Dynamics, and Applications“, *Journal Machines* (ISSN 2075-1702) - The SS2 Chairs will be responsible for selecting and proceeding.