



41st Danubia-Adria Symposium Advances in Experimental Mechanics
September 23-26, 2025, Kragujevac, Serbia



41 DANUBIA-ADRIA SYMPOSIUM ON ADVANCES IN EXPERIMENTAL MECHANICS –23-26 Septembar 2025 – Hotel Kragujevac, Kragujevac, Serbia



SYMPOSIUM PROGRAMME DAS 2025

<https://www.das2025.fin.kg.ac.rs/>



41st Danubia-Adria Symposium Advances in Experimental Mechanics
September 23-26, 2025, Kragujevac, Serbia



SHORT PROGRAMME

Time		Date				
		Tuesday 23.09.2025.	Wednesday 24.09.2025.	Thursday 25.09.2025.	Friday 26.09.2025.	
8	00-15					
	15-30					
	30-45		Registration	Registration	Registration	
	45-00					
9	00-15		Opening Ceremony	KEYNOTE PRESENTATIONS 2	KEYNOTE PRESENTATIONS 3	
	15-30					
	30-45					
	45-00					
10	00-15		KEYNOTE PRESENTATIONS 1	Coffee break	Coffee break	
	15-30					
	30-45					
	45-00					
11	00-15		Coffee break	POSTER PRESENTATIONS 4	POSTER PRESENTATIONS 5	
	15-30					
	30-45					
	45-00					
12	00-15		POSTER PRESENTATIONS 1		Closing Ceremony	
	15-30					
	30-45					
	45-00					
13	00-15		Lunch	Lunch	Lunch	
	15-30					
	30-45					
	45-00					
14	00-15		POSTER PRESENTATIONS 2	Excursion		
	15-30					
	30-45					
	45-00					
15	00-15		Coffee break			
	15-30					
	30-45					
	45-00					
16	00-15		POSTER PRESENTATIONS 3			
	15-30					
	30-45					
	45-00					
17	00-15	Registration			Excursion	
	15-30					
	30-45		Scientific Comiteee Meeting			
	45-00					
18	00-15		Diner			
	15-30					
	30-45					
	45-00					
19	00-15	Welcome reception				
	15-30					
	30-45					
	45-00					
20	00-15					
	15-30					
	30-45			Gala diner 20:30 – 24:00		
	45-00					



FULL PROGRAMME

September 23rd, Tuesday

17:00 ÷ 19:00	REGISTRATION
19:00 ÷ 20:00	WELCOME COCKTAIL

September 24th, Wednesday

8:30 ÷ 9:00	REGISTRATION		
9:00 ÷ 10:00	OPENING CEREMONY		
10:00 ÷ 11:00	KEYNOTE PRESENTATIONS 1 Session Chairs - Zbigniew L. Kowalewski & Stefan Dan Pastrama		
Time	ID	Title	Authors
10:00 ÷ 10:20	17	NOVEL TEST METHODS FOR TRIBO/MECHANICAL PROPERTIES IN THE CONTEXT OF ALTERNATIVE FUELS - Rudolf Beer Lecture	Florian Grün Peter Oberreiter Philipp Renhart Michael Pusterhofer
10:00 ÷ 10:20	28	INITIAL EXPENDABLE TURBOJET PROTOTYPE TESTING EXPERIENCES	Nikola Davidovic Nenad Kolarevic Milos Stankovic Marko Milos
10:40 ÷ 11:00	8	IMPLEMENTATION AND PRACTICAL APPLICATION OF NON-EQUIVALENT BIAXIAL MEASUREMENTS FOR HYPERELASTIC MATERIALS	Kristóf Havasi Attila Kossa
11:00 ÷ 11:30	COFFEE BREAK		



POSTER PRESENTATIONS 1 Session Chairs – Ermioni D. Pasiou & Thomas Lehmann Oral introductions			
Time	ID	Title	Authors
11:30 ÷ 13:00			
11:30 ÷ 11:35	26	ALTERNATIVE METHOD OF STRESS PARAMETERS DETERMINATION DURING TENSILE TESTS USING METRIC ENTROPY AND DIC	Zbigniew Kowalewski Mateusz Kopec Grzegorz Garbacz Adam Brodecki
11:35 ÷ 11:40	51	DETERMINATION OF FOUR CHARACTERISTIC REGIONS IN THE STRESS-STRAIN RESPONSE OF APM FOAM UNDER COMPRESSION USING DVC	Zvonimir Tomičević Borna Božović Daniel Kytýř Petr Koudelka
11:40 ÷ 11:45	33	MEASUREMENT OF PIEZOELECTRIC PROPERTIES OF HYDROGELS	Fatima Živić Marija Branković Danilo Petrović Petar Todorović Nenad Grujović
11:45 ÷ 11:50	14	MULTITECHNIQUE CHARACTERIZATION OF CEMENT PASTE WITH AND WITHOUT GRAPHENE OXIDE	Muhammad Shahid Sophie Schmid Olaf Lahayne Agathe Robisson Bernhard Pichler
11:50 ÷ 11:55	30	HARDNESS MEASUREMENT OF ROLLING BEARING BALLS SUBJECTED TO MULTI-CYCLE CRYOGENIC TREATMENT	Jovana Antić Žarko Mišković Danilo Pejčić Martin Dix Alexander Pierer Jürgen Heidrich Matthias Milbrandt
11:55 ÷ 12:00	50	EFFECT OF ELECTRON BEAM PROCESSING PARAMETERS ON THE SURFACE ROUGHNESS OF TITANIUM SAMPLES: PART II	Živana Jovanović Pešić Aleksandra Vulović Strahinja Milenković Đorđe Ilić Dragan Džunić



12:00 ÷ 12:05	57	CFD INVESTIGATION OF TURBULENT WATER FLOW IN A PIPE ELBOW: ASSESSMENT OF CAVITATION RISK	Pavle Ljubojević Saša Stašević
12:05 ÷ 12:10	47	STRUCTURAL ASSESSMENT AND REDESIGN OF THE WATER CHAMBER IN A DOMESTIC GASIFICATION BOILER	Filip Nastić Mladen Josijević Davor Končalović Dušan Gordić Vladimir Vukašinović
12:10 ÷ 13:00	DISCUSSION AT POSTERS		
13:00 ÷ 14:00	LUNCH		
14:00 ÷ 15:30	POSTER PRESENTATIONS 2 Session Chairs – Miroslav Živković & Nenad Kolarević Oral introductions		
Time	ID	Title	Authors
14:00 ÷ 14:05	15	ANALYSIS OF TEST STRAIN IN A FOUR-POINT BENDING CALIBRATION SETUP FOR STRAIN GAGES	Thomas Lehmann Tobias Jähnichen Jörn Ihlemann
14:05 ÷ 14:10	31	INVESTIGATION OF RESIDUAL STRESS EVOLUTION DUE TO CYCLIC LOADING BY YIELD SURFACE TRACKING	Radim Halama Michal Kořínek Jiří Čapek Karel Trojan Radim Petkov Adam Gladiš Jiří Hajnyš Nikolaj Ganev
14:10 ÷ 14:15	24	FATIGUE PERFORMANCE COMPARISON OF STREX 700 AND 55NICRMOV7 STEELS	Dušan Arsić Gordana Jovičić Miroslav Živković Miloš Pešić Marko Topalović Đorđe Ivković Marko Deliće



14:15 ÷ 14:20	27	INFLUENCE OF TEMPERATURE ON MODE I FRACTURE TOUGHNESS OF A DUCTILE ADHESIVE	Lukáš Horák Jan Krystek
14:20 ÷ 14:25	40	QUASI-STATIC AND DYNAMIC BEHAVIOR OF VANADIUM-CARBIDE REINFORCED ALUMINUM ALLOY STUDIED VIA DIGITAL IMAGE CORRELATION – PRELIMINARY STUDY	Miloš Pešić Aleksandar Bodić Marko Topalović Snežana Vulović Vladimir Dunić Vladimir Milovanović Miroslav Živković
14:25 ÷ 14:30	12	EXPERIMENTAL ANALYSIS OF ELECTRIC SCOOTER DYNAMICS	Zsombor Magyari Roland Zana Dénes Takács
14:30 ÷ 14:35	32	EXPERIMENTAL AND ANALYTICAL METHODS FOR DETERMINING INTERLAMINAR SHEAR STRENGTH OF COMPOSITES MADE BY FDM 3D PRINTING	Nenad Grujović Strahinja Milenković Fatima Živić
14:35 ÷ 14:40	60	CHALLENGES OF ADDITIVE MANUFACTURING IN MACHINE ELEMENT APPLICATIONS	Ivan Simonović Aleksandar Marinković Jovana Antić Nenad Kolarević
14:40 ÷ 15:30	DISCUSSION AT POSTERS		
15:30 ÷ 16:00	COFFEE BREAK		
16:00 ÷ 17:00	POSTER PRESENTATIONS 3 Session Chairs – Karel Doubrava & Zvonimir Tomičević		
Time	ID	Title	Authors
16:00 ÷ 16:05	18	NUMERICAL ANALYSIS OF BARREL LOADS IN THE DESIGN PHASE OF AN ARTILLERY SYSTEM	Bogdan Todorović Aleksandra Obradović Nebojša Hristov Damir Jerković
16:05 ÷ 16:10	45	RESIDUAL STRESS-INDUCED DAMAGE IN BRAKE DRUMS	Dobrivoje Čatić Vladimir Čatić



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16:10 ÷ 16:15	46	INFLUENCE OF CRACKS ON THE STRUCTURAL STABILITY OF CYLINDRICAL STEEL EQUALIZATION TANKS	Vladimir Milovanović Stefan Dikić Saša Spasenić Mileta Ristivojević Sreten Spasenić Aleksandar Bodić Miloš Pešić
16:15 ÷ 16:20	56	CONDITIONS RELATED TO THE ROOF STRUCTURE STRENGTH OF BUSES POWERED BY NATURAL GAS AND FUEL CELLS	Saša Milojević Snežana Vulović Marija Rafailović Slobodan Savić
16:20 ÷ 16:25	54	DEVELOPMENT AND EXPERIMENTAL TESTING OF A HYDRAULIC STAND WITH PUMPS INTENDED FOR A CENTRAL HEATING SYSTEM	Mladen Josijević Dušan Gordić Davor Končalović Filip Nastić
16:25 ÷ 16:30	41	DEVELOPMENT OF CONSTRUCTION FOR THE TRANSFER OF HEAVY PRISMATIC PROFILES	Miroslav Milutinović Aleksandar Okilj Sanjin Troha
16:30 ÷ 17:00	DISCUSSION AT POSTERS		
17:30 ÷ 18:30	SCIENTIFIC COMMITTEE MEETING		
18:30 ÷ 19:30	DINNER		

September 25th, Thursday

8:30 ÷ 9:00	REGISTRATION		
9:00 ÷ 10:00	KEYNOTE PRESENTATIONS 2 Session Chairs - Attila Kossa & Radim Halama		
Time	ID	Title	Authors
9:00 ÷ 9:20	6	INFLUENCE OF STRINGER GEOMETRY ON THE STRUCTURAL INTEGRITY OF CRACKED STIFFENED PLATES	Stefan-Dan Pastrama
9:20 ÷ 9:40	29	THE DEPENDENCE OF THE DEGREE OF NON-ADDITIVITY OF MECHANICALLY LOADED SYSTEMS ON THE LOADING RATE	Dimos Triantis Ilias Stavrakas Ermioni Pasiou Stavros Kourkoulis
9:40 ÷ 10:00	10	GRP TANK LOADING INVESTIGATION USING CFS AND DFOS SENSORS	Karel Doubrava Nikola Schmidová David Blaha Zdeněk Padovec Ctirad Novotny Radek Kottner Radek Sedláček Milan Růžicka
10:00 ÷ 10:30	COFFEE BREAK		
10:30 ÷ 12:30	POSTER PRESENTATIONS 4 Session Chairs – Rita Kiss & Miroslav Živković Oral introductions		
Time	ID	Title	Authors
10:30 ÷ 10:35	55	FINITE ELEMENT ANALYSIS OF PLATELET ACTIVATION AND CELL MECHANICS IN CIRCULATING TUMOR CELL ARREST	Vladimir Simić Aleksandar Nikolić Miljan Milošević Shao Ning Fransisca Leonard Miloš Kojić



10:35 ÷ 10:40	23	OPTIMISING GAIT STABILITY ANALYSIS IN PATIENTS WITH MUSCULOSKELETAL DISORDERS	Kristóf Bányi Zsófia Pálya Mária Takács Rita Kiss
10:40 ÷ 10:45	39	QUASI-STATIC TENSILE TESTING OF HIGH-STRENGTH BALLISTIC STEEL USING DIGITAL IMAGE CORRELATION – PRELIMINARY STUDY	Miloš Pešić Aleksandar Bodić Marko Topalović Snežana Vulović Vladimir Dunić Vladimir Milovanović Miroslav Živković
10:45 ÷ 10:50	37	QUANTITATIVE DETERMINATION OF GLASS FIBER CONTENT IN FIBER-REINFORCED COMPOSITE MATERIALS	Milan Blagojević Živče Šarkočević Ivica Čamagić
10:50 ÷ 10:55	42	EXPERIMENTAL VALIDATION OF FRICTION STIR WELDING PARAMETERS FOR EN AW 6060 T6 ALUMINUM ALLOY	Aleksandar Bodić Vladimir Milovanović Miroslav Živković Miloš Pešić Dušan Milojević Marko Topalović
10:55 ÷ 11:00	59	IMPROVEMENT OF THE TECHNICAL AND OPERATIONAL CHARACTERISTICS OF ZA-27 ALLOYS REINFORCED WITH SIC AND Al_2O_3	Dragan Džunić Stefan Miletić Milan Ivković Slobodan Mitrović
11:00 ÷ 11:05	25	EXPERIMENTAL DETERMINATION OF THE EFFECT OF AXIAL FORCE ON A HEADLESS SCREW CONNECTION	Anđela Perović Miloš Matejić Vladimir Milovanović
11:05 ÷ 11:10	13	EFFECTS OF STEERING ANGLE SATURATION ON STABILITY OF REVERSING TRAILERS	Levente Mihályi Denes Takacs
11:10 ÷ 11:15	53	ANALYSIS OF DEEP DRAWING PROCESS USING FEA AND FLD	Marko Delić Vesna Mandić Srbislav Aleksandrović Dušan Arsić Đorđe Ivković



11:15 ÷ 11:20	19	STABILITY LOSS OF TAPE-PRINGS UNDER COMPRESSIVE LOADS: A FINITE ELEMENT ANALYSIS	Péter Máté András Szekrényes
11:20 ÷ 11:25	38	ANALYTICAL AND FEM ASSESSMENT OF A DOUBLE-SIDED BUTT-WELDED S1000QL SPECIMEN FOR TENSILE TESTING PREPARATION	Snežana Joksić Jovana Živić Marija Matejić Miloš Matejić Živče Šarkočević Ivica Čamagić
11:25 ÷ 11:30	36	INFLUENCE OF PALLET PLACEMENT METHOD ON BEAM BEHAVIOR IN RACK STRUCTURE	Mirjana Piskulić Rodoljub Vujanac Nenad Miloradović Mirko Blagojević
11:30 ÷ 11:35	58	KINEMATIC ANALYSIS OF THE COMPLEX PLANETARY GEAR TRAIN OVERVIEW	Stefan Čukić Slavica Miladinović Anđela Perović Lozica Ivanović Saša Milojević Blaža Stojanović
11:35 ÷ 12:30	DISCUSSION AT POSTERS		
13:00 ÷ 14:00	LUNCH		
14:30 ÷ 20:00	EXCURSION TO TOPOLA (OPLENAC) AND VISIT TO THE COMPANY MIND PARK		
20:30 ÷ 24:00	GALLA DINNER		

September 26th, Friday

8:30 ÷ 9:00	REGISTRATION		
9:00 ÷ 10:00	KEYNOTE PRESENTATIONS 3 Session Chairs - Florian Grün & Adrian Pascu		
Time	ID	Title	Authors
9:00 ÷ 9:20	16	IDENTIFICATION OF ENERGETIC AND DISSIPATIVE FLOW STRESS USING INFRARED THERMOGRAPHY	Nikola Lalović Thomas Böhlke
9:20 ÷ 9:40	21	EXPERIMENTAL ANALYSIS OF HIGH-SPEED GEARBOXES	Nenad Kolarević Milosav Ognjanović Miloš Stanković Aleksandar Dimić Nikola Davidović Marko Miloš
9:40 ÷ 10:00	34	IMPACT VELOCITY INFLUENCE ON THE FRACTURE BEHAVIOUR OF PORCINE FEMURS UNDER DYNAMIC LOADING	Petra Bagavac Marijo Bekić Lovre Krstulović-Opara
10:00 ÷ 10:30	COFFEE BREAK		
10:30 ÷ 12:30	POSTER PRESENTATIONS 5 Session Chairs – Zvonimir Tomičević & Vladimir P. Milovanović Oral introductions		
Time	ID	Title	Authors
10:30 ÷ 10:35	7	CONSTITUTIVE MODELLING OF POLYMER FOAMS USING AN ASYMMETRIC POISSON'S RATIO	Márton Kammerer Attila Kossa
10:35 ÷ 10:40	52	2D AXISYMMETRIC VS. 3D SOLID ELEMENT PHASE-FIELD DAMAGE MODELING	Vladimir Dunić Aleksandar Bodić Miroslav Živković



10:40 ÷ 10:45	20	AUTOMATION OF CONSTITUTIVE MODEL PARAMETER IDENTIFICATION	Dragan Rakić Slobodan Radovanović Miroslav Živković
10:45 ÷ 10:50	4	DYNAMIC CALIBRATION OF A MODEL OF A MIXED STRUCTURE BRIDGE DECK BASED ON DYNAMIC TESTS OF THE BRIDGE	Cristian Lucian Ghindea Radu Iuliu Cruciat Andrei Gheorghe Pricopie Adrian Aurelian Diaconu Ionut Radu Racanel
10:50 ÷ 10:55	11	COMPARATIVE EVALUATION OF THE ELASTIC MODULUS IN CEMENT PASTES USING ULTRASONIC AND 3-MIN-CREEP TESTING	Sophie Schmid Olaf Lahayne Bernhard Pichler
10:55 ÷ 11:00	48	EFFECT OF PRIOR CREEP ON TENSILE PROPERTIES OF AA2124/SIC COMPOSITES	Agnieszka Rutecka Zbigniew L. Kowalewski
11:00 ÷ 11:05	3	THE INFLUENCE OF BUILD PARAMETERS ON THE COLLAPSE BEHAVIOUR OF A HIGHLY POROUS RANDOM OPEN-CELL LATTICE 3D PRINTED IN IN718 ALLOY	Tomasz Libura Judyta Sienkiewicz Zbigniew Nowak Zbigniew Kowalewski Alexis Rusinek George Voyiadjis Urvashi Gunputh Paul Wood
11:05 ÷ 11:10	2	EXPERIMENTAL STUDY OF HEAT EFFECT ON THE DEFORMATIONS OF AL/CU BIMETAL IN 3-POINT BENDING	Robert Uścińowicz
11:10 ÷ 11:15	9	MECHANICAL RESPONSE OF PA6 UNDER ENVIRONMENTAL CONDITIONS: A DUAL APPROACH USING EXPERIMENTS AND NUMERICAL ANALYSES	Nicolae Stefanoaea Olivia Laura Petrascu Adrian Marius Pascu
11:15 ÷ 11:20	22	EXPERIMENTAL AND NUMERICAL ANALYSIS OF LASER-CUT PNEUMATIC SOFT ROBOT STRUCTURES	Kata Ruzsa Szabolcs Berezvai



11:20 ÷ 11:25	43	EXPERIMENTAL DETERMINATION OF THE EFFICIENCY OF A COMPOUND PLANETARY GEARBOX	Sanjin Troha Kristina Marković Željko Vrcan Filip Šulj Miroslav Milutinović
11:25 ÷ 11:30	35	DEVELOPMENT OF A TEST DEVICE (FIXTURE) FOR DETERMINING THE PULL-OUT FORCE OF SWAGED BALL TERMINATIONS ON CONTROL CABLES	Milan Blagojević Živče Šarkočević Milan Bojović Ivica Čamagić
11:30 ÷ 11:35	49	INFLUENCE OF FEED RATE ON SURFACE ROUGHNESS OF AL6088 ALLOY IN THE BALL BURNISHING PROCESS	Vladimir Kočović Dragan Džunić Sonja Kostić Živana Jovanović Pešić Milan Đorđević Ljiljana Brzaković Đorđe Vukelić
11:35 ÷ 12:30	DISCUSSION AT POSTERS		
12:30 ÷ 13:00	CLOSING CEREMONY		
13:00 ÷ 14:00	LUNCH		



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