

34th Danubia-Adria Symposium on Advances in Experimental Mechanics



19 - 22 September 2017, Trieste, Italy

Tuesday, September 19

University of Trieste, Piazzale Europa 1, Aula Magna, Bldg. A, 3rd floor

Wednesday, September 20

Ex Military Hospital (RTM Living), Ex Ospedale Militare, via Fabio Severo 40

Thursday, September 21

Ex Military Hospital (RTM Living), Ex Ospedale Militare, via Fabio Severo 40

Friday, September 22

Ex Military Hospital (RTM Living), Ex Ospedale Militare, via Fabio Severo 40

Tuesday, September 19		
University of Trieste, Aula Magna		
16.30	Registration	
17.30	Opening	
	ORAL OPENING	
	Chairpersons: C. Bernal, L. Borbás	
18.10	Oral1 8054	Structural analysis 1 (Shinichi Suzuki) MEASUREMENT OF OPENING DISPLACEMENT AND STRESS INTENSITY FACTOR OF TWO BRANCHES OF BIFURCATED NOTCH BY MOIRE INTERFEROMETRY
18.35	Oral2 8090	Recent developments in international Standardization and technical regulations 1 (Helmut J. Holl) INTEGRATION OF THE GENDER APPROACH IN THE DESIGN PROCESS OF MECHATRONIC PRODUCTS
19.00	Happy Hour	
20.30		

Wednesday, September 20				
Ex Military Hospital (RTM Living)				
8.00	Registration			
ORAL 1				
Chairpersons: P. Pyrzanowski, A. Strozzi				
8.30	Oral3	8076	Material characterization and testing (Dan M. Costantinescu) FABRICATION OF NANOCOMPOSITES WITH SILICA NANOPARTICLES	
8.55	Oral4	8085	Structural analysis 2 (Gazić, Goran) EVALUATION OF OUT-OF-PLANE DEFORMATION OF MASONRY INFILL WALLS DUE TO IN-PLANE LOADING BY DIGITAL IMAGE CORRELATION	
9.20	Oral5	8081	Material characterization and testing 2 (Bernasconi) FEASIBILITY STUDY OF STRAIN PROFILE MEASUREMENT BY A DISTRIBUTED FIBER OPTIC SENSING SYSTEM UNDER MODE I INTERLAMINAR FRACTURE TOUGHNESS OF FIBER-REINFORCED POLYMER MATRIX COMPOSITES	
9.45	Oral6	8030	Structural analysis 3 (Szabolcs Berezhvai) EXPERIMENTAL INVESTIGATION OF THE SHEAR ANGLE VARIATION DURING ORTHOGONAL CUTTING	*
10.10	Coffee Break			
POSTER 1				
Chairpersons: M. Milos, S. Suzuki				
10.30	Poster1	8003	A LOW-COST CABLE-SUSPENDED PARALLEL MANIPULATOR FOR TESTING 3D OLFACTION ALGORITHMS	Dino Hüllmann
10.35	Poster2	8005	THE FMECA ANALYSIS AND THE MECHANICAL FAILURES IN RADIOLOGY	Manuela Stroili
10.40	Poster3	8016	LASER WELDED INCONEL ROTOR BLADES FOR TIP-JET HELICOPTER	Nenad Kolarevic
10.45	Poster4	8039	STRAIN GAUGE MEASUREMENT OF PROPELER BLADE VIBRATION DURING OPERATION ON AIRCRAFT DIESEL ENGINE	Rosa Jindrich
10.50	Poster5	8062	A CONCEPT FOR AN AERIAL BASED LANDFILL MONITORING SYSTEM	Niels Paul
10.55	Poster6	8072	A METHOD PRESENTED BY MEASUREMENTS TO PREVENT HARMFUL EFFECTS OF ICING FORMING ON GROUND WIRES OF HIGH-VOLTAGE TRANSMISSION LINES	Tamas Bagi*

11.00	Poster7	8080	HIGH PERFORMANCE FLYWHEEL TECHNOLOGY FOR ELECTRIC ENERGY STORAGE USING MAGNETIC BEARINGS	Stefan Gössinger
11.05	Poster8	8088	CHATTER DETECTION AND AVOIDANCE USING A SENSORY TOOL HOLDER	Paul Schörghofer*
11.10	Poster9	8082	EXPERIMENTAL INVESTIGATION OF FRICTION REDUCTION BY SUPERIMPOSED VIBRATIONS	Martin Meindlhumer*
11.15	Poster10	8027	DEVELOPMENT OF THE ADAPTABLE ENERGY ABSORBERS FOR CAR CRASHES	Milan Růžička
11.20	Poster11	8045	PEG-IN-HOLE OPERATION USING A COBOT WITHOUT USING EXTERNAL SENSORS	Stefano Seriani
11.25	Poster12	8015	MEASURING PARAMETERS OF PHOENIX-100 GAS-GENERATOR	Kolarević Nenad*
11.30	Poster13	8018	NUMERICAL AND ANALYTICAL STUDIES OF A SHAKER TEST SYSTEM FOR FATIGUE TESTING	Philipp Renhart*
11.35	Poster14	8019	DEVELOPMENT OF A NEW SPECIMEN SETUP FOR HIGH PRECISION UNIAXIAL TENSION-COMPRESSION TESTS OF RUBBER	Lars Kanzenbach*
11.40	Poster15	8021	DIC DEFORMATION ANALYSES OF MG SPECIMENS AT ELEVATED TEMPERATURES	Lehmann, Thomas
11.45	Poster16	8035	PRELIMINARY STUDIES FOR ALTERNATIVE LATTICE CORE DESIGN FOR FDM 3D PRINTED SANDWICH PANELS	Michał Kowalik
11.50	Poster17	8036	RFID SENSOR SYSTEM EMBEDDED IN CONCRETE - VALIDATION OF UHF ANTENNA GEOMETRIES IN DIFFERENT CONCRETE DEPTHS	Sergej Johann
11.55	Poster18	8047	MECHANICAL PROPERTIES OF Ti-6Al-4V SAMPLES PRODUCED WITH ADDITIVE TECHNOLOGY	Zoltan Keresztes*
12.00	Poster19	8002	AN INNOVATIVE MECHANICAL TESTING METHOD FOR MEASURING YOUNG'S MODULUS OF A THIN FLEXIBLE MATERIAL (OWN-WEIGHT CANTILEVER METHOD)	Atsumi Ohtzuki
12.05	Poster20	8053	SURFACE PROPERTIES OF PLASMA NITRIDED TEMPERED STEEL	Dorina Kovács*
12.10	Posters viewing			
13.15	Lunch			
14.30	Excursion			

Thursday, September 21				
Ex Military Hospital (RTM Living)				
ORAL 2				
Chairpersons: R. Kiss, M. Růžička				
8.30				
	Oral7	8025	Material characterization and testing 3 (Daniel Steiner) ENHANCING THE LABORATORY ASSESSMENT OF THE THERMAL CRACKING RESISTANCE OF ASPHALT MIXTURES	*
8.55				
	Oral8	8026	Instrumentation 1 (Martin Stockmann) 25 YEARS BASIC RESEARCH IN THE FIELD OF STRAIN GAGE TECHNOLOGY ON CHEMNITZ UNIVERSITY OF TECHNOLOGY - INSTITUTE OF MECHANICS	
9.20				
	Oral9	8075	Material characterization and testing 4 (Srnc Novak, Jelena) METALLURGICAL AND SURFACE DAMAGE ANALYSIS IN A COPPER MOLD AFTER SERVICE	
9.45				
	Oral10	8056	Structural analysis 4 (Zemčík, Robert) IMPACT RECONSTRUCTION AND LOCALIZATION ON LAMINATED STRUCTURE	
10.10	Coffee Break			
POSTER 2				
Chairpersons: O. Bokůvka, D.M. Constantinescu				
10.30	Poster21	8094	MECHANICAL CHARACTERIZATION OF 3D-PRINTED SAMPLES	Alberto Dal Maso*
10.35	Poster23	8049	DO MODERN CONCRETES EXHIBIT SIMILAR EARLY-AGE STIFFNESS AND STRENGTH DEVELOPMENTS AS THEIR PREDECESSORS?	Bernhard Pichler
10.40	Poster24	8034	A NEW PROCEDURE FOR AUTOMATIC PATH PLANNING IN BRONCHOSCOPY	Stefan Dan Pastrama
10.45	Poster25	8031	EFFECTS OF PERTURBATION DIRECTION ON SINGLE-LEG STANCE BALANCE RECOVERY PERFORMANCE	Petró, Bálint
10.50	Poster26	8070	DETERMINATION OF DIFFERENCE BETWEEN SIMILAR POLYMER MODELS SIMULATING THE BEHAVIOUR OF BIOLOGICAL TISSUES	Kmiecik Barbara*

10.55	Poster27	8033	EXAMINATION OF SAILORS' BALANCING ABILITY CONSIDERING THE ROLE OF THE HEAD MOVEMENT	Bernadett Kiss*
11.00	Poster28	8037	LYMPHEDEMA TREATMENT'S EFFECT OF GAIT PARAMETER	Zsofia Palya*
11.05	Poster29	8042	NON-INVASIVE METHOD FOR PARAMETER IDENTIFICATION IN A LUMPED MODEL OF PULMONARY CIRCULATION	Zdravko Virag
11.10	Poster30	8043	EVALUATION OF ANATOMICAL LANDMARK CALIBRATION ACCURACY OF A MOTION CAPTURE BASED GAIT ANALYSIS SYSTEM	Kristóf Rácz*
11.15	Poster31	8048	3D-PRINTABLE FOOT PROSTHESIS DESIGN FOR TRANSTIBIAL AMPUTEES	Bence Rochlitz*
11.20	Poster32	8092	CONCEPT OF THE NEW SYSTEM FOR THE MANDIBLE BASE FRACTURE FIXATION	Agnieszka Szust
11.25	Poster33	8060	SHORT TERM EVALUATION OF CHANGES IN ELASTIC PROPERTIES OF BOVINE TRABECULAR BONE DUE TO THE STORAGE METHOD	Adam Mazurkiewicz
11.30	Poster34	8061	INFLUENCE OF THE TRABECULAR BONE STRUCTURE INDICATORS ON ITS STATIC STRENGTH AND FATIGUE LIFE	Adam Mazurkiewicz
11.35	Poster37	8065	OSSEOINTEGRATION SPECIFIED GRIT BLASTING PARAMETERS	Alexandra Kemény*
11.40	Poster38	8084	CORROSION BEHAVIOUR OF OVERLAPPING CORONARY ARTERY STENTS	Dóra Károly*
11.45	Poster69	8051	VERIFICATION OF 3D DIC SOFTWARE FOR CURVILINEAR SURFACES USING FE METHOD AND RAY-TRACING	Karol Suprynowicz
11.50	Poster39	8089	IMPLEMENTATION OF CORRECTNESS CRITERIA FOR THE BONE STRUCTURE ANALYSIS BY MEANS OF A HAND-HELD X-RAY SYSTEM	Alessandra Nicolosi*
11.55	Poster 40	8097	BONE STRUCTURE AND FRAGILITY FRACTURE RISK FACTORS: A POPULATION ANALYSIS	Alessandra Nicolosi*
12.00	Posters viewing			
13.15	Lunch			
ORAL 3				
Chairpersons: A. Freddi, S. Pastrama				
14.30	Oral11 8091	Material characterization and testing 5 (Belan Juraj) THE INFLUENCE OF IN718 ALLOY ANNEALING ON FATIGUE LIFETIME CHANGES		
14.55	Oral12 8046	Structural analysis 5 (Felix Kresinsky) FAILURE MECHANISM IN FEATHERED KEY SHAFT HUB CONNECTIONS UNDER TORSIONAL LOAD		
15.20	Coffee Break			

POSTER 3				
Chairpersons: A. Kossa, J. Eberhardsteiner				
15.40	Poster41	8023	CHARACTERIZATION OF THE TEMPERATURE BEHAVIOR OF A PIEZORESISTIVE ACCELEROMETER	Sergej Johann
15.45	Poster42	8032	MOTION CAPTURE SYSTEM VALIDATION WITH SURVEYING TECHNIQUES	BERNADETT KISS
15.50	Poster43	8073	A NEW METHODOLOGY FOR MEASURING THE FLOWABILITY OF GRANULAR MATERIALS	Ragunanth Venkatesh*
15.55	Poster44	8087	MOTION DEVIATIONS OF A ROTATIONAL POSITIONING TABLE INDUCED BY THERMAL EFFECTS	Michael Nirtl*
16.00	Poster45	8010	CORROSION RESISTANCE OF S355J2 STEEL WELDED BY SAW BEFORE AND AFTER SURFACE TREATMENT BY PHOSPHATING	Kamil Borko*
16.05	Poster46	8011	THE EFFECT OF ULTRASONIC IMPACT TREATMENT (UIT) ON ELECTROCHEMICAL CHARACTERISTICS OF AZ31 MAGNESIUM ALLOY	Daniel Kajánek*
16.10	Poster47	8013	FATIGUE PROPERTIES OF AW 6082 ALUMINIUM ALLOY AFTER SHOT PEENING AND ANODIZING	Novy F.
16.15	Poster48	8006	DEPENDENCE OF MECHANICAL PROPERTIES ON VOLUME OF Si AND Cu IN SECONDARY Al-Si-Cu CAST ALLOY	Lenka Kuchariková
16.20	Poster49	8007	DELAMINATION GROWTH ANALYSIS IN MODE I BY MEANS OF LAMB WAVES	Lenka Michalcová
16.25	Poster51	8071	EXPERIMENTAL STUDIES ON EFFECT OF HYDROLYTIC DEGRADATION ON ADDITIVE MANUFACTURED POLYMERIC PARTS	Andrzejewska Angela*
16.30	Poste52	8040	DEVELOPMENT OF A MINING MACHINE SEAT MODEL	Paulina Działak*
16.35	Poster53	8057	EXPERIMENTAL MODELING APPROACH FOR DETERMINING THE MOISTURE DAMPING EXPONENT OF A BLUETOOTH LOW ENERGY SIGNAL IN MOIST BUILDING MATERIAL	Laura Moldenhauer*
16.40	Poster55	8069	IMPACT OF THE ECAP PROCESS ON THE MACHINABILITY OF ALUMINUM (EN AW-6082)	Gerhard Wiesinger *
16.45	Poster56	8079	INFLUENCE OF MHP-TECHNOLOGY ON THE SURFACE NEAR MATERIAL STRUCTURE OF STAINLESS STEEL 1.4301	Stephan Krall*
16.50	Poster57	8008	SECONDARY CAST AL-ALLOYS WITH HIGHER CONTENT OF IRON	Denisa Závodská*
16.55	Poster58	8086	MODEL BASED RESEARCH OF CLIMBING CARABINERS	Agnieszka Szust
17.00	Poster59	8050	CHARACTERIZATION AND MODELING OF THE FATIGUE BEHAVIOR OF TPU	Jürgen Holzweber*
17.05	Poster60	8040	DEVELOPMENT OF A MINING MACHINE SEAT MODEL	Paulina Działak
17.10	Poster65	8059	COMPARISON OF THE METALLURGICAL PROPERTIES AND SURFACE CHARACTERISTICS OF DIFFERENT ORTHODONTIC ARCHWIRES ALLOYS	Ziety Anna*
17.15	Posters viewing			
18.00	Scientific Committee			
20.00	Gala Dinner			

Friday, September 22				
Ex Military Hospital (RTM Living)				
ORAL 4				
Chairpersons: L. Krstulović-Opara, M. Stockmann				
8.30				
	Oral13	8055	Material characterization and testing 6 (Bernal, Celina) DEVELOPMENT OF MULTIFUNCTIONAL SELF-REINFORCED COMPOSITES	
8.55				
	Oral14	8074	Material characterization and testing 7 (Alexandra Aulova) EFFECT OF ACID CONCENTRATION ON MECHANICAL PROPERTIES OF PA6 FOILS PREPARED BY METHOD OF CHANGING PHASE STATES	
9.20				
	Oral15	8009	Integration of mathematical/numerical methods with experimental mechanics (Dijana Damljanovic) INTER-FACILITY CORRELATIONS OF TRANSONIC TEST RESULTS OF THE AGARD- C STANDARD WIND-TUNNEL MODEL	
9.45				
	Oral16	8028	Material characterization and testing 8 (Tomasz Libura) THE BAUSCHINGER EFFECT IN THIN SHEET MAGNESIUM ALLOY USING ANTI- BUCKLING FIXTURE	*
10.10	Coffee Break			
POSTER 4				
Chairpersons: Z. Kowalewski, B. Pichler				
10.30	Poster61	8012	MOTOR SPEED TRANSFER FUNCTION FOR WIND VECTOR ESTIMATION ON MULTIROTOR AIRCRAFT	Dino Hüllmann
10.35	Poster62	8095	ANALYSIS OF THE PROPERTIES OF AW6082 ALUMINIUM ALLOY WELD JOINTS PRODUCED WITH DISK LASER	Miroslav Sahul
10.40	Poster63	8044	EXPERIMENTAL AND NUMERICAL INVESTIGATION OF WATER JETS	Norbert Krouzecky
10.45	Poster64	8096	IMPROVING THE FATIGUE STRENGTH OF IMPAIRED WELDS BY OVERLOADING	Gajdoš, Ľubomír
10.50	Poster66	8078	MEASURING STABILITY OF MILLING PROCESS	Zoltan Dombovari
10.55	Poster67	8029	ON THE CRUCIFORM SPECIMENS FOR MATERIALS TESTING	Tadeusz Szymczak

11.00	Poster68	8038	INVESTIGATION OF THE CHIP FORMATION USING HIGH-SPEED CAMERA AND FINITE ELEMENT METHOD	Attila KOSSA
11.05	Poster69	8083	EXPERIMENTAL AND NUMERICAL ANALYSES OF THE IMPACT RESPONSE OF LIGHTWEIGHT SANDWICH PANELS	Dan Constantinescu
11.10	Poster70	8017	EXPERIMENTAL DETERMINATION OF MATERIAL MODEL OF MACHINE PARTS PRODUCED BY SLS TECHNOLOGY	Lajos Borbas
11.15	Poster71	8052	PULSE PHASE THERMOGRAPHY: IMPACT DAMAGE RETRIEVAL	Lovre Krstulović-Opara
11.20	Poster72	8024	RATE DEPENDENCY OF INTERFACE FRAGMENTATION IN AL-MG-COMPOUNDS	Carola Kirbach
11.25	Poster73	8004	FATIGUE PERFORMANCE OF REINFORCED SINGLE LAP JOINTS IN A CARBON FIBRE COMPOSITE	Hron Robin
11.30	Poster74	8020	ANALYSIS OF A SEGMENTED LOCKING RING FOR SHELL-BOTTOM CONNECTION IN PRESSURE VESSELS	Antonio Strozzi
11.35	Poster75	8067	NUMERICAL AND EXPERIMENTAL IDENTIFICATION OF CRACK IN THE STACKER CONSTRUCTION	Paweł Maslak
11.40	Poster76	8066	TENSION IDENTIFICATION OF PIPELINE COMPENSATORS	Paweł Maslak
11.45	Posters viewing			
13.00	Closing			
13.15	Lunch			
14.30				