

7th International Conference on Advanced Materials and Structures

AMS'18

28-31 March 2018 Timișoara, Romania

Conference Program		
Wednesday 28/03/2018		
17:00-19:00	Registration	Casa POLITEHNICII 2 (University guesthouse) Blv. Mihai Eminescu 2
19:00-21:00	Welcome reception	
Thursday 29/03/2018		
8:00-9:00	Registration	Central Library of Politehnica University Timisoara, Vasile Pârvan 2B 300223 Timișoara
9:00-9:30	Welcome addresses	
9:30-10:30	Plenary Session 1 (Papers 1, 2)	
10:30-10:45	Coffee Break	
10:45-12:15	Plenary Session 2 (Papers 3, 4, 5)	
12:30-13:30	Lunch	
14:00-16:00	Parallel Sessions 1	
16:00-17:00	Coffee Break + Poster Session	
17:00-18:30	Parallel Sessions 2	
19:30-22:00	Conference Dinner	
Friday 30/03/2018		
8:30	Departure to Hunedoara	Central Library of Politehnica University Timisoara, Vasile Pârvan 2B, Timișoara
11:30-12:30	Closing ceremony + Closing lectures (Papers 6, 7, 8)	Faculty of Engineering of Hunedoara
13:00-15:00	Visit of the Corvin Castle Hunedoara	
15:00-16:00	Lunch	
16:30	Departure to Timisoara	
Saturday 31/03/2018		
9:00-10:30	Visit of ICER Timisoara	Str. Gavril Muzicescu 138
10:30-12:00	City tour of Timisoara	

Thursday 29/03/2018

Plenary Session 1 (Papers 1, 2)

Chairman: **L. Marsavina** (Romania)

9:30-10:00 Education and research at Óbuda University
Mihály RÉGER, Zoltán RAJNAI (Hungary)

10:00-10:30 Microstructure based modelling of advanced materials and structures
Ewald WERNER (Germany)

Plenary Session 2 (Papers 3, 4, 5)

Chairman: **M. Nicoara** (Romania)

10:45-11:15 Computational advantages of the local strain energy density for fracture and fatigue design
Filippo BERTO, L. Sandnes, J. Torgersen (Norway)

11:15-11:45 Plasticity induced by minor addition of “soft” atoms in Ti-based bulk metallic glasses
Mariana CALIN, S. Bera, R. Parthiban, M. Stoica, J. Eckert (Germany)

11:45-12:25 Benefits of the numerical calculation in the material engineering. Case of a highly heterogeneous material: the Hot Mix Asphalt
Joseph ABSI (France)

Parallel Sessions 1

Advanced materials - amorphous, nano-structured materials, composites, cellular materials, biomaterials – Sala Polivalenta Room

Chairmans: **R. Brighenti** (Italy) and **I. Riposan** (Romania)

14:00-14:15 – Mechanics of active mechano-chemical responsive polymers
R. Brighenti, F. Artoni, M. P. Cosma

14:15-14:30 – Production of Geopolymer Composite Materials with Sodium Silicate Activator by using Fly Ash
H. Öznur Öz, N. Doğan-Sağlamtimur, A. Bilgil, T. Köker, T. Vural

14:30-14:45 – Evaluation of the elastic properties of highly porous alumina foams using finite element analysis
D.A. Şerban, N. Tessier-Doyen, J. Absi, L. Marşavina, R. Negru

14:45-15:00 – Structure characteristics of silicon alloyed ductile cast iron
S.C. Stan, M. Chisamera, I. Riposan, E.L. Neacsu, A.M. Cojocaru

15:00-15:15 – Solar Powder Metallurgy: preparation of TiC – TiB₂ ceramic foam
J. Kováčik, T. Dvůrák, Š. Emmer, J. Rodriguez, I. Cañadas

15:15-15:30 – Issues of Direct Application of Fracture Toughness Determination Procedures to Coupled Composite Laminates
S. Samborski, J. Rzeczkowski, J. Paśnik

15:30-15:45 – Long-term Stable Electrodes Based on Platinum Electrocatalysts Supported on Titanium Sintered Mesh for the Use in PEM Fuel Cells
U. Rost, P. Podleschny, M. Schumacher, R. Muntean, D.T. Pascal, C. Mutascu, J. Koziolk, G. Marginean, M. Brodmann

15:45-16:00 – Consolidated composites with natural textile fabrics
M.P. Todor, C. Bulei, T. Heput, I. Kiss

Surface engineering and Modern fabrication, joints and recycling technologies – K1 Room

Chairmans: F. Berto (Norway) and N. Tessier-Doyen (France)

14:00-14:15 – Simultaneous hot isostatic pressing and solution annealing of aluminum cast alloys followed by instantaneous aging at elevated temperatures
S. Hafenstein, E. Werner

14:15-14:30 – Mechanical behaviour of narrow gap MAG welding of API 5L X65M steel pipeline
D. Simionescu, I. Mitelea, M. Burcă, I.D. Uțu

14:30-14:45 – Comparison of the Corrosion Behaviour of Differently Deposited PVD TiN/TiO₂ Coatings on Electron Beam Modified Ti5Al4V Alloy
M.P. Nikolova, E. Yankov, T. Hikov, D. Dechev, N. Ivanov, S. Parshorov, V. Zaharieva, P. Petrov

14:45-15:00 – Effect of the Reinforcement on the Shrinkage and the Warpage of the Injected Parts
D.V. Stan

15:00-15:15 – The influence of the cutting tools parameters on Inconel CNC manufacturing
A. But, L. Gal

15:15-15:30 – The effect of the sampling distance of the roughness parameters in a case of abrasive worn microtopographies
I. Barányi

15:30-15:45 – Surface Integrity Investigation for Abrasive Flow Machining: Industrial Application
M.A.M. Sayed, S.M.A. Mahdy

15:45-16:00 – Surface characterization of DLC layers PVD coated on AISI 52100 steel substrate
D.I. Feldiorean, D. Cristea, L. Jakab-Farkas, M.H. Tierean

Materials damage under time-dependent-actions (fatigue, creep, impact, corrosion) – K2 Room

Chairmans: I. Peter (Italy) and R.G. Gillich (Romania)

14:00-14:15 – Effect of Tungsten Inert Gas welding on the microstructure and the fatigue resistance of ZE41 magnesium alloy
I. Peter, M. Rosso

14:15-14:30 – A method to precise determine the Young's modulus from dynamic measurements
L. Barboni, G.R. Gillich, C.P. Chioncel, C.O. Hamat, I.C. Mituletu

14:30-14:45 – Identification of delamination in multilayered composites
C. Tufis, G.R. Gillich, O. Vasile, Z.I. Korca, C.O. Hamat

14:45-15:00 – Mechanical behaviour of MIG pulsed welded joints from 6082 T6 aluminium alloy
C.P. Lucian, I. Mitelea, M. Burcă, I.D. Uțu

- 15:00-15:15 – Determination of material characteristics of bearing balls through statical and dynamical actuation
T. Manescu, G. Balan, R. Avram
- 15:15-15:30 – The Effect of Zinc Stearate Modification on Aging Characteristics of Asphalt Binder
P. Hajikarimi, H. Shahsavari, M. Rahi, F. Sharif, F. M. Nejad
- 15:30-15:45 – The influence of processing parameters on the magnetic properties of Fe-P soft magnetic cores
B. V. Neamțu, T. F. Marinca, F. Popa, M. Tamas, T. Fodor, I. Chicinaș
- 15:45-16:00 – Micromechanical behaviour of asphalt concrete based on X-ray computed tomography images and random generation of heterogeneous aggregates skeleton
Y. El Haloui, F. Fakhari Tehrani, J. Absi, F. Courreges, M. Elomari, F. Allou, C. Petit

Poster Session

Chairman: *A. Tulcan (Romania)*

Paper code / Title / Author(s)

- 001 – Experimental analysis of tribological behaviour of organic composites materials
AL Craciun, C Pinca-Bretotean, ID Utu, A Josan
- 002 – Effect of silica fume and siliceous fly ash addition on the fracture toughness of concrete in Mode I
DM Gil, GL Golewski
- 003 – The generalized fracture toughness of 28-day fly ash concrete
GL Golewski
- 004 – The dispersion of the heat flow in the engine compartment. Case study ford fiesta 1. 4i
C Birtok Baneasa, A Budiul Berghian, SA Ratiu, DM Stoica
- 005 – Effect of nano admixture of CSH on selected strength parameters of concrete including fly ash
B Szostak, GL Golewski
- 008 – Recovery and valorification of iron from industrial waste
O Lupu, L Zgripcea, A Socalici, E Ardelean
- 009 – The reintroduction into the economic circuit of waste with a content of iron and steel components for alierea
SG Șerban, M Flori
- 011 – Influence of the Chemical Composition, Structure and Heat Treatment on the Topography and Mechanical Properties of Ti5Al4V and Ti6Al4V after Electron Beam Surface Treatment
MP Nikolova, E Yankov, D Nikolov, D Tonev, V Zaharieva, M Ormanova, S Valkov, T Hikov, P Petrov
- 014 – Changes in the Mechanical Properties of Ti Samples with TiN and TiN/TiO₂ Coatings Deposited by Different PVD Methods
E Yankov, MP Nikolova, D Dechev, N Ivanov, T Hikov, S Valkov, V Dimitrova, M Yordanov, P Petrov
- 015 – Determination of Young's modulus of surface coating paint with impulse excitation technique and analysis of laser signals
E Nyaguly, I Crăștiu, D Vlădaia, G Drăgănescu, Liviu Bereteu
- 016 – Design and dynamic analysis of fixture behaviour used for vibration testing of some automotive

components

A B Bârgău, D Simoiu, C Gozman-Pop, D Vlădaia, LC Berce, L Bereteu

- 017 – Use of aqueous NaOH solutions to recover silver from radiographic films
L Cănda, E Ardelean, T Heput, M Ardelean
- 023 – Recovering aluminium for recycling in reusable backyard foundry that melts aluminium cans
C Bulei, MP Todor, T Heput, I Kiss
- 025 – Cracking risk analysis of the mass concrete in a function of ambient temperature
E Domonyi
- 030 – Impact of exploitation flaws on load capacity of tempered glass stairs assessed by numerical analyse with XFEM
D Pietras, T Sadowski, L Wójcik
- 033 – Studies on pulse electrodeposition of Pt-Ni binary alloy for electrochemical cell applications
R Muntean, DT Pascal, U Rost, P Podleschny, M Schumacher, G Mărginean
- 034 – Description of Brittle Behaviour of Alumina/Zirconia 2 Phase Ceramics
T Sadowski, L Marsavina, E Craciun, D.Pietras
- 037 – Plastic Strain Accumulation at Thermal Cycles for Solder Alloys
C Linul, E Linul
- 038 – Microstructure and phase composition of NiCrBSi-TiB₂ vacuum furnace fused flame-sprayed coatings
N Kazamer, PC Vălean, DT Pascal, R Muntean, GM Mărginean, VA Șerban
- 042 – Numerical analysis of two types polymeric fibre composite materials with different reinforcement architecture for creation of innovative snap-fit joints
P Golewski, T Sadowski
- 043 – An influence of UV ageing process on tensile strength and Young's modulus of polymeric fiber composite materials
P Golewski, T Sadowski
- 047 – Application of the CZM technique to delamination analysis of coupled laminate beams
J Paśnik, S Samborski, J Rzeczkowski
- 048 – Ti-Ta high temperature shape memory alloys
GA Chilnicean, A Novac, R Sprancenatu, CM Craciunescu
- 051 – Mechanical response of combined thin-walled boxes under complex mechanical loading conditions - FEM analysis
T Sadowski, M Nowicki
- 052 – Fracture energy of basalt fibre reinforced high performance concrete
P Smarzewski
- 053 – Influence of silica fume on mechanical properties of high performance concrete
P Smarzewski
- 054 – Electrochemical Corrosion Behavior of High Temperature Vacuum Braze WC-Co-NiP Functional Composite Coatings
DT Pascal, N Kazamer, R Muntean, PC Valean, GM Marginean, VA Serban

- 060 – Prediction of the Biomechanical Behavior of All-Ceramic Dental Restorations after Cyclic Loading using FEA
L Porojan, S Porojan, F Topală
- 063 – Fracture Behavior of Monolithic Hot-Pressed Posterior Ceramic Dental Crowns
L Porojan, L Rusu, A Boloş, C Savencu, S Porojan
- 068 – Thermal analysis of high Si ductile iron
AM Cojocaru, EL Neacsu
- 069 – Thermal analysis of inoculated grey cast irons
EL Neacsu, AM Cojocaru
- 070 – Wood fibre reinforced geopolymer composites
G Furtos, L Silaghi-Dumitrescu
- 071 – Stochastic micromechanics with FFT-based spectral methods
T Sadowski, B Pankowski
- 072 – Effect of Coffee Grounds Addition on Efflorescence in Fly Ash-based Geopolymer
D Mierzwiński, K Korniejenko, M Łach, J Mikula, J Krzywda
- 073 – The Mechanical Properties of Waste Tire Cords Reinforced Geopolymer Concretes
M Łach, A Kiszka, K Korniejenko, J Mikula
- 074 – Manufacturing and compressive mechanical behavior of reinforced polyurethane flexible (PUF) foams
E Linul, PA Linul, C Linul, L Marsavina, D Silaghi-Perju
- 075 – The effect of manufacturing on the press fit insertion force
DI Maxim, L Marsavina, L Rusu
- 076 – Eco-friendly improvement of water erosion resistance of unstable soils with biodegradable polymers
A Donayre, LF Sanchez, S Kim, R Aguilar, J Nakamatsu
- 078 – An Overview of Current Applications of Inorganic-organic Polymers
K Korniejenko, B Tyliszczak, M Łach, J Mikula, M Hebdowska-Krupa, D Mierzwiński
- 079 – Microstructure and wear behaviour of Ti reinforced HVOF coating
A Szabo, ID Utu, I Hulka, I Bordeasu, I Mitelea
- 081 – Analysis of cavitation erosion resistance of grey cast iron EN-GJL-200 by the surface induction hardening
E Riemschneider, I Bordeasu, I Mitelea, ID Utu
- 082 – The anisotropy effect of closed-cell Polyisocyanurate (PIR) rigid foam under quasi-static compression loads
E Linul, L Marsavina, M Georgescu
- 083 – Fracture Toughness Investigation of Polyurethane Rigid (PU) Foams Using Single Edge Cracked (SEC) Specimens
E Linul, L Marsavina, C Codrescu
- 084 – Compressive behavior and energy absorption capability of reinforced closed-cell aluminum alloy foams
E Linul, L Marsavina, J Kovacik

- 085 – Roughness parameters during cavitation exposure of nodular cast iron with ferrite – pearlite microstructure
T Bena, I Mitelea, I Bordeasu, CM Craciunescu
- 090 – CoCr based alloys in current dental prosthetic applications
L Reclaru, LC Ardelean
- 091 – Evaluation of the mechanical properties and failure mechanism of fibres formed in municipal wastewater systems
SV Galatanu, D Micota, L Marsavina, S Muntean
- 092 – Investigations on the Characteristics of Thermally Sprayed NiCrBSi Coatings Fused by Flame and Inductive Processing
PC Vălean, N Kazamer, R Muntean, DT Pascal, Y Kilic, G Mărginean, VA Șerban
- 093 – Research regarding capacitor discharge stud welding with tip ignition on galvanized thin sheets
A Magda, M Burca, M Lego
- 094 – Metal foam-filled tubes as plastic dissipaters in earthquake-resistant steel buildings
C Ghiani, E Linul, MC Porcu, L Marsavina, N Movahedi, F Aymerich
- 095 – Influence of real cracks on chloride penetration in reinforced concrete
C Sosdean, L Marsavina, G de Schutter
- 096 – Cobalt layered perovskite type $Y_{0.5}Ca_{0.5}BaCo_4O_7$ as anodic material for sulphite oxidation in neutral media
AF Enache, ML Dan, MA Lăboșel, N Vaszilcsin
- 097 – New electrodes based on Pt-Co alloys used as anodic materials for sulphite oxidation in alkaline fuel cells
AF Enache, ML Dan, R Muntean, N Vaszilcsin
- 098 – Influence of pH on the corrosion behaviour of laser-processed Co-Cr dental alloys in artificial saliva
ML Dan, LV Costea, CE Savencu, L Porojan
- 099 – Comparative study on the corrosion resistance of CAD/CAM and conventional processed Co-Cr dental alloys in NaCl solutions
LV Costea, ML Dan, CE Savencu, L Porojan
- 100 – Influence of Anisotropy and Loading Speed on Compressive Behaviour of Glass Foam
E Linul, L Marsavina
- 101 – Simulation of Thermal Field in Bulk Amorphous Steels
C Codrean, B Radu, D Buzdugan, C Opreș
- 102 – Numerical determination of stress concentration near runner blade – crown/ring junctions
I-C Predoiu, L Marsavina, S Muntean
- 104 – Mechanical characterization of fly ash-based ceramic foams
E Linul, K Korniejenko, DA Șerban, R Negru, L Marșavina
- 105 – Evaluation of different pH solutions on the mechanical behaviour of two hot pressed dental ceramics
RD Vasiliu, D Utu, L Porojan
- 106 – Design of porous structures in shape memory alloy systems
R Sprincenatu, A Novac, G Chilnicean, V Bolocan, C Craciunescu

- 108 – Martensitic transformation in Fe-Pd ferromagnetic shape memory alloy wires
A Novac, R Sprincenatu, G Chilnicean, V Bolocan, C Craciunescu
- 109 – Shape memory alloy films manufactured by magnetron sputtering
V Bolocan, R Sprincenatu, A Novac, G Chilnicean, C Craciunescu
- 110 – Ti-Ta high temperature shape memory alloys
G Chilnicean, A Novac, R Sprincenatu, V Bolocan, C Craciunescu
- 112 – The effects of screen sizes on the surface properties of tempered steel treated by active screen plasma nitriding
D Kovács, A Kemény, A Bonyár, J Dobránszky
- 113 – Comparative study on dry sliding wear resistance of carbon steel, alloyed steel and cast iron
L Nedeloni, ZI Korka, DT Pascal, N Kazamer, MD Nedeloni
- 114 – Impact Modelling of Cermet Composites
E Postek, T Sadowski
- 115 – The particularities of the CMT braze-welding process between ferritic stainless steel - magnesium alloy
N Simon, I Mitelea, M Burca, ID Utu
- 116 – On surface topography and microstructure in cavitation erosion tests of alloy 80 A
C Belin, I Mitelea, I Bordeasu, C Craciunescu
- 118 – Expired domestic drug - paracetamol - as corrosion inhibitor for carbon steel in acid media
DA Duca, ML Dan, N Vaszilcsin
- 119 – Enhancement of Hydrogen Evolution Reaction on Pt-Co Layer Deposited on Copper
DA Duca, ML Dan, AZ Vidinaru, R Muntean, N Vaszilcsin
- 123 – Robust method of dynamic young's modulus determination
CP Chioncel, RG Gillich, IC Mituletu
- 128 – The degrading phenomenon of the cylindrical bearing rollers due to multiple collisions during the manufacturing process
T Manescu, G Balan, R Avram
- 130 – Investigations on dry sliding wear and corrosion resistance of thermal sprayed molybdenum coatings
L Păduraru, L Nedeloni, N Kazamer, R Muntean, DT Pascal, PC Vălean, MD Nedeloni
- 131 – Cavitation erosion and dry sliding wear research on X5CrNi18-10 austenitic stainless steel
MD Nedeloni, E Birtărescu, L Nedeloni, SL Bogdan, B Clavac
- 132 – Some laboratory tests regarding the X20Cr13 martensitic stainless steel behaviour
E Birtărescu, MD Nedeloni, CV Câmpian, T Ene, C Dodenciu, A Pellac
- 133 – Dynamic analysis of satellites used for side-airbag system
C Gozman-Pop, D Simoiu, E Nyaguly, D Vlădaia, AB Bârgău, L Bereteu
- 136 – Assessment of the distribution of nanofibers in membranes based on microstructure photos
P Wolszczak, C Garcia
- 137 – Application of topological measures in estimation of reinforcing bers distribution in composites
P Wolszczak, T Sadowski, S Samborski

- 138 – Structural and optical properties of perovskite-type compounds obtained by ultrasonic method
P Sfirloaga, M Stoia, M Poienar, P Vlazan
- 139 – Influence of synthesis method on the morphology and properties of ABO₃ materials
P Vlazan, M Stoia, P Svera, M Poienar, P Sfirloaga
- 140 – Thermal transformations during fabrication by reactive sintering of Al-based hybrid composites
M Nicoara, D Buzdugan, BV Neamtu, SI Saraolu
- 141 – Experimental assessment of deformability of cement and asphalt-cement matrices with rubber powder additive by application of DIC system
J Kukielka, T Sadowski
- 143 – Thin wall AW3103 pipe – dynamic load concerns
RS Maruta, R Nagy, K Menyhardt
- 144 – Mechanical properties of Fe/Zr dual amorphous phase bulk metallic glasses
M Vodă, C Codrean, D Toşa, VA Şerban
- 145 – Stress and strain determination occurring in contact area of the 450/75 ACSR conductor
D Achiriloaiei, SV Galatanu, I Vetres
- 148 – Study on the obtaining of MnSi_{1.75} intermetallic compound by mechanical alloying
V Cebotari, TF Marinca, F Popa, BV Neamtu, I Chicinaş
- 149 – Quartz sand mechanochemical processing for subsequent magnetic separation
A Cotai, F Popa, TF Marinca, BV Neamtu, I Chicinaş

Parallel Sessions 2

Advanced materials - amorphous, nano-structured materials, composites, cellular materials, biomaterials – Sala Polivalenta Room

Chairmans: **J. Kováčik** (Slovakia) **L. Marsavina** (Romania)

- 17:00-17:15 – W-TiB₂ composite material for Electro-spark deposition
J. Kováčik, Š. Emmer, J. Kulasa, M. Lis, S. Malara, J. Rodriguez, I. Cañadas
- 17:15-17:30 – A parametric study of the mechanical properties of open-cell Kelvin structures
D.A. Şerban, S. Sărăndan, R. Negru, G. Belgiu, L. Marşavina
- 17:30-17:45 – Modelling the bending behaviour of novel fibre-reinforced sandwich structures with polyurethane foam core
O. Weißenborn, S. Geller, J. Jaschinski, M. Gude
- 17:45-18:00 – Topologic study of a novel periodic cellular core for sandwich panels
M.A. Ifimiciuc, S. Lache, M. N. Velea
- 18:00-18:15 – A comparative study of linen (flax) fibers as reinforcement of fly ash and clay brick powder based geopolymers
G. Silva, S. Kim, A. Castañeda, R. Donayre, J. Nakamatsu, R. Aguilar, K. Korniejenko, M. Łach, J. Mikula

18:15-18:30 – Heterogeneous Visco-Hyperelastic Numerical Modeling of Crumb Rubber Modified Asphalt Binders

P. Hajikarimi, F. Fakhari Tehrani, F. M. Nejad, J. Absi, A. Khodaii, M. Rahi, C. Petit

Surface engineering and Modern fabrication, joints and recycling technologies – K1 Room

Chairmans: M. Calin (Germany) and C.M. Craciunescu (Romania)

17:00-17:15 – Comparison of the Phase Composition and Nanohardness of Gradient TiN/TiO₂ Coatings on Ti5Al4V Alloy Deposited by Different PVD Methods

S. Valkov, M.P. Nikolova, E. Yankov, T. Hikov, R. Bezdashnyi, D. Dechev, N. Ivanov, P. Petrov

17:15-17:30 – Influence of the process parameters on the shape and dimensions of the parts obtained by selective laser sintering (SLS)

D.I. Stoia, L. Marsavina, C. Vigarù

17:30-17:45 – Researches regarding heterogeneous welding between carbon and stainless steel used in fabrication of cylinders' rod for magnesium alloy extruders

L. Zgripcea, O. Lupu, M. Ardelean, V. Putan

17:45-18:00 – Gaining the Dimensional Conformity of the Plastic Parts Through the Control of the Shrinkage in the Mould

D.V. Stan

18:00-18:15 – Classical and modern methods of manufacturing on CNC milling centers

A. But, L. Gal

18:15-18:30 – Surface Enhancement of gears using Abrasive Flow Machining; Finishing of a Spur Gear

M.A.M. Sayed Mahdy, S.M.A. Mahdy

18:30-18:45 – Investigation of the Mechanical Properties of Acrylonitrile Butadiene Styrene (ABS)-Nanosilica Reinforced Nanocomposites for Fused Filament Fabrication 3D Printing

P. Kyratsis, D. Tzetzis

Materials damage under time-dependent-actions (fatigue, creep, impact, corrosion) – K2 Room

Chairmans: J. Absi (France) and S. Samborski (Poland)

17:00-17:15 – Assessment of mass variation by vibration-based methods

L. Barboni, G.R. Gillich, Z.I. Korka

17:15-17:30 – Synthesis of composite magnetic core of alloy/MeFe₂O₄ type by classical and spark plasma sintering

T.F. Marinca, B.V. Neamțu, F. Popa, I. Vida-Simiti, I. Chicinaș

17:30-17:45 – Experimental verification of the DCB test configuration applicability to mechanically coupled composite laminates

J. Rzeczkowski, S. Samborski, J. Paśnik

17:45-18:00 – Multi-Scale Numerical Viscoelastic Simulation of Fatigue Behavior of Asphalt Mixtures Modified with Polyphosphoric Acid

M. Khodadadi, A. Khodaii, P. Hajikarimi, F. Fakhari Tehrani, J. Absi

18:00-18:15 – Experimental investigation of mechanically coupled composite specimens in the ENF test configuration

J. Rzeczkowski, S. Samborski, J. Paśnik

18:15-18:30 – Multiscale Heterogeneous numerical modeling of asphalt concrete
F. Fakhari Tehrani, Y. EL Haloui, J. Absi, F. Allou, C. Petit

Friday 30/03/2018

Closing ceremony + Closing lectures (Papers 6, 7, 8)

Chairman: Ana Socalici (Romania), Liviu Marsavina (Romania)

11:30-11:50 Arcelor Mittal – The world's leading steel and mining company
Dorin REDINCIUC (Romania)

11:50-12:10 Damaging micromechanisms in ductile cast irons
Francesco IACOVIELLO, V. Di Cocco (Italy)

12:10-12:30 Modelling drilling experiments on Al7075 using the response surface methodology
Panagiotis KYRATSIS, N. Efkolidis, K. Kakoulis (Grece)