

<b>Program for International Conference on Advanced Structural and Functional Materials 2018</b>		
15:00-17:30	<b>Monday August 20</b> <b>Onsite registration &amp; Sign up</b>	
<b>Tuesday August 21</b> <b>Room A, Wawel I+II</b>		
08:30-08:40	Opening Ceremony	
<b>Session: Advanced Functional Composites I</b> <b>Chair: Di Zhang</b>		
08:40-09:05	A01: Development of efficient quantification protocols and simple analytical devices involving multifunctional nanomaterials	<b>Pawel Zarzycki</b> Koszalin University of Technology, Poland
09:05-09:30	A02: Novel functional composites composed of disk-like Ni-Cr alloy particles in soda-lime glass	<b>Yoshiharu Waku</b> Tohoku University, Japan
09:30-09:55	A03: Thermal and Mechanical Properties of Historical Structural Metals at Elevated Temperatures	<b>Chrysanthos Maraveas</b> University of Liege, Belgium
09:55-10:20	A04: Polymeric nanocapsules with covalently and non-covalently bound nucleic acids	<b>Emi Haladjova</b> Bulgarian Academy of Sciences, Bulgaria
10:20-10:40	Session Break	
<b>Session: Coating Technology</b> <b>Chair: Pawel Zarzycki</b>		
10:40-11:05	A05: Superhydrophobic and Superhydrophilic Functional Coatings Showing Self-healing Properties	<b>Atsushi Hozumi</b> National Institute of Advanced Industrial Science and Technology, Japan
11:05-11:30	A06: TiO <sub>2</sub> -based decorative coatings produced at industrial conditions	<b>Lukasz Skowronski</b> University of Technology and Life Sciences of Bydgoszcz, Poland
11:30-11:55	A07: Novel waterborne star-shaped styrene-alkyd resins	<b>Edwin Alberto Murillo Ruiz</b> Francisco de Paula Santander University, Colombia
12:00	Lunch Break	

**Tuesday August 21****Room B****Session: Advanced Functional Composites II****Chair: Ichiro Koiwa**

13:30 -13:55	B01: Current Research on Bioinspired Materials in State Key Lab of Metal Matrix Composite	<b>Di Zhang</b> Shanghai Jiao Tong University, China
13:55 -14:20	B02: Advanced Functional Materials for Sensing and Actuation Applications	<b>Jibran Khaliq</b> Northumbria University at Newcastle, UK
14:20-14:45	B03: Effect of Ultrasonic Treatment on Particle Distribution and Properties of Nano-SiCP/Al-Cu Composites	<b>Shusen Wu</b> Huazhong University of Science and Technology, China
14:45-15:10	B04: Electrical insulation for power products - enhancement of epoxy composites properties by modification of fillers	<b>Andrzej Rybak</b> ABB Corporate Research Center, Krakow, Poland
15:10-15:35	B05: Reconstruction Modeling and Performance Prediction of Particle Reinforced Aluminum Matrix Composites	<b>Yishi Su</b> Shanghai Jiao Tong University, China
15:35-15:55	Session Break	
<b>Session: Advanced Functional Composites III</b>		<b>Chair: Shusen Wu</b>
15:55-16:20	B06: Preparation of Zn-Al <sub>2</sub> O <sub>3</sub> and Zn-TiO <sub>2</sub> Composite Films Plated from Non-Suspended Solution	<b>Ichiro Koiwa</b> Kanto Gakuin University, Japan
16:20-16:45	B07: Enhanced performance of oxide thermoelectrics by nanostructuring and reduced graphene oxide nanoadditive	<b>Oleksandr Tkach</b> University of Aveiro, Portugal
16:45-17:10	B08: Various rejuvenation behaviors of Zr-based metallic glass by cryogenic cycling treatment with different casting temperatures	<b>Wei Guo</b> Huazhong University of Science and Technology, China
17:10-17:35	B09: Investigation of adsorption properties of iron-sludge complex material	<b>Renata Świdorska-Dąbrowska</b> Koszalin University of Technology, Poland
17:35-18:00	B10: Strong interlayer coupling in MoS <sub>2</sub> van der Waals homojunction constructed by defect engineering	<b>Zheng Zhang</b> University of Science and Technology Beijing, China
18:10	Dinner Social	

**Tuesday August 21****Room C****Session: Advanced Structural Composites I****Chair: Chunxiang Cui**

13:30 -13:55	C01: New Sheet Molding Compounds (SMC) Formulations for Lighter and Stronger Structural Composites	<b>Kyriaki Kalaitzidou</b> Georgia Institute of Technology, USA
13:55 -14:20	C02: Superhigh mechanical properties of (Ti <sub>5</sub> Si <sub>3</sub> +TiBw)/Ti composites with two-scale network architecture	<b>Lin Geng</b> Harbin Institute of Technology, China
14:20-14:45	C03: Optical properties of hydrogenated amorphous silicon with embedded nanoparticles	<b>Zdenek Remes</b> Institute of Physics of the Czech Academy of Sciences, Praha, Czechia
14:45-15:10	C04: The role of viscoelasticity on wave control by means of phononic materials	<b>Anastasiia O. Krushynska</b> The University of Trento, Italy
15:10-15:35	C05: Bio-inspired fabrication of CNT/Al-alloy nano-laminated composites based on elemental alloying	<b>Zhanqiu Tan</b> Shanghai Jiao Tong University, China
15:35-15:55	Session Break	
<b>Session: Advanced Structural Composites II</b>		<b>Chair: Lin Geng</b>
15:55-16:20	C06: Microstructure and properties of aluminum alloy modified by Nano ceramic particles/Al composite inoculants	<b>Chunxiang Cui</b> Hebei University of Technology, China
16:20-16:45	C07: Electronic Structure Modulation and Interface Design on Carbon Materials and Their Transition Metal Composites toward Efficient Charge Storage	<b>Yufeng Zhao</b> Shanghai University, China
16:45-17:10	C08: Morphing Multidisciplinary (Aero-Composites Structures-Controls) Technologies in Aerospace	<b>Ruxandra Mihaela Botez</b> École de Technologie Supérieure, Canada
17:10-17:35	C09: Review of the CNTs incorporation in the Out of Autoclave manufactured CFRPs for multi-scale reinforced composites with increased Toughness characteristics	<b>Vassilis Kostopoulos</b> University of Patras, Greece
18:10	Dinner Social	

**Wednesday August 22****Room B****Session: Advanced Functional Composites IV Chair: Xiaoyan Song**

08:30-08:55	B11: Nonsolute-Cation-based Halide Induced Phase Transformation for Highly Crystalline Perovskite	<b>Yue Zhang</b> University of Science and Technology Beijing, China
08:55-09:20	B12: Influence of Whey Proteins Hydrolysate on the Properties of Cu (II) Crosslinked Gelatin-Based Hydrogels	<b>Violeta Popescu</b> Technical University of Cluj-Napoca, Romania
09:20-09:45	B13: Smart nanocomposite poly(N-isopropylacrylamide) /clay hydrogels	<b>Beata Strachota</b> Academy of Sciences of the Czech Republic, Czech Republic
09:45-10:10	B14: Light production from aerogel composites	<b>Stoyan Gutzov</b> Sofia University "St. Kliment Ohridski", Bulgaria
10:10 -10:30	Session Break	
<b>Session: Advanced Functional Composites V Chair: Qiubao Ouyang</b>		
10:30-10:55	B15: Sintering Cemented Carbides: Nanograin Size OR Performance?	<b>Xiaoyan Song</b> Beijing University of Technology, China
10:55-11:20	B16: Changes of activated sludge morphology using polyelectrolytes and natural zeolites for wastewater treatment	<b>Krzysztof Piaskowski</b> Koszalin University of Technology, Poland
11:20-11:45	B17: Green metallic nanostructured composite as adsorbent for heavy metal treatment in aqueous media	<b>Doğa KAVAZ</b> Cyprus International University, Turkey
11:45-12:00	B18: Enhanced mechanical behavior and fabrication of silicon carbide particles covered by in-situ carbon nanotube reinforced 6061 aluminum matrix composites	<b>He Cao</b> Shanghai Jiao Tong University, China
12:00	Lunch Break	

<b>Wednesday August 22</b>		
<b>Room B</b>		
<b>Session: Advanced Structural Composites III</b>		<b>Chair: Shulin Lv</b>
13:30 -13:55	B19:Architecture and Interface Design f or Highly Conductive Graphene/Copper Composites	<b>Ding-Bang Xiong</b> Shanghai Jiao Tong University, China
13:55 -14:20	B20: Enhanced strength-ductility of CNT/Al-Cu-Mg composites through Bimodal grain structure design	<b>Zhenyu Liu</b> Institute of Metal Research, Chinese Academy of Sciences, China
14:20-14:35	B21: Refinement of 2wt. % nano-SiCp/A356 composites with ultrasonic vibration and Sr addition	<b>Du Yuan</b> Huazhong University of Science and Technology, China
14:35-15:00	B22: Three-dimensional interpenetrating network graphene/copper composites with simultaneously enhanced strength, ductility and conductivity	<b>Jianli Kang</b> Tianjin Polytechnic University, China
15:00-16:00	<b>Poster Session</b>	
<b>Session: Advanced Functional Composites VI</b>		<b>Chair: Doğa KAVAZ</b>
16:00-16:25	B23: Nonlinear Effect Assisted Magnetoresistance and Spin Logic	<b>Xiaozhong Zhang</b> Tsinghua Univesity, China
16:25-16:50	B24: Silica-based Luminescent Glass Prepared by Spark Plasma Sintering	<b>Beiyong Zhou</b> Donghua University, China
16:50-17:15	B25: Biocomposites related stationary phases for microplanar electrophoresis	<b>Lucyna Lewandowska</b> Koszalin University of Technology, Poland
17:15-17:40	B26: Effect of SiC Particle on Microstructure and Mechanical Properties of Semisolid Mg Alloy containing LPSO Phase	<b>Shulin Lv</b> Huazhong University of Science and Technology, China
17:40-18:05	B27: How to combine elasticity with fire protection? Progress in ceramifiable composites development	<b>Rafal Anyszka</b> University of Twente, The Netherlands
18:15	Dinner Social	

**Wednesday August 22****Room C****Session: Functional Interface Materials****Chair: Fabien Rouault**

08:30-08:55	C10: Functionalization of microfluidic devices by surface modification and its application to biological sensing	<b>Izumi Kubo</b> Soka University, Japan
08:55-09:20	C11: Ionic liquid and polymer composite as new functional materials	<b>Takaya Sato</b> National Institute of Technology, Tsuruoka College, JAPAN
09:20-09:45	C12: Insights in the structure and composition of nanoparticles for energy applications	<b>Alba Garzón-Manjón</b> Max-Planck-Institut für Eisenforschung GmbH, Germany
09:45-10:10	C13: Nanoscale evaluation of GeTe-Sb <sub>2</sub> Te <sub>3</sub> phase-change superlattice films for applications at elevated temperature	<b>Leonid Bolotov</b> National Institute of Advanced Industrial Science and Technology, Japan
10:10 -10:30	Session Break	
<b>Session: Energy Storage Materials</b>		<b>Chair: Takaya Sato</b>
10:30-10:55	C14: Characterization and selection of phase change materials for space heating and cooling	<b>Fabien Rouault</b> Pontifical Catholic University of Chile, Chile
10:55-11:20	C15: Nanoengineering for solid state thermal generators and energy harvesters	<b>Daniel Zabek</b> Warsaw University of Technology, Poland
11:20-11:35	C16: A new interpretation of relationship between microstructure and irreversible capacity in SiO <sub>x</sub> anode electrode	<b>Dae-In Lee</b> Sejong University, Korea
11:35-12:00	C17: Chemical surface analysis on materials and devices under functional conditions – Environmental photoelectron spectroscopy as a non-destructive tool for routine characterization	<b>Paul Dietrich</b> SPECS Surface Nano Analysis GmbH, Germany
12:00	Lunch Break	

<b>Wednesday August 22</b>		
<b>Room C</b>		
<b>Session: Advanced Functional Composites VII Chair: Vladimir M. Mostepanenko</b>		
13:30 -14:00	C18: Polymeric nanomaterials for drug delivery and nanomedicine	<b>Alexander V. Kabanov(keynote)</b> University of North Carolina, USA
14:00 -14:25	C19: Functionalized detonation nanodiamond particles in the packaging, cosmetics and medical applications	<b>Katarzyna Mitura</b> Koszalin University of Technology, Poland
14:25-14:50	C20: Remote Actuation of Magnetic Nanoparticles For Cancer Cell Selective Treatment Using Super Low Frequency AC Magnetic Field	<b>Marina Sokolsky-Papkov</b> University of North Carolina, USA
14:50-15:15	C21: Fabrication and Electrochemical Properties of Graphene Oxide based Papers	<b>Tseung-Yuen Tseng</b> National Chiao Tung University, Taiwan
15:15-16:00	<b>Poster Session</b>	
<b>Session: Graphene and Carbon-based Nanomaterials Chair: Tseung-Yuen Tseng</b>		
16:00-16:25	C22: Reflectivity and Conductivity Properties of Graphene	<b>Vladimir M. Mostepanenko</b> Peter the Great St.Petersburg Polytechnic University, Russia
16:25-16:50	C23: Heavy metal-binding effects in unfolded fullerene-derived nanoparticles	<b>Roberto Pizzoferrato</b> University of Rome Tor Vergata, Italy
16:50-17:15	C24: From wearables to concrete: applications of graphene and 2D materials	<b>Ana Neves</b> University of Exeter, UK
17:15-17:40	C25: Improving graphene distribution and mechanical properties of GNP/Al composites by cold drawing	<b>Xuexi Zhang</b> Harbin Institute of Technology, China
17:40-18:05	C26: Fluctuation-Induced Forces in Graphene Systems	<b>Galina L. Klimchitskaya</b> Peter the Great St.Petersburg Polytechnic University, Russia
18:15	Dinner Social	

<b>Thursday Aug. 23</b>	<b>One-Day Excursion: Nature, Culture, and Collaboration</b>

<b>Wednesday August 22</b>		
<b>15:15-16:00</b>		
<b>Poster Session Chair: Alexander V. Kabanov</b>		
P01	Polyaniline /Poly(vinyl alcohol) Cryogels: Soft, Macroporous and Conducting Materials	<b>Jaroslav Stejskal</b> Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Czech Republic
P02	Polypyrrole nanotubes: infrared and Raman spectroscopies	<b>Miroslava Trchova</b> Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Czech Republic
P03	Influence of $\gamma$ -Irradiation on the Optical Band Gap of the Polyimide–YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.7</sub> System	<b>Assem A. Kyrykbayeva</b> Al Farabi Kazakh National University, Almaty, Kazakhstan
P04	Coating Properties of Acrylic Modified Polyolefin-type Primer	<b>Jae Hwan Chun</b> Korea Institute of Footwear & Leather Technology, South Korea
P05	Synthesis and Characterization of Thermal Stable Triarylmethane-based Dyes	<b>Hoyoul Kong</b> Korea Research Institute of Chemical Technology, Korea
P06	Modification of woven fabrics with graphene using sol-gel method	<b>Dorota Kowalczyk</b> Textile Research Institute, Poland
P07	Surface and Layer Analysis of Blend Films using Stereocomplex Formation	<b>Won-Ki Lee</b> Pukyong National University, South Korea
P08	<b>Effect of Temperature and Humidity on Conductivity of Flexible-printed</b>	<b>Chung-Hwan Kim</b> Chungnam National University, Korea
P09	Fiber reinforced composites for CAD/CAM applications in dentistry	<b>Cristina Prejmerean</b> Babes-Bolyai University, Romania
P10	Enzymatic Hydrolysis of Whey Protein Isolate for the Obtaining of Biologically Active Peptides	<b>Violeta Popescu</b> Technical University of Cluj-Napoca, Romania
P11	Antibacterial activity and flexural strength of graphene oxide experimental orthodontic cements	<b>Codruta Sarosi</b> Babes-Bolyai University, Romania
P12	The physico-chemical properties and morphology of the nanocomposites with graphene oxide	<b>Marioara Moldovan</b> Babes-Bolyai University, Romania



P13	Novel Transmissive to Black Shutter Based on Ambipolar Electrochromic Material System	<b>Guey-Sheng Liou</b> National Taiwan University, Taiwan
P14	Ambipolar Electrochromic Arylene Diimides with Methoxy- or tert-Butyl-Protected Triphenylamine N-Substituents	<b>Sheng-Huei Hsiao</b> National Taipei University of Technology, Taiwan
P15	TBA	<b>Hong-eun Lee</b> Ulsan Technopark in Korea
P16	Brazing mechanisms of the Ti <sub>2</sub> AlC joints using pure Al filler alloy	<b>Jie Zhang</b> Harbin Institute of Technology, China
P17	Enhanced magnetic refrigeration capacity in Ni-Mn-Ga micro-particles	<b>Mingfang Qian</b> Harbin Institute of Technology, China