

9:00 a.m., Monday, 19<sup>th</sup> April

1<sup>st</sup> Plenary Session

*Analytical chemistry & Nanotechnology 1*

1.	Nikola Lenar	<i>The new hybrid material as mediation layer in potassium-selective potentiometric sensors</i>
2.	Karolina Głozz	<i>Electro-synthesis of carbazole-based polymer layers for room temperature hydrogen gas sensing</i>
3.	Anna Górska	<i>Highly sensitive voltammetric determination of anti-diabetic drug on renewable amalgam film electrode</i>
4.	Babutan Iulia	<i>Manipulation of optoelectronic properties of conjugated polymers by adding reduced graphene oxide or silver nanoparticles</i>
5.	Maria Jędrzejewska	<i>Less is more: highly crystalline zinc oxide nanocrystals coated with short-chain ligands</i>
6.	Jyoti	<i>Molecularly imprinted polymer nanoparticles as the recognition unit of the electrochemical chemosensor for cilostazol</i>
7.	Mykola Kravets	<i>Plasmonic nanoproboscopes transducing the length and flexibility of <math>\alpha,\omega</math>-alkanedicarboxylic acids into an optical readout</i>

12:15p.m., Monday, 19<sup>th</sup> April

2<sup>nd</sup> Plenary Session

*Material Engineering 1*

1.	Bishnu Bhattarai	Aerobic biodegradation of xenobiotics: degradation profiles of selected analgesic drugs in wastewater
2.	Ewa Dzierzkowska	Microstructure of the combined nano/microscale fibers for medical application
3.	Paweł Goj	Structural features of P2O5-Fe2O3-FeO-CaO glasses
4.	Simona Halmagyi	Synthesis, optimization and characterization of iron oxide nanoparticles obtained by co-precipitation method
5.	Agata Kaczmarek	Photoluminescence properties of carbon nanoparticles synthesized by laser ablation in water and aqueous solutions of amine-based reagents
6.	Jakub Ramult	Corrosion resistance of spinels with different MgO:Al2O3 molar ratio in contact with steel slag
7.	Karina Warmuz	A determination of difference in hydration kinetics of binary mixtures with the MgO:Al2O3 micro- or nano-powders

3:00p.m., Monday, 19<sup>th</sup> April

### 3<sup>rd</sup> Plenary Session

#### *Bioengineering, biotechnology, biomedical engineering 1*

1.	Anna Kacprowicz	Influence of the size of yeast cells on the ultrasonic disintegration process
2.	Krzysztof Kolankowski	Optimization of poly(glycerol maleate) cross-linking process with the use of amines addition
3.	Piotr Kowalczyk	Composite chitosan-human bone granulates for bone tissue regeneration
4.	Szonja Polett Posa	Cytotoxicity assessment of cinchona alkaloids used in organocatalysis on a co-culture of parental and multidrug resistant malignant cell lines
5.	Kamila Chęcińska	Long- term degradation of bioactive glass -modified composites loaded of polyphenolic compounds extracted from <i>Salvia officinalis</i>

9:00 a.m., Tuesday, 20<sup>th</sup> April

### 4<sup>th</sup> Plenary Session

#### *Mathematical modeling, simulations & optimization*

1.	Aleksandra Bandzerewicz	Development and optimization of a synthesis procedure of poly(glycerol citrate)
2.	Alessandra-Diana Selejan	Dynamic modelling of hydrogen production by biogas steam reforming process
3.	Radosław Krzosa	Modelling of deagglomeration process using dissolvers - application of population balance
4.	Lucía Bautista	Analysis of the maintenance cost for heterogeneous systems subject to a periodic inspection policy
5.	Katarzyna Sintera	CFD study of monolithic structures with enhanced transport properties
6.	Justyna Wojtasik-Malinowska	CFD simulation of drag force in porous packing for rotating packed beds
7.	Michał Wrzecionek	Synthesis of poly(glycerol succinate) with simplex optimization
8.	Dawid Zawadzki	Computer-aided modeling and experimental studies of 3D printed internals customized for CO <sub>2</sub> absorption in rotating absorbers

12:15 p.m., Tuesday, 20<sup>th</sup> April

5<sup>th</sup> Plenary Session

*Apparatus, separation processes &  
Environmental protection, alternative energy sources 1*

1.	Noureddine Zouhri	Generation of sulfuric acid and sodium hydroxide from the sodium sulphate salt by electro-electrodialysis (EED)
2.	Zuzanna Bojarska	MoS <sub>2</sub> /CNMs hybrid nanostructures for photo-electrocatalytic applications
3.	Roman Chyzhovych	Research of rapeseed oil qualitative characteristics with IR spectroscopy
4.	Tomasz Kotkowski	Comparison of physical and chemical activation of tyre pyrolysis char
5.	Alexander Maywurm	Investigating flow and power input of viscoelastic fluids in a stirred tank
6.	Wanawan Pragot	Ecological study of a mineral carbon capture and conversion process

4:00 p.m., Tuesday, 20<sup>th</sup> April

6<sup>th</sup> Plenary Session

*Material Engineering 2 & Other*

1.	Patrycja Wilczewska	Engineering bismuth based semiconductors properties for enhancement photocatalytic degradation of anticancer drugs
2.	Anna Kołakowska	Synthesis of inulin acetate for potential use as a surfactant or an emulsifier
3.	Michał Dymek	Emulsions as vehicles for the controlled release of astaxanthin in topical application
4.	Johanna Kiss	Depolymerization of Poly(ethylene terephthalate) with Recyclable Organocatalysts
5.	Balazs Molnar	Cinchona organocatalysts modified with a lipophilic moiety

9:00 a.m., Wednesday, 21<sup>st</sup> April

7<sup>th</sup> Plenary Session

*Analytical chemistry & Nanotechnology 2*

1.	Justyna Lipińska	Surface modification of working electrodes through the cold plasma deposition of thin layers for voltammetric applications
2.	Barbara Niemiec	Investigation of the influence of gold nanoparticle stabilizer on metrological parameters of potentiometric sensors
3.	Patrycja Parnicka	Synthesis and applications of AgInS <sub>2</sub> QDs-modified Bi <sub>2</sub> WO <sub>6</sub>
4.	Radosław Porada	Voltammetric determination of folic acid
5.	Ewa Rybak	Preparation of polycaprolactone nanoparticles via nanoprecipitation method and evaluation of their properties.
6.	Anna Szymczyk	Investigations on nucleic acids extraction from biological samples with modified magnetic nanoparticles
7.	Aleksandra Wosztyl	A giant Faraday effect in a semiconductive polymer doped with magnetic nanoparticles
8.	Szymon Wójcik	Deep learning in interpretation of voltammetric data

11:45 a.m., Wednesday, 21<sup>st</sup> April

8<sup>th</sup> Plenary Session

*Apparatus, separation processes, Environmental protection, alternative energy sources 2 & Other*

1.	Alexandru Sonica	MOF-Al <sub>2</sub> O <sub>3</sub> composites for catalytic applications
2.	Monika Sikora	CFD analysis of mass transport mechanism in porous SOFC electrode
3.	András György Németh	Application of elemental sulfur in multicomponent reactions
4.	Edyta Rekiel	Comparison of wettability of human skin and its equivalents by aqueous solutions of chosen surfactants
5.	Krzysztof Jędrzejczak	Theoretical model of blood rheology including hemolysis

**1:45 p.m., Wednesday, 21<sup>st</sup> April**

**9<sup>th</sup> Plenary Session**

*Kinetics, thermodynamics*

1.	Daniele Baiocco	Vegan Microcapsules to Encapsulate Peppermint Oil
2.	Michał Wojtalik	Simple and Advanced Nucleation and Growth Kinetics of MoS <sub>2</sub>
3.	Dora Richter	Organocatalytic synthesis of disubstituted amino acids' intermediates

**2:30 p.m., Wednesday, 21<sup>st</sup> April**

**10<sup>th</sup> Plenary Session**

*Bioengineering, biotechnology,  
biomedical engineering 2*

1.	Justyna Szczepańska	Influence of selected inhalation drugs on dynamic physicochemical properties of a pulmonary surfactant model
2.	Katarzyna Dobrowolska	Effect of liquid properties and aerosol dilution conditions on the final droplet size of aerosol delivered from nebulizers
3.	Klaudia Szafran	Studies on properties of CsA-LG monolayers on water subphase
4.	Mateusz Bartczak	Determination of mixing time in a disposable bioreactor supported with wave-induced agitation