

9:30 a.m., Monday, 23rd April**1st Plenary Session*****Material Engineering 1***

1.	Jolanta Nieroda	Formation and examination of well-attached layer to the amorphous metal surface
2.	Maciej Bik	Silicon Oxycarbide glasses as protective coatings on TiAl based alloys
3.	Tatyana Sazanowa	Atomic force microscope as a study tool for surface structuring mechanisms of polymeric membranes based on chitosan
4.	Renata Jadach	Antimony modified germanate oxide glass doped with rare earth ions - structural and optical properties
5.	Piotr Rożek	Structural and mechanical properties of fly ash-based geopolymers
6.	Paweł Goj	Molecular dynamics simulations of iron phosphate glasses
7.	Magdalena Fryc	Effect of tantalum addition on the structure of ferromagnetic shape memory alloy Ni-Co-Mn-In
8.	Mateusz Kamiński	Sorption properties of MTMS-based aerogel and filters modified with its share

11:45 a.m., Monday, 23rd April**2nd Plenary Session*****Bioengineering, biotechnology, biomedical engineering 1***

1.	Ewa Rybak	Endothelial cells metabolism analysis in contact with steel biomaterial
2.	Magdalena Gawęda	Bioactivity of layers based on black glasses - preparation and examination
3.	Magdalena Fryc	Diagnosis of lung cancer using Matlab
4.	Magdalena Fryc	Structural studies of glass-carbomer cements
5.	Sylwia Stiler	Contact lenses as controlled release drug systems on the example of Tymolol
6.	Sylwia Stiler	Staining techniques as a tool for assessing surface hydrophobicity
7.	Anna Pawlik	Impact of different functionalization of anodic TiO ₂ layers on the cells response and drug delivery process
8.	Sylwia Stiler	Thermogravimetric studies of hydrogel contact lenses

3rd Plenary Session*Nanotechnology & Mathematical modeling, simulations, optimization*

1.	Julia Rogowska-Tylman	Nanotechnological approach to bacterial cellulose/nanohydroxyapatite biocomposites fabrication for bone regeneration
2.	Sylvia Dąbrowska	The new generation of microwave reactors for hydro- and solvothermal nanopowder synthesis
3.	Jacek Wojnarowicz	Effect of microwave power radiation on size of aggregates of ZnO NPs prepared using microwave solvothermal synthesis
4.	Katarzyna Zubańska	Study of initial substrate concentration on MoS ₂ nanoparticles size produced in turbulent micromixers
5.	Przybysław Przybył i Dominik Pucula	Experimental study of influence of process parameters and reactor geometry on process of molybdenum disulphide nanoparticles formation in impinging jet reactors
6.	Bartosz Woźniak	Mechanism of formation and growth of nanohydroxyapatite layers deposited by ultrasonic method
7.	Maria Sergeeva	Xenon recovery from natural gas by gas hydrate crystallisation
8.	Piotr Grochowicki	Flow rate influence on foam formation in high speed bottles filling process

4th Plenary Session*Material engineering 2*

1.	Zuzanna Góral	Adhesives based on the polyvinyl acetate dispersion with improved thermal and fireproof properties
2.	Kamil Kornaus	Synthesis methods of magnesium titanate solid solutions by solid state reaction
3.	Agnieszka Chmielewska	Post processing and biological evaluation of the titanium implants fabricated by Selective Laser Melting
4.	Ewa Litwinek	The influence of addition of bismuth oxide on the properties of low-melting glazes
5.	Dawid Kozień	Synthesis of B4C using different carbon precursor
6.	Łukasz Szymański	Composite layer fabricated in situ in steel castings
7.	Sándor Nagy	Optimization and homogeneous catalysis of <i>aza-Markovnikov</i> reaction using cinchona organocatalysts and their recycling by organic solvent nanofiltration
8.	Petra Kozma	Application of cinchona-squaramide organocatalyst immobilized on polybenzimidazole membrane and its recovery by nanofiltration

11:15 a.m., Tuesday, 24th April5th Plenary Session*Bioengineering, biotechnology, biomedical engineering 2*

1.	Małgorzata Skorupa	Multilayer composites as coatings for neural devices: PEDOT/gold films
2.	Katarzyna Piekларz	The effect of the solvent type on the structure of chitosan hydrogels formed at the physiological body temperature
3.	Katarzyna Piekларz	Chitosan hydrogels formed at the physiological body temperature containing nano-ingredients
4.	Mikhail Nosov	Numerical simulation of LVAD inflow cannula effect on stagnation and recirculation zones in left ventricular
5.	Melinda Pázmándi	Exploring the potential of lactic acid bacteria for the production of high-purity galacto-oligosaccharides
6.	Agnieszka Chmielewska	Modeling of the patient-specific cutting guides and surgical instruments
7.	Emilia Stańkowska	Influence cleaning works on the swimming pool on microbial contamination
8.	Dominika Gajewska	Precursors of chlorates and chlorites in swimming pool water

3:40 p.m., Tuesday, 24th April6th Plenary Session*Environmental protection, alternative energy sources*

1.	Daniel Fozer	Life cycle and PESTLE analysis of CCS alternatives
2.	Daniel Fozer	The investigation and improvement of hydrothermal gasification parameters on microalgal biomass
3.	Małgorzata Skorupa	Removal of Rhodamine B from aqueous solutions: new reaction system for synthesis of magnetic macroporous sorbents from waste PMMA
4.	Gyula Dargó	The first synthesis of enantiopure cinchona-binaphthalene derivatives and their application as organocatalysts in asymmetric <i>Michael</i> addition
5.	József Kupai	Synthesis and application of a cinchona-squaramide organocatalyst and its recovery by immobilization on poly(glycidyl methacrylate)
6.	Péter Kisszékelyi	Synthesis and application of oligosaccharide-based cinchona organocatalysts
7.	Levente Kárpáti	The effect of substituents on direct polycondensation and properties of aliphatic polyester-amides

7th Plenary Session*Analytical chemistry*

1.	Łukasz Magda	Caffeine detection on glassy carbon electrode modified by composed nanoparticles of titanium dioxide - conductive polymer
2.	Justyna Ubysz	Polyphenolic compounds in the juice of citrus fruits - components of the voltammetric analysis
3.	Joanna Smajdor	Voltammetric analysis of active substances content in oral contraceptive pills
4.	Katarzyna Wilkosz	Application of zirconium nanopowders for chromium sorption
5.	Justyna Zuziak	DP and LAP voltammograms as a data source in food profiling
6.	Karolina Sipa	The application of carbon-based electrodes modified with MWCNTs and GNPs for the sensitive voltammetric determination of selected pesticides
7.	Balázs Erdős	Real-time monitoring of the enzymatic production of fructo-oligosaccharides using UV spectroscopy
8.	Björn Lewandowski	Analysis of <i>wake</i> structures in bubbly flows using <i>Particle Image Velocimetry</i> (PIV)

8th Plenary Session*Material engineering 3*

1.	Kinga Kepska	Alkylbenzenesulfonic acid-doped poly(3-hexylthiophene) as membrane material for gas separation
2.	Karolina Gawlak	Controlled synthesis of anodic tin oxide layers with complex internal morphology and their photoelectrochemical properties
3.	Katarzyna Pasiut	The influence of addition of the zirconium oxide on some technological parameters of the raw porcelain glaze
4.	Anna Rył	Investigation of the chitosan solutions flow behaviour using rotational and oscillatory measurements
5.	Elżbieta Pietrzykowska	Warm isostatic pressing technology for polymer-hydroxyapatite composites
6.	Kamila Kluczevska	The preparation condition influence on $K_{0.5}Bi_{0.5}TiO_3$ electrochemical properties
7.	Łukasz Rakoczy	Qualitative and quantitative characterization of microstructural constituents in Ni-based superalloy
8.	Łukasz Rakoczy	Influence of shell mould composition on microstructure of cast nickel alloy

9th Plenary Session*Apparatus, separation processes & Kinetics, thermodynamics*

1.	Stanislav Battalov	Membrane gas separation module with pulsed retentate for low-permeable component recovery
2.	Artem Atlaskin	Continuous membrane column configurations for gases high purification: comprehensive experimental study and efficiency evaluation
3.	Artem Atlaskin	Evaluation of the absorbing pervaporation technique for ammonia recovery after the Haber process
4.	Krzysztof Kowalski	Heat Transfer in Helical Coil Heat Exchanger: Parametric Study
5.	Maxim Bukovskiy	Unsteady-state batch distillation with periodical distillate withdrawals for improved separation performance
6.	Maria Zuzga	Influence of MTMS aerogel modification of fibrous filters on the effectiveness of oil mist separation
7.	Tomasz Kotkowski	Physical activation of end-of-life tyre pyrolytic char
8.	Björn Lewandowski	Investigation of formation and characteristics of heterocoagulates in flotation processes with <i>Shadowgraphy</i>

1st Poster Session

1.	Katarzyna Kała	Analysis of fatty acids composition in <i>Tricholoma equestre</i> fruiting bodies
2.	Katarzyna Kała	Study on the release of organic compounds from commercial preparations containing <i>Bacopa monnieri</i> to artificial digestive juices
3.	Katarzyna Kała	Analysis of selected organic compounds in preparations containing <i>Bacopa monnieri</i>
4.	Natalia Przybysz	Influence of Au NPs on electrooptical properties of liquid crystals
5.	Michał Chodkowski	Water wettability of activated composite surfaces.
6.	Joanna Moś	The effect of connecting a tapered optical fiber with a liquid crystal mixture
7.	Marlena Kwiatkowska	Electrical control depolarization in nematic liquid crystals cells
8.	Renata Zawisza	Dual-resonance long-period grating in fiber loop mirror structure for liquid refractive index measurement
9.	Anna Drzewicz	Inversion of helical twist sense phenomenon
10.	Magdalena Chrzan	Metal oxide catalysts for methane combustion: in situ FTIR study of active centres
11.	Damian Chlebda	Co/Pd based mixed oxide catalysts for methane combustion: structure and activity studies
12.	Damian Krystian Kaczmarek	Quaternary ammonium salts as stored product insect antifeedants
13.	Tomasz Rzemieniecki	Synthesis and purification of quinine-based quaternary ammonium halides
14.	Jolanta Nieroda	Influence of plasma treatment factors on final properties of metallic glass surface
15.	Stanislav Battalov	Modelling of radial membrane gas separation module for integration in Aspen Plus
16.	Paulina Pędziwiatr	Preparation and Characterization of Chitosan Obtained from Honey Bee
17.	Aleksandra Kucharczyk	New method for formaldehyde determination in the air using polyurethane foam passive samplers
18.	Maciej Bik	Studies on corrosion inhibition of black glasses coatings/TiAl based alloys system
19.	Tatyana Sazanova	Multiparametric mathematical algorithm for describing unsteady-state membrane gas separation with pulsed retentate mode

20.	Justyna Ubysz	Determination of biologically active compounds with using Glassy Carbon Electrode
21.	Renata Jadach	The effect of modifier additive on Barium-Gallo-Germanate glass structure and optical properties
22.	Kamil Wierzchowski	Cultures of HL-60 cells in wave-type agitated single-use bioreactor
23.	Zuzanna Góral	Impact of melamine and its derivatives on the polyvinyl acetate wood adhesive properties
24.	Agnieszka Fiszka Borzyszkowska	The photocatalytic removal of cytostatic drugs in presence of $\text{Bi}_4\text{O}_5\text{Cl}_{1,3}\text{Br}_{0,7}$ - influence of the matrix solution
25.	Patrycja Wilczewska	Comparative study of sol-gel and hydrothermal synthesis of MWCNTs/ TiO_2 composite nanoparticles
26.	Karolina Gebka	Synthesis of p-conjugated graft copolymers and their electrochemical characteristic
27.	Marta Zych	Optimalization of the thermal treatment conditions of modified anodic WO_3 with enhanced photoelectrochemical properties
28.	Joanna Grudzień	Complex characteristic of novel bacterial electrodes for bioelectrochemical systems' applications
29.	Katarzyna Pasiut	The influence of addition of the zirconium oxide on some surface parameters of the raw porcelain glaze
30.	Anna Taraba	Temperature studies of rutin-surfactant systems
31.	Magdalena Szaniawska	Folin-Ciocalteu method in determination of polyphenols in tea extracts
32.	Anna Pawlik	Apatite-forming ability of anodic titanium dioxide layers synthesized at different anodization potential
33.	Jakub Matusiak	Influence of carrageenan and cationic surfactants on the stability of the alumina suspension
34.	Anna Drewniak	Synthesis of monomers containing asymmetric diimides for photovoltaic applications

5:20 p.m., Tuesday, 24th April

2nd Poster Session

1.	Anna Kurzych	Registration of phenomena associated with Rotational Seismology
2.	Natalia Przybysz	Photonic Crystal Fiber Transducers for an Optical Fiber Multilevel Temperature Threshold Sensor
3.	Michał Chodkowski	Determination of phase transition temperature of wetting silicon by water using contact angle measurements
4.	Anna Drzewicz	Systems with inversion of helical twist sense phenomenon tested by differential scanning calorimetry

5.	Damian Krystian Kaczmarek	Dicationic triazolium ionic liquids - synthesis and application
6.	Tomasz Rzemieniecki	Ionic liquids of natural origin with abietate anions
7.	Soraya Laghmari	Development and evaluation of an antifouling coating for reverse osmosis membranes which can be applied in modules
8.	Piotr Rożek	Influence of SiO ₂ /Al ₂ O ₃ ratio on geopolymer properties
9.	Kamila Zabielska	Adsorption equilibrium of carbon dioxide on Zeolite 13X at high pressures
10.	Urszula Szałaj	Examination of the kinetics of adsorption and desorption of water by HAP nanoparticles
11.	Maxim Bukovskiy	Special aspects of trace impurity determination in high-purity inorganic hydrides by gas chromatography
12.	Sanae Gassa	Magneto-responsive composite ultrafiltration membranes with reversible molecular sieving effects
13.	Magdalena Gawęda	Structural studies on phosphorus-modified silicon oxycarbide
14.	Joanna Smajdor	Voltammetric determination of betamethasone on mercury film silver based electrode (Hg(Ag)FE)
15.	Emilia Stańkowska	Alternatives to bottled waters
16.	Krystyna Mika	Electrochemical synthesis of nanostructured ZnO in sodium hydroxide electrolyte
17.	Dominika Gajewska	Assessment of water quality in swimming pool foot bath
18.	Agnieszka Fiszka Borzyszkowska	New type of CNW/BiOClBr photocatalysts with high cytostatic drugs removal efficiency
19.	Magdalena Karpowicz	3D printing of stainless and acid resistant steel
20.	Magda Pęska	Use of a mixture of technically pure iron and aluminum powders to shaping the surface of Fe-Al sinter using 3D printing technology
21.	Katarzyna Sawicka	Application of porogenes in the process of production of porous polymers by supercritical foaming
22.	Karolina Gawlak	Novel photoanodes based on anodic tin oxide layers for photoelectrochemical water splitting
23.	Juliusz Kondracki	Determination of oil sorption properties of fibrous media coated with aerogel particles
24.	Agnieszka Chodara	Hydrothermal microwave synthesis and characterization of hydroxyapatite nanoparticles.

25.	Karol Ulatowski	Influence of liquid flowrate on size of nanobubbles generated by porous-membrane modules
26.	Anna Taraba	The influence of the surfactant on the properties of quercetin solutions
27.	Magdalena Szaniawska	Determination of antioxidant activity of coffee and tea extracts by DPPH method
28.	Aleksandra Kalbarczyk	Investigation of liquid crystals with frequency controlled birefringence
29.	Kamila Kluczewska	The electrochemical properties of La doped BiFeO ₃ ceramics
30.	Jacek Wojnarowicz	MSS2 - A novel microwave reactor for for hydro- and solvothermal scale-up nanopowder synthesis
31.	Jakub Matusiak	Tensiometric and conductometric studies of the cationic starch/anionic surfactants complexes
32.	Joanna Gnyla	Dispersability of silicon carbide powders in aqueous media with TMAH
33.	Dominika Gilek	Corrosion tests of InSb thin films synthesized via pulse electrodeposition
34.	Agnieszka Chmielewska	Modeling and fabrication of custom designed veterinary implants

4:40 p.m., Wednesday, 25th April

3rd Poster Session

1.	Michał Chodkowski	Surface properties of 3-bromopyruvic acid deposited on plasma-activated substrates
2.	Damian Krystian Kaczmarek	Surface properties of herbicidal ionic liquids
3.	Tomasz Rzemieniecki	Herbicidal ionic liquids with bicyclic cation
4.	Łukasz Magda	The influence of nanopowder on the analytical signal from caffeine
5.	Patrycja Wilczewska	BiOXY modified by multi-walled carbon nanotubes - synthesis, characterisation and environmental applications
6.	Maxim Bukovskiy	VLE behavior of ammonia-based dilute solutions during elevated pressure distillation
7.	Anna Taraba	The temperature influence on the conductivity in the rutin-surfactant systems
8.	Joanna Środa	The influence of particle size of porogenes on the process of supercritical foaming of poly(ε – caprolactone)
9.	Katarzyna Gaładyk	The study of ferroelectric liquid crystal mixtures with very shortpitch

10.	Anna Rył	Influence of cation in glycerophosphate salts on viscoelastic properties of chitosan solutions
11.	Magdalena Szaniawska	Determination of critical micelle concentration of Kolliphor surfactants from the absorption and emission spectra of pyrene
12.	Paulina Chilimoniuk	Manufacture of the anode aluminum oxide on the surface of Fe-Al alloy
13.	Justyna Zuziak	Classification of tea infusions based on voltammetric signals
14.	Dawid Kozień	Synthesis of B ₄ C using monosaccharides and polysaccharides
15.	Filip Mikołajczyk	The study of ruthenium-based catalysts used in homogeneous transfer hydrogenation of ketones
16.	Aleksandra Kalbarczyk	Experimental results and calibration of dynamic phase shift measurement system for liquid crystals application
17.	Monika Sołtys	Synthesis and characterization of nanostructured anodic TiO ₂ modified/doped with transition metal ions
18.	Anna Pawlik	Chitosan-coated anodic TiO ₂ layers as a potential drug delivery system
19.	Martyna Borysiak	Investigations of ceramic membrane fouling in ultrafiltration process of protein aqueous solution
20.	Katarzyna Wilkosz	Removal of organic impurities using nanopowders based on zirconium dioxide
21.	Tomasz Kotkowski	Investigation of the integrated reactive adsorption process
22.	Dereck Koch	Functionalization of ultrafiltration membranes for integration of adsorber properties
23.	Szymon Malinowski	The development of an innovative method of bioreceptor layer deposition in biosensor construction
24.	Anna Kuziel	From low-molecular weight analogues to carbon nanotubes – chemistry of azides toward functionalization of sp ² -nanocarbons
25.	Kamila Kluczevska	Impedance spectroscopy of vanadium pentoxide
26.	Barbara Zagrajczuk	A new cerium doped bioglasses for bone tissue engineering
27.	Adriana Szydłowska	Influence of particles swelling on viscosity of water suspensions of vegetal particles
28.	Joanna Latocha	Synthesis of hydroxyapatite nanoparticles in continuous reactor: preliminary experimental results
29.	Jacek Wojnarowicz	Microwave solvothermal synthesis and characterization of nanocrystalline ZnO doped with Mn ²⁺ and Co ²⁺

30.	Sylwia Ciołek	Formation non-equilibrium high-aluminum phases in the eutectic area by powder metallurgy
31.	Jakub Matusiak	Adsorption and electrokinetic properties of the cationic starch/silica system
32.	Katarzyna Dobrowolska	Effect of the properties of selected nebulized inhalation drugs on aerosol characteristics
33.	Karolina Sipa	β -Cyclodextrin and multiwalled carbon nanotubes modified boron-doped diamond electrode for the voltammetric analysis of carbendazim
34.	Karolina Sipa	Square-wave voltammetric determination of pesticide bixafen using graphene paste electrode