### 1st POSTER SESSION

#### 1 Bartosz Nowak

Oil mist filtration dynamics of fibrous filters modified with MTMS-based aerogel structure

## 2 Tanmay Netke

Industrial approach to membrane functionalization in biomedical applications

# 3 Igor Półgrabski

Regeneration method of fibrous filters modified with MTMS-based aerogel dedicated for oil mist separation

### 4 Melinda Pazmandi

Investigation of the potential of lactic acid fermentation in bioremediation of whey

### 5 Marta Nowak

Determination of biocides in environmental samples using of LC-MS/MS

### 6 Monika Nowak

Elimination of acetamiprid by Metarhizium sp.

#### 7 Anna Hlukaniuk

Hydrodynamical water purification

### 8 Jolanta Nieroda

Kinetic of drying process of sol solutions based on Tetraethyl orthosilicate and 1,2-Bis(triethoxysilyl)ethane

#### 9 Zuzanna Góral

Impact of modified halloysite on intumescent properties of protective ceramic coatings

#### 10 Paulina Piotrkiewicz

A possibility to obtain an Al2O3 – Cu – Ni composites via slip casting method

### 11 Szymon Rojewski

Chemical modification of roving and textiles for application in prepregs

#### 12 Michał Chodkowski

Wetting of silicon <100> surface by diiodomethane

### 13 Michał Chodkowski

Development of a force field for the simulation of liquid diiodomethane

## 14 Paulina Korycka

Verification of regression equations describing the effect of process parameters on the fiber diameter and the beads size

#### 15 Albasher Shareif

Analysis of heat modelling failure around contiguous micro objects

#### 16 Adam Mirek

Factorial design of the electrospun polymeric mat structures as a tool for selection of electrospinning process parameters

#### 17 Anna Kuziel

c-CVD synthesis of helical carbon nanotubes as potential energy storage nanomaterials

# 18 Patrycja Wąsik

Ionic liquid dispersions of functionalised CNTs – en route to modern energy storage materials

### 19 Natalia Nowak

Synthesis of imidazole ionic liquids as dispersing media of carbon nanotubes

# 20 Urszula Szałaj

Water vapour adsorption on HAP nanocrystals

# 21 Magdalena Szaniawska

Kolliphor surfactants – adsorption properties

## 22 Magdalena Szaniawska

Sweeteners in food industry

# 23 Jakub Matusiak

Influence of surfactants on the adsorption of alginic acid on the alumina surface

### 24 Jakub Matusiak

Determination of  $\beta$ -cyclodextrin/surfactants complexes formation by surface tension measurements

### 2<sup>nd</sup> POSTER SESSION

## 1 Justyna Kopeć

Development of an electrochemical procedure for the determination of aluminum in tea samples

# 2 Katarzyna Czarnecka

Application of polymer-graphene fibrous nanocomposites in tissue engineering

## 3 Katarzyna Pieklarz

Hydrogels enriched with nanostructured carbon materials for use in bone tissue engineering

### 4 Sylwia Stiler-Wyszyńska

Polymer matrices for controlled dosing of drugs - perspectives

# 5 Sylwia Stiler-Wyszyńska

Dyeing techniques as markers of the hydrophobicity of the surface of contact lenses

# 6 Urszula Szałaj

Ultrasonic deposition of nano-hydroxyapatite layers on polymeric surfaces

# 7 Kinga Pogoda

Effect of vacuum on removal of nitrogen from activated sludge

### 8 Marta Nowak

The use of LC-MS/MS in the analysis the role of cytochrome P-450 in the PCPs elimination by fungi of the genus Basidiomycetes

#### 9 Monika Nowak

Effect of acetamiprid on fungal biomass of Metarhizium sp.

### 10 Piotr Rożek

Lightweight geopolymer monoliths for methylene blue removal from wastewaters

### 11 Magdalena Gaweda

The influence of doping ions on the sol-gel synthesis of SiOC preceramic precursors

#### 12 Michał Wrzecionek

Preparation of copolymer of poly(glicerol sebacate) and poly (L-lactide) and using it in the electrospinning method

### 13 Maciej Bik

Oxidation studies of coatings based on SiAIOC glasses

### 14 Paweł Goj

Molecular dynamics simulations and spectroscopic studies of sodium-iron phosphate glasses

#### 15 Dawid Kozień

Chemical etching of boron carbide edges with the removal of excess carbon after synthesis

# 16 Aleksandra Kalbarczyk

The depolarization properties of nematic liquid crystal

#### 17 Marcin Zemła

The ab initio study of hydrogen-vacancy complexes in diamond

#### 18 Anna Kuziel

The impact of purification and characteristics of carbon nanotubes onto their dispersibility in ionic liquids

# 19 Sylwia Dąbrowska

Microwave reactors for hydro- and solvothermal synthesis. Measurements problems and scale up possibility

# 20 Daria Czuryszkiewicz

Bis-ammonium herbicidal ionic liquids comprising cinnamate anion

# 21 Bartłomiej Kramarczyk

Investigation of the ability of PETN detonating cords to initiate cartridged, chemically sensitized emulsion explosives

### 22 Ewa Litwinek

Viscoelastic properties of clay-cement binders

## 23 Gyula Dargó

Development and application possibilities of new, hydrogen bond donor organocatalysts

### 24 Tomasz Rzemieniecki

Synthesis and properties of chiral ionic liquids derived from mandelic acid

### 25 Marcin Gerlich

New explosives precursors: investigation of the possibility of obtaining pyrotechnic mixtures and explosives using substances not covered by European regulations

# 3<sup>rd</sup> POSTER SESSION

#### 1 Nikola Lenar

The influence of sodium-selective membrane composition on analytical parameters of TCNQ- based potentiometric ion sensors

## 2 Szymon Wójcik

Voltammetric determination of anethole on carbon electrodes

### 3 Justyna Lipińska

The study of voltammetric determination of Vitamin K2 with the application of carbon and mercury electrodes

### 4 Radosław Porada

Electrochemical sensor for the characterization and determination of benzodiazepines

#### 5 Anna Górska

Metformin determination on modified GC electrodes using AdSV

# 6 Agnieszka Hahaj

Transfer of the static MTMS-based aerogel fibrous filter modification method to a flow system

# 7 Edyta Kruś

Characteristic of antifreeze proteins produced by psychrophilic yeast from Glaciozyma martini species

# 8 Barbara Zagrajczuk

In vitro bioactivity evaluation of the gel-derived glasses doped with cerium, strontium, and zinc

#### 9 Michał Bień

Study on oxygen absorption rate in aqueous solutions of protein in a disposable bioreactor with wave-induced agitation

## 10 Joanna Gnyla

Dispersing of submicrometric SiC powders and improving its rheological behavior

### 11 Renata Szal

Structural investigation on gallo-germanate glasses modified with various content of barium oxide

## 12 Łukasz Rakoczy

Application of the X-ray diffraction in the study of the gamma prime phase dissolution

### 13 Maciej Ludwig

Corrosion resistance of modified magnesia refractory material in contact with copper slag

## 14 Donata Kuczyńska-Zemła

Microstructure and mechanical analysis of laser structured titanium grade 2 for biomedical applications

# 15 Justyna Pleśniak

Ferritic steel modified with Gd2O3 nanoparticles and its oxidation resistance and electrical properties

#### 16 Hubert Ronduda

Effect of precipitating agent on the structure, morphology and electrochemical properties of LiCoO2 cathode material in lithium ion batteries

# 17 Magdalena Rzeszotarska

Magnesium Hydrides used in Hydrogen Storage Technology

# 18 Magda Pęska

Problems associated with hydrogen storage

## 19 Marta Lewusz, Ada Hlebowicz

Simulation of cascade LNG liquefaction process in Aspen Plus

## 20 Anna Wojciechowska

Characterization of Ligand Shell for Mixed-Ligand Coated Zinc Oxide Quantum Dots

## 21 Bartłomiej Kramarczyk

Study of the effect of hydrostatic pressure on the stability of the operating properties of seismic emulsion explosives.

## 22 Wojciech Bień

Polymer composites with ITO and graphene

## 23 Wojciech Frąckowiak

PDMS – coated Particle Track Membrane for microfluidics – fabrication and application

### 24 Daria Czuryszkiewicz

lonic liquids with tryptophanate anion as active ingredients prolonging vase-life of cut flowers