

1st POSTER SESSION

1 Paulina Armatys (3:50 p.m. – 4:00 p.m.)

Effect of electrospun fiber morphology on microbial properties of fiber membranes

2 Aleksandra Bandzerewicz (4:00 p.m. – 4:10 p.m.)

Polyesters of azelaic acid and selected short-chain dihydroxy alcohols for the preparation of cell scaffolds

3 Szymon Bober (4:10 p.m. – 4:20 p.m.)

The effect of chitosan molecule mass on naphthoquinone secretion and proliferation of *Rindera graeca* transgenic roots cultured on PLA-chitozan hybrid scaffolds

4 Maria Bobrova (4:20 p.m. – 4:30 p.m.)

Methods for Assessing the Metabolic Activity of Plant Cells

5 Rafał Czajka (4:30 p.m. – 4:40 p.m.)

Novel 3D printed culture flasks for transgenic root culture under wave-type agitation conditions

6 Barbara Guzdek (4:40 p.m. – 4:50 p.m.)

Piezoelectric materials as scaffolds for tissue regeneration

7 Karina Jasińska (4:50 p.m. – 5:00 p.m.)

Development of chokeberry and apple pomace as matrices for immobilization of microbial lipases

8 Grzegorz Karpiński (5:00 p.m. – 5:10 p.m.)

Cultivation of transfected *Nicotiana tabacum* BY-2 cells in a rocking disposable bioreactor

9 Jakub Knap-Kowalski (5:10 p.m. – 5:20 p.m.)

Polydopamine as a possible binding agent for antithrombotic coating for small-diameter artificial vascular grafts

10 Katarzyna Kozubal (5:20 p.m. – 5:30 p.m.)

Gel-derived bioactive glass nanoparticles

11 Magdalena Król (5:30 p.m. – 5:40 p.m.)

The impact of proton radiation on osteoblasts

12 Anna Marszałek (5:40 p.m. – 5:50 p.m.)

Selection of conditions for obtaining fibrous substrates with variable wettability intended for soft tissue restoration

13 Magdalena Miętus (5:50 p.m. – 6:00 p.m.)

Aza-Michael addition reactions of itaconic compounds

14 Martyna Nizioł (6:00 p.m. – 6:10 p.m.)

3D printing of thermosensitive hydrogel with antimicrobial properties

15 Agnieszka Piontek (6:10 p.m. – 6:20 p.m.)

Optimization of the 3D printing process of gelatin methacryloyl bioink

16 Wiktoria Wojnarowska (6:20 p.m. – 6:30 p.m.)

An integrative biomechanical approach to developing a patient-specific numerical model of the pelvic bones

2nd POSTER SESSION

1 Seyedshoja Amini (3:50 p.m. – 4:00 p.m.)

Continuum model of twin branching in shape memory alloys

2 Eglė Didžiulytė (4:00 p.m. – 4:10 p.m.)

Influences of temperature and extractions duration on the chemical composition of digestate extracts

3 Patrycja Gaćkowska (4:10 p.m. – 4:20 p.m.)

Valence and coordination states of Co transition metal ions in a view of the borate bioactive glass structure

4 Monika Klimek (4:20 p.m. – 4:30 p.m.)

MTMS aerogel-based ssPCM – morphology effect and sorption method investigation

5 Karolina Kozanecka (4:30 p.m. – 4:40 p.m.)

Printing parameter optimization to achieve high-resolution objects for the dentistry

6 Karolina Kryszczyńska (4:40 p.m. – 4:50 p.m.)

Synthesis of Silver-Modified Halloysite – a material with antibacterial properties

7 Weronika Ługowska (4:50 p.m. – 5:00 p.m.)

Experimental research on rheological and tribological properties of oil suspensions with the addition of MoS₂/CNTs hybrid nanostructures

8 Klaudia Łyszczarz (5:00 p.m. – 5:10 p.m.)

Cationic modifications of black glasses – preparation and properties

9 Anna Martin (5:10 p.m. – 5:20 p.m.)

Cost-effective electroconductive sodium lignosulfonate/carbon nanotube composite coating for paper electronics

10 Anna Martin (5:20 p.m. – 5:30 p.m.)

The effect of water on electroconductive carbon composite coatings containing sodium carboxymethylcellulose

11 Kornel Prystupiak (5:30 p.m. – 5:40 p.m.)

Precipitation of doped hydroxyapatite nanoparticles in a continuous reactor

12 Katarzyna Starzak (5:40 p.m. – 5:50 p.m.)

Investigating the spectroscopic properties and kinetics of photopolymerisation processes based on new photoinitiators dedicated to dental applications

13 Karol Tutek (5:50 p.m. – 6:00 p.m.)

Rowanberry - a natural alternative to synthetic additives for polymeric materials

3rd POSTER SESSION

1 Grzegorz Bernacki (3:50 p.m. – 4:00 p.m.)

A project of demonstration installation for plant-based drink production

2 Julia Chaładej (4:00 p.m. – 4:10 p.m.)

A coupled CFD-PBE model of particle breakage during grinding in a horizontal stirred media mill

3 Radosław Gernaszewski (4:10 p.m. – 4:20 p.m.)

Influence of plant extracts on the process of unfolding and properties of structures obtained from PLA solution blow spinning

4 Goda Gudinskaitė (4:20 p.m. – 4:30 p.m.)

Benefits of frass in fertilizer production

5 Maria Jarząbek-Karnas (4:30 p.m. – 4:40 p.m.)

3D-printing as the method for prototyping novel PEM electrolyzers

6 Katarzyna Kisiel (4:40 p.m. – 4:50 p.m.)

Bio-based substitutes of polar aprotic solvents as reaction environment for ATRP

7 Anna Łapeta (4:50 p.m. – 5:00 p.m.)

Advanced analytical techniques to assess the stability of emulsions containing functionalized organosilicon compounds

8 Kleopatra Majewska (5:00 p.m. – 5:10 p.m.)

Numerical simulations of the heat transfer process in a stirred tank

9 Małgorzata Noworyta (5:10 p.m. – 5:20 p.m.)

Mechanism studies of new initiating systems for 3D printing of crowns and bridges

10 Małgorzata Noworyta (5:20 p.m. – 5:30 p.m.)

Two-component photoinitiating systems as an alternative to commercially available photoinitiators for photopolymerization processes

11 Michał Półtorak (5:30 p.m. – 5:40 p.m.)

Personalized 3D printing in skin cancer brachytherapy: Development, Implementation, Clinical Applications, and Treatment Assessment

12 Agnieszka Sysło (5:40 p.m. – 5:50 p.m.)

Synthesis, purification and characterization of carbon dots for application in cationic and free-radical photopolymerization processes

13 Adam Tymoszewski (5:50 p.m. – 6:00 p.m.)

Development of a Bioreactor with Continuous Supernatant Harvesting and Uninterrupted Bioprocessing

14 Ewelina Warmbier (6:00 p.m. – 6:10 p.m.)

Characterization of micellar networks in selected nonionic/ionic surfactant mixtures