



POSTER SESSION

Posters are arranged numerically and should be attached to the assigned poster panels on Thursday, 15th Oct (15:00 - 15:15 & 16:30-17:00) or Friday, 16th Oct (8:45-9:00). All posters will be exposed throughout the whole conference. Poster presenters are strongly encouraged to be present at their posters for the poster sessions.

LIST OF POSTERS

1. **Alina Sionkowska**, Oliwia Mężykowska, Nabanita Saha, Elżbieta Menaszek
New composites based on bacterial nanocellulose and gelatin
2. **Alina Sionkowska**, Katarzyna Adamiak, Katarzyna Lewandowska
Rheological properties of collagen gels after UV treatment
3. **Marta Michalska-Sionkowska**, Oliwia Warzyńska, Maciej Walczak, Beata Kaczmarek
The effect of β -glucan on the surface morphology and roughness parameters of fish origin collagen materials
4. **Marta Szulc**, Katarzyna Lewandowska
Characterization of thin chitosan composite films
5. **Anna Karewicz**, Adrianna Machowska, Joanna Klara
Halloysite-based system for controlled delivery of clindamycin phosphate
6. **Magdalena Wytrwał-Sarna**, Agata Pomorska, Małgorzata Sekuła-Stryjewska, Katarzyna Gajos, Kamil Awiuk, Michał Sarna, Ewa Zuba-Surma, Krzysztof Szczubiałka
Bone morphogenetic protein-2 adsorption on photoactive polymeric substrates
7. **Krzysztof Pałka**
Polymerization shrinkage of new dental composites modified with liquid rubber
8. **Sylwia Grabska-Zielińska**, Alina Sionkowska, Fernando J. Monteiro, Catarina C. Coelho, Katarzyna Lewandowska
Physico-chemical characterization and biological tests of silk fibroin/collagen/chitosan materials, cross-linked by glyoxal solution
9. **Filip Maciąg**, Tomasz Moskalewicz, Zoya Hadzhieva, Aldo R. Boccaccini
Microstructure, surface topography and adhesion of zein coatings electrophoretically deposited on titanium substrates
10. Marcin Elgalal, Piotr Komorowski, Krzysztof Makowski, Andrzej Styczyński, Piotr Ułański, Tomasz Kubiak, Jacek Sawicki, Marcin Domżański, **Bogdan Walkowiak**
Design and manufacture of customized medical implants – third report
11. **Filip Kuśmierczyk**, Łukasz Cieniek, Tomasz Moskalewicz
Fabrication and characterization of multicomponent HA/MoS₂/PEEK coatings on the Ti-13Nb-13Zr alloy
12. **Maciej Warcaba**, Tomasz Moskalewicz, Zoya Hadzhieva, Aldo R. Boccaccini
Electrophoretic deposition and characterisation of sodium alginate coatings on commercially pure titanium
13. Michalina Ehlert, Aleksandra Radtke, Tomasz Jędrzejewski, Katarzyna Roszek, **Piotr Piszczek**
Comprehensive evaluation of the biological properties of surface-modified titanium alloy implants
14. **Beata Kaczmarek**, Marcin Wekwejt, Kinga Nadolna, Agata Owczarek, Olha Mazur, Anna Pałubicka
The bactericidal degradation effectiveness of tannic acid-based thin films for wound care
15. Barbara Kubiak, **Aleksandra Radtke**, Patrycja Golińska, Piotr Piszczek
The antimicrobial and photocatalytic activity evaluation of the polymer/titanium(IV) oxo-complex composites

16. **Marta Tuszyńska**, Joanna Skopińska-Wiśniewska
Dual cross-linking as a method of improving mechanical properties of gelatin-alginate hydrogels
17. **Justyna Kozłowska**, Marta Sienkiewicz, Anna Lipińska
Hydrogel-based materials for delivery medicinal plant extracts - preliminary studies
18. **Dagmara Malina**, Katarzyna Bialik-Wąs, Klaudia Pluta
Preparation and characterization of bio-hybrid hydrogel materials
19. **Magdalena Walkowiak-Przybyło**, Marta Walczyńska, Marta Kamińska, Piotr Komorowski, Bogdan Walkowiak
May metallic biomaterials used for orthopedic implants promote cancer processes? Preliminary transcriptomics research on human articular chondrocytes
20. **Marta Kamińska**, Marta Walczyńska, Magdalena Walkowiak-Przybyło, Piotr Komorowski And Bogdan Walkowiak
Does surface structuring of metallic materials affect thrombocompatibility?
21. **Małgorzata Miastkowska**, Katarzyna Bialik-Wąs
Determination of aloe vera release from alginate based hydrogels
22. **Paulina Chytrosz**, Monika Gołda-Cępa, Andrzej Kotarba
Functionalization of polyurethane surfaces for improved biocompatibility
23. **Wojciech Pajerski**, Monika Gołda-Cępa, Mirosława Pawlyta, Magdalena Parlińska-Wojtan, Monika Brzychczy-Włoch, Andrzej Kotarba
Bacteria meet nanoparticles - electron microscopy insights
24. **Monika Gołda-Cępa**, Paulina Chytrosz, Wojciech Pajerski, Monika Brzychczy-Włoch, Andrzej Kotarba
Design and tailoring of polymeric biomaterials surfaces: prevention of biomaterials-centered infections
25. Paulina Chytrosz, Monika Gołda-Cępa, Janusz Włodarczyk, Jarosław Kuzdzal, Mirosława El Fray, **Andrzej Kotarba**
Characterization of partially covered self-expandable metallic stents for esophageal cancer treatment: in vivo degradation
26. **Martyna Leszczewicz**, Natalia Gniada, Krzysztof Makowski, Piotr Komorowski, Bogdan Walkowiak
Morphological and biochemical features of microorganisms inhabiting the surfaces of personalized femoral implants
27. **Natalia Gniada**, Martyna Leszczewicz, Krzysztof Makowski, Piotr Komorowski, Bogdan Walkowiak
Identification and characterization of microbiological contamination sources in the environment of production of personalized femoral implant
28. **Marcin Wekwejt**, Marta Michalska-Sionkowska, Małgorzata Nadolska, Anna Pałubicka, Andrzej Zieliński
Improving antibacterial activity of bone cement doped with nanosilver
29. **Ewa Dzierzkowska**, Przemysław Żmuda, Anna Ścisłowska-Czarnecka, Kamil Kornaus, Ewa Stodolak-Zych
The influence of microstructure of fibrous PLA/PVA membranes on physicochemical and biological properties
30. Maciej Gubernat, **Ewa Dzierzkowska**, Anna Ścisłowska-Czarnecka, Maciej Boguń, Magdalena Chadzińska, Ewa Stodolak-Zych
Fibrous carbon scaffold modified by polysaccharides with potential biological activity
31. **Natalia Stachowiak**, Jolanta Kowalonek, Justyna Kozłowska
The influence of cocamidopropyl betaine on the mechanical and thermal properties of polymer films
32. **Przemysław Kurtyka**, Roman Major, Maciej Gawlikowski, Marcin Kaczmarek, Roman Kustos
Technology selection of surface modification for cardiac implants used in MCS therapy
33. Przemysław Ceynowa, Ewa Czerwińska, Łukasz Szparaga, Katarzyna Mydlowska, **Jerzy Ratajski**, Anna Iwanek, Ewa Dobruchowska
Influence of surface modification of 316L medical steel on microbial adhesion

34. Ewa Czerwińska, Adrian Wiśniewski, Łukasz Szparaga, **Katarzyna Mydlowska**, Przemysław Ceynowa, Jerzy Ratajski
Influence of filtering material on the microbiological safety of protective half masks
35. Tomasz Gapinski, Krzysztof Lenartowicz, **Paulina Galas, Małgorzata Gonsior**, Leonardo Ricotti, Lorenzo Vannozzi, et al.
First tests of extrusion process using arthroscopic 3d bioprinting handheld tools prototypes
36. **Amanda Bartkowiak**, Arkadiusz Zarzycki, Sławomir Kąc, Marcin Perzanowski, Marta Marszałek
Mechanical properties of different nanopatterned TiO₂ substrates and their effect on hydrothermally synthesized bioactive hydroxyapatite coatings
37. **Tomasz Goryczka**, Tomasz Borycki, Andrzej Borycki
Surface modification of NiTi wires for endoscopic guide wires used in urology
38. **Barbara Zawidlak-Węgrzyńska**, Małgorzata Gonsior, Lech Czerwiński, Adam Jarosz, Roman Kustos
Evaluation of N,N-dimethylacetamide level in polyurethane implant elements manufactured in dip-molding process
39. Marcin Boruchowski, **Karol Gryń**, Barbara Szaraniec, Jan Chłopek
Mechanical properties of hydrogels in a chitosan/silk/graphene system
40. **Konrad Kwiecień**, Agata Flis, Filip Koper, Wiktor Kasprzyk, Elżbieta Pamuła
Degradation studies of poly(diol citrates) for vascular tissue engineering purposes
41. Klaudia Trembecka- Wójciga, **Roman Major**, Roman Ostrowski, Marcin Surmiak, Juergen Lackner
Carbon-based coatings on titanium substrate, laser modified to control endothelium cell growth
42. **Patrycja Domalik-Pyzik**, Karolina Kosowska, Martyna Hunger, Kinga Pielichowska, Jan Chłopek
Highly porous polyurethane-based gradient scaffolds for tissue engineering of osteochondral defects
43. Patrycja Domalik-Pyzik, Klaudia Zięba, **Jan Chłopek**
Hydrogels crosslinked with natural compounds for biomedical applications
44. **Barbara Szaraniec**, Marcin Boruchowski, Karol Gryń, Jan Chłopek
Chitosan hydrogels modified with silk, graphene oxide or reduced graphene oxide