

# PROGRAMME

## **15<sup>30</sup> – 18<sup>00</sup> Dedicated Session: *Biomaterials and Biotechnologies* (Room A- 'Emil Palade' Auditorium)**

**Chairs: Jacques Desbrieres** – University of Pau, France

**Liliana Verestiuc** - Grigore T. Popa University of Medicine and Pharmacy, Faculty of Medical Bioengineering, Iasi

**Anca Galaction** - Grigore T. Popa University of Medicine and Pharmacy, Faculty of Medical Bioengineering, Iasi

- 1. Original Concept to Produce Low (non)Toxic Biomaterials for Advanced Drug Delivery,** *Jacques Desbrieres, M. Popa, Catalina Peptu*
- 2. Collagen Structures in Pericardium and Aortic Heart Valves and Their Significance for Tissue Engineering,** *Elena Filova, Zuzana Burdikova, Lubica Stankova, Daniel Hadraba, Hynek Chlup, Eva Gultova Jan Vesely, Lukas Horny, Zdenek Svindrych, Frantisek Straka, David Schornik , Rudolf Zitny, Jan Pirk, Lucie Bacakova - Id:55*
- 3. Electrochemical Deposition of Hydroxyapatite (HA) on Titanium Alloys for the Implant Surface Bio-functionalization,** *Ionut Stirbu, Petrica Vizureanu, Mihaela Ratoj, Nicanor Cimpoesu - Id:88*
- 4. Influence of Contact Frequencies on Corrosion Behavior of Ti-6Al-4V Alloy during Fretting in Physiological Solution,** *Lidia Benea, Eliza Danaila, Jean Pierre Celis - Id:98*
- 5. Surface Investigations of Vacuum Teflon Thin Films Deposited on Different Materials Suitable for Bioengineering and Medical Applications,** *Marius Prelipceanu, Adrian Graur, Lucian-Nicolae Cojocariu - Id:99*
- 6. Active Thermography Method Using an CO<sub>2</sub> Laser for Thermal Excitation, Applied to Defect Detection in Bioceramic Materials,** *Razvan Gabriel Dragan, Ileana-Constanta Rosca, Sam-Ang Keo, Florin Breaban - Id:104*
- 7. Designing Polymer-based Immunosensing Platforms for Cancer Biomarker Detection,** *Anca Florea, Mihaela Tertis, Alexandru Cristea, Robert Sandulescu, Cecilia Cristea - Id:115*
- 8. Fractionation of Carboxylic Acids Mixture by Succinic Acid Fermentation Using,** *Madalina Postaru, Lenuta Kloetzer, Corina Ciobanu, Anca-Irina Galaction, Dan Cascaval - Id:172*
- 9. Automated Dynamic Bioreactor for 2D Endothelial Structures,** *Roman Matejka, Jozef Rosina, Elena Filova, Jana Havlikova, Jaroslav Chlupac, Jana Stepanovska - Id:196*
- 10. Functionalized Superparamagnetic Nanoparticles as Versatile Carriers for Targeted Antioxidant Enzyme Therapy,** *Vera Balan, Maria Butnaru, Ovidiu Bredetean, Lenuta Profire, Florentina Geanina Lupascu, Aurica Chiriac, Loredana Nita, Iordana Neamtu, Liliana Verestiuc - Id:224*

## POSTERS

- 11. Bending-Rotation Tests of NiTi Superelastic Wires Used in Medical Applications**, *Lucian Bogdan, Cristian Nes, Angelica Enkelhardt, Nicolae Faur, Jenel Marian Patrascu - PId:23*
- 12. Monitoring the Thermal Effects in the Magnetic Hyperthermia**, *Iordana Astefanoaei, Ioan Dumitru, Alexandru Stancu, Horia Chiriac - PId:66*
- 13. Obtaining Hydroxyapatite (HA) by Sol-Gel Method on Ti6Al4V Alloys Aiming the Implant's Surface Bio-Functionalization**, *Ionut Stirbu, Petrica Vizureanu, Mihaela Ratoi, Ramona Cimpoesu - PId:89*
- 14. Effect of Electroplating Parameters on UHMWPE Co-Deposition into Cobalt Matrix**, *Marilena Mardare - Pralea, Lidia Benea, Iulian Bounegru, Eliza Danaila - PId:100*
- 15. Active Thermography Based on the Heat Transfer Process in Determining the Influence of Micro Defects in Bio-ceramic Materials Surface**, *Razvan Gabriel Dragan, Ileana-Constanta Rosca, Franck Brachelet, Florin Breaban- PId:105*
- 16. Antioxidant Properties of Halotolerant Penicillium Vhrysogenum var. Chrysogenum Secondary Metabolites**, *Zerrin Canturk, Miris Dikmen, Nilgun Ozturk, Ercin Kocabiyik, Semra Ilhan- PId:149*
- 17. Importance of Phytosterols and their Determination in Herbal Medicines**, *Bianca Ivanescu, Laurian Vlase, Andreia Corciova- PId:166*
- 18. Interfacial Mass Transfer in Direct Extraction of Propionic Acid from Propionibacterium acidipropionici Broths with Tri-n-Octylamine**, *Alexandra Carlescu, Alexandra Cristina Blaga, Marius Turnea, Amalia Bompa, Dan Cascaval, Anca irina Galaction - PId:167*
- 19. Comparative Studies on Oxygen Mass Transfer in Different Fermentation Broths in Presence of Oxygen Vectors**, *Ramona Matran, Maria Filibiu, Alexandra-Cristina Blaga, Marius Turnea, Anca-Irina Galaction, Dan Cascaval - PId:173*
- 20. Use of Bacterial Cellulose-Glycerol-Poly(vinyl alcohol) Composites in Drug Release**, *Ramona-Daniela Pavaloiu, Tanase Dobre, Cristina Hlevca - PId:193*
- 21. Antiangiogenic and Antiproliferative Effects of Halotolerant Penicillium chrysogenum var. Chrysogenum on the Human Umbilical Vein Endothelial Cells (HUVECs)**, *Miris Dikmen, Zerrin Canturk, Selin Engur, Buket Demirtas, Semra Ilhan - PId:205*
- 22. Synthesis and Characterization of Magnetic Nanoparticles Based on N-Palmitoyl-Chitosan with Potential Applications in Cancer Theranostics**, *Vera Balan, Maria Butnaru, Liliana Verestiuc- PId:211*
- 23. Compartmental Analysis Using Electrical Impedance Applied for Real Fermentation Broths**, *Marius Turnea, Calin Corciova, Doru Andritoi, Mariana Rotariu - PId:220*
- 24. Novel semi-Interpenetrating Polymer Networks Based on Functionalized Chitosan and Poly(acrylic acid) with Potential Applications in Soft Tissue Engineering**, *Alina Gabriela Rusu, Marcel Ionel Popa, Maria Butnaru, Liliana Verestiuc - PId:229*
- 25. Biocompatible composites based on mixtures of biopolymers (chitosan and hyaluronic acid) and calcium phosphate for bone tissue engineering**, *Andreea Marian, Florina Daniela Ivan, Maria Butnaru, Liliana Verestiuc - PId:230*

**26. Degradation Mechanisms and Surface Analysis of the Polyethylene Components of Total Knee Prostheses, *Iulian Antoniac, Marius Niculescu, Diana Popescu- PId:249***

**27.The Failure Mechanism in the Case of One Customized Implant Used for a Tumoral Reconstruction of the Femur, *Iulian Antoniac, Marius Niculescu, Diana Popescu- PId:250***