



Virtual International Scientific Conference on
“Applications of Chemistry in Nanosciences and Biomaterials Engineering –
NanoBioMat 2021”

25-26 June 2021

Program

The program will be published on the official webpage of AOSR and UPB on 21.06.2021 as well in the TEAMS Class. The link for the TEAMS Class will be provided in due time, on or before 21.06.2021.

The topics for the conference include, but are not limited to:

- novel materials;
- surface chemistry;
- air and soil bioremediation;
- composite materials and biomaterials;
- applications of natural compounds and chemical products;
- nanomaterials and bionanomaterials for the controlled release of biologically active molecules;
- bionanoproducts for tissue engineering and regeneration;
- advanced techniques for material processing.

Deadlines:

- | | |
|--------------------------------|---------------|
| 1. Registration: | 15.05.2021 |
| 2. Abstract submission: | 11.06.2021 |
| 3. Acceptance Notification: | 15.06.2021 |
| 4. Final Program announcement: | 21.06.2021 |
| 5. Conference: | 25-26.06.2021 |

Registration:

Registration should be done using the link: <https://forms.office.com/r/1VXE3v3vK9>

Registration is free for all students and postdoctoral researchers (or equivalent).



Abstract submission:

Abstract should be submitted in MS Word document, by email, to Eng. Cristina CHIRCOV (cristina.chircov@upb.ro) on or before 11.06.2021. The abstract should be 150 – 300 words and it must contain the title, authors, and their full affiliation.

Scientific Committee

Prof. Ecaterina ANDRONESCU, UPB&AOSR (Romania)

Prof. Ioana DEMETRESCU, UPB&AOSR (Romania)

Prof. Anton FICAI, UPB&AOSR (Romania)

Prof. Maria GAVRILESCU, TU Iași&AOSR (Romania)

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Prof. Lenuta Profire, UMF Iasi (Romania)

Prof. Serguei SAVILOV, MSU (Russia)

Prof. Ze Xiang SHEN, NTU (Singapore)

Prof. Eduard COROPCEANU, UST (Moldova)

Organizing Committee

Prof. Ecaterina ANDRONESCU – president

Prof. Maria GAVRILESCU

Prof. Anton FICAI

Eng. Cristina CHIRCOV – Conference Secretary



Program

25 June 2021

9:00-9:15 – OPENING CEREMONY

Prof. Ecaterina ANDRONESCU – President of the Scientific Committee

Prof. Adrian-Alexandru BADEA – President of The Academy of Romanian Scientists

Prof. Tudor PRISECARU – President of the University Politehnica of Bucharest Senate

9:15-12:00 – PLENARY SESSION

Chairs – Serguei SAVILOV. Anton FICAI

9:15-9:45 – *The Features of Carbon Nanostructures.* **Serguei V. Savilov**, Ekaterina A. Arkhipova

9:45-10:05 – *The Biomedical Applications of Chitosan Based Nanomaterials as Wound Dressings.* **Lenuța Profire**. Andreea Teodora Iacob. Oana Maria Ionescu. Teodora Iurașcu. Ioannis Gardikiotis. Simona Eliza Giușca. Irina-Draga Căruntu

10:05-10:20 – *Presentation on the Legislation in the Field of Medical Devices in the Current European and International Context.* **Sorina Loghin**

10:20-10:50 – *Polymer Nanocarriers as Emerging Smart Nanoformulations.* **Domenico Lombardo**

10:50-11:30 – *From Self-Assembly of Amphiphiles to Ionic Liquid Formation.* **Pietro Calandra**

11:30-12:00 – Q & A Session

12:00-12:30 – POSTER SESSION

Chairs - Irina FIERASCU. Faik N. OKTAR

12:30-13:30 – LUNCH BREAK

13:30 - 16:00 – SESSION I. APPLICATIONS OF NATURAL COMPOUNDS

Chairs – Pietro CALANDRA. Lenuța PROFIRE

13:30-13:45 – *Production of Nanofibers Containing Purified Black Seed Oil by Making Use of Electrospinning System.* **Ihsan Fatih Ertas**. Müslüm Demircioglu. Muhammet Uzun

13:45-14:00 – *The Use of Additive Manufacturing Method to Develop Lanolin Based Scaffold for Wound Dressing Applications.* **Al Amin**. Ani Diana Kuyumcu. Muhammet Uzun. Oğuzhan Gündüz



- 14:00-14:15 – *Controlled Release of Resveratrol-Loaded Levan Nanoparticles Using Electrospray*. **Ezgi Cinan**. Sumeyye Cesur. Oğuzhan Gündüz. Ebru Toksoy Oner
- 14:15-14:30 – *Polyphenols: A Natural Alternative for Cancer Therapy*. **Alina Florentina Vladu**. Anton Fikai
- 14:30-14:45 – *Magnetite-Silica Core-Shell Nanoparticles Functionalized with Essential Oils for Antimicrobial Therapies*. **Cristina Chircov**. Maria-Florentina Matei. Ovidiu Oprea. Roxana Trușcă. Alexandru Mihai Grumezescu. Ionela Andreea Neacșu. Ecaterina Andronescu
- 14:45-15:00 – *Synthesis and Characterization of Electrospun Nanofibers Loaded with Black Tea/Thyme Plant Extracts as an Antimicrobial Wound Dressing*. **Aybuke Gur**. Sumeyye Cesur. Tuba Sevimoglu. Oğuzhan Gündüz
- 15:00-15:15 – *Controlled Release of Amygdalin Loaded PLA/PEG Nanofiber by Electrospinning Method*. **Serap Ayaz Seyhan**. Dilek Bilgic Alkaya. Sumeyye Cesur. Oğuzhan Gündüz
- 15:15-15:30 – *Production, Characterization, and Evaluation of Sublingual Micromeria Fruticosa Subsp. Brachycalyx-Loaded Chitosan/Polyvinyl Alcohol Nanofibers*. **Ilke Kabaoglu**. Ravana Babazade. Fadime Topal. Ece Guler. Hatice Kübra Elcioglu. Muhammet Emin Cam
- 15:30-15:45 – *The Evaluation of Ultra-Fast Release Teucrium Polium-Loaded Nanofibers Produced by Electrospinning in the Treatment of Diabetes Mellitus*. **Elif Beyzanur Polat**. Ayse Nur Hazar-Yavuz. Ece Guler. Hatice Kübra Elcioglu. Muhammet Emin Cam
- 15:45-16:00 – *Drug Delivery Systems for Topical Cannabidiol. An Overview and Future Research Directions*. **Geanina Silvana Banu**. Anton Fikai. Nicolae Costache

13:30 - 16:00 – SESSION II. NANOSTRUCTURES FOR FOOD PACKAGING, BIOREMEDIATION, AND INDUSTRIAL APPLICATIONS (I)

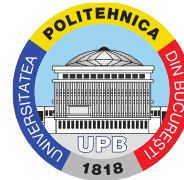
Chairs – Eduard COROPCEANU. Maria GAVRILESCU

- 13:30-13:45 – *Initial Screening of Biosorption Process Modelling and Optimization for its Industrial Scale-up*. **Mihaela Roșca**. Raluca-Maria Hlihor. Petronela Cozma. Cătălina Filote. Isabela-Maria Simion. Maria Apostol. Maria Gavrilescu



- 13:45-14:00 – *Comparison of Eco-Friendly and Conventional Bioremediation Processes Scenarios of Metal-Loaded Wastewaters.* **Cătălina Filote.** Mihaela Roșca. Isabela Maria Simion. Raluca-Maria Hlihor
- 14:00-14:15 – *Nickel Toxicity for Sinapis Alba L. Plant and its Phytoremediation Potential for Metal Recovery.* **Mariana Minuț.** Mihaela Roșca. Petronela Cozma. Mariana Diaconu. Maria Gavrilescu
- 14:15-14:30 – *Ecological Risk Assessment on Heavy Metals in Soils: An Overview.* **Gina-Mihaela Finaru (Chelaru).** Petronela Cozma. Camelia Smaranda. Ioan Mamaliga. Maria Gavrilescu
- 14:30-14:45 – *Environmental Constraints Generated by Food Waste and Alternatives for Sustainable Management.* **Ersilia Daniela Lazar (Coșbuc).** Elena-Diana Ungureanu-Comanita. Simona Ilău (Olteanu). Maria Gavrilescu
- 14:45-15:00 – *Comparative Assessment of Lead Chloride and Cadmium Chloride to Ocimum Basilicum L.* **Dana Mihaela Asiminicesei.** Laura Hagiu Zaleschi. Maria Apostol. Raluca Maria Hlihor. Maria Gavrilescu
- 15:00-15:15 – *Electrochemical Investigation of Thin CrNx Films Deposited on 310 H Stainless Steel by Thermoionic Vacuum Arc (TVA) Method.* **Aurelia Elena Tudose.** Ioana Demetrescu. Florentina Golgovici. Manuela Fulger. Diana Diniashi. Cristina Surdu-Bob. Alexandru Anghel. Marius Bădulescu
- 15:15-15:30 – *Application of TVA Coating Technology on Zy-4 and as-Received Cr Coating Characterization.* **Diana Diniasi.** Ioana Demetrescu. Florentina Golgovici. Cristina Surdu. Alexandru Anghel. Marius Badulescu. Manuela Fulger. Aurelia Tudose
- 15:30-15:45 – *Investigation of Chemical Stress Generated by Lead on the Growth and Physiology of Zea Mays L.* **Ionela Cătălina Vasilachi.** Dana Mihaela Asiminicesei. Mariana Minuț. Mihaela Roșca. Petronela Cozma. Camelia Betianu. Maria Gavrilescu
- 15:45-16:00 – *A Study on the Effect of Tip to Collector Distance to Electromechanical Properties of Electrospun Carbon Nanotube Based Flexible Strain Sensors.* **Selin Gençay.** İhsan Fatih Ertaş. Mert Taş. Abdulkadir Şanlı. Muhammed Uzun

16:00 - 16:30 – BREAK



16:30 - 19:00 – SESSION III. BIOMATERIALS FOR TISSUE ENGINEERING AND REGENERATION

Chairs – Vitalie COBZAC. Ioana DEMETRESCU

- 16:30-16:45 – *Selection of an Appropriate Cross-linking Method of Collagen Sponges for Articular Cartilaginous Tissue Engineering.* **Vitalie Cobzac.** Liliana Verestiuc. Mariana Jian. Viorel Nacu
- 16:45-17:00 – *Bacterial Cellulose/Boron Nitride Hydrogels Potential for Bone Tissue Engineering Applications.* **Semra Unal**
- 17:00-17:15 – *Synthesis of Silk Fibroin Derived from Silk Cocoon and Using for Tissue Engineering Applications.* **Sureyya Elif Celik.** Songul Ulag. Ayse Ceren Calikoglu Koyuncu. Oğuzhan Gündüz
- 17:15-17:30 – *Collagen and Keratin Additives for New Nanostructures in Tissue Engineering.* **Maria Stanca.** Carmen Gaidau. Maria Rapa. Daniela Berechet. Anamaria Mosutiu
- 17:30-17:45 – *Terbium-Doped Hydroxyapatite.* **Andrei Păduraru.** Ovidiu Oprea. Adina Magdalena Muşuc. Bogdan Ştefan Vasile. Florin Iordache. Ecaterina Andronescu
- 17:45-18:00 – *Effect of Corn Starch Additive on Mechanical and Biocompatibility Properties of Sintered β -TCP Bioceramics.* **Yiğit Turan.** Cevriye Kalkandelen. Yuksel Palaci. Ali Şahin. Hasan Gökçe. Oğuzhan Gündüz
- 18:00-18:15 – *Biomaterials Based on Multifunctional Hydroxyapatite for Orthopedic Applications.* **Reka Balint.** Gheorghe Tomoaia. Daniel Oltean-Dan. Aurora Mocanu. Maria Tomoaia-Cotisel
- 18:15-18:30 – *Bioceramics Based on Magnesium Silicate for Bone Regenerative Medicine.* **Alexandra Avram.** Maria Gorea. Gheorghe Tomoaia. Aurora Mocanu. Maria Tomoaia-Cotisel
- 18:30-18:45 – *Biological Assesment of Electrospun Nanofibres Based on Chitosan.* **Andreea-Teodora Iacob.** Oana-Maria Ionescu. Teodora Hanghichel Iuraşcu. Maria Apotrosoaei. Florentina Lupaşcu. Maria Drăgan. Lenuţa Profire. Anton Fikai. Ecaterina Andronescu



18:45-19:00 – *Hyaluronic Acid-Based Electrospun Nanofibers: Design and Characterization.*

Oana Maria Ionescu. Andreea Teodora Iacob. Arn Mignon. Teodora Iuraşcu.

Ioannis Gardikiotis. Natalia Simionescu. Lenuţa Profire

16:30 - 19:00 – SESSION IV. NOVEL MATERIALS AND NANOPRODUCTS

Chairs – Domenico LOMBARDO. Ovidiu OPREA

16:30-16:45 – *The Evaluation of the Osteoinductive Effect of Vitamin D3/Vitamin*

K2/Magnesium-Loaded Polylactic Acid/Tricalcium Phosphate/

Polycaprolactone Composite Nanofibers on Wnt/B-Catenin Pathway. **Ece**

Guler. Muhammet Emin Cam

16:45-17:00 – *Novel Treatments for Nail Diseases.* **Teodora Andreea Bunda.** Ecaterina

Andronesu. Alexandru Mihai Grumezescu

17:00-17:15 – *Morphological, Structural, and Chemical Characterization of Hydroxyapatite*

Obtained Through Different Synthesis Routes. **Maria-Elena Zarif.** Alina Maria

Holban. Sorin Vizireanu. Gheorghe Dinescu. Alexandru Mihai Grumezescu.

Ecaterina Andronesu

17:15-17:30 – *Gelatin Methacryloyl (GelMA) Nanofibers via Centrifugal Spinning.* **Ezgi**

Ismar. Oguzhan Polat. Fatih Arican. Aykut Sancakli

17:30-17:45 – *Hybrid Material: Silver Nanoclusters Trapped in PEGDA-Based Hydrogel for*

Environmental Monitoring. **Luca Burratti.** Nayeli Reyes Moreno. Fabio De

Matteis. Roberto Francini. Paolo Prosposito

17:45-18:00 – *Sulfur-Doped Graphene Nanoflakes: Synthesis and Application in*

Supercapacitors. **Mikhail Levin.** Ekaterina Arkhipova. Dmitrii Stolbov. Anton

Ivanov. Serguei Savilov

18:00-18:15 – *Extracellular Vesicles as Tiny Riddles from Medicine to Material Science.* **Esra**

Cansever Mutlu

18:15-18:30 – *Synthesis of Ti₃C₂T_x Mxene with Various Surface Functionalisation.* **Nikolay**

Osipov. Stepan Yu. Kupreenko, Serguei V. Savilov

18:30-18:45 – *Optimization of the Mechanical Performance of 3D Printed Sandwiches.* **S.**

Valvez. P.N.B. Reis. Abílio P. Silva

18:45-19:00 – *A Route to Biofabrication of Microbubble Based Scaffolds via Microfluidic*

Systems. **Ecem Doğan.** Mustafa Şengör. Cem Bülent Üstündağ. Oğuzhan

Gündüz



26 June 2021

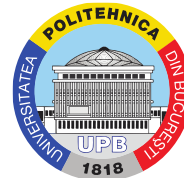
9:00-10:00 – POSTER SESSION

Chairs - Irina FIERASCU. Faik N. OKTAR

**10:00-12:30 – SESSION V. NANOMATERIALS AND BIOMATERIALS FOR THE
CONTROLLED RELEASE OF BIOACTIVE MOLECULES (I)**

Chairs – Oğuzhan GÜNDÜZ. Denisa FICAI

- 10:00-10:15 – *Biocompatible and Biomimetic Nanofibers Based on Chitosan and Active Substances with Antioxidant Effects.* **Teodora Iurascu.** Andreea-Teodora Iacob. Alexandru Sava. Oana Ionescu. Lenuța Profire
- 10:15-10:30 – *New Multitarget Polymer Systems for the Treatment of Diabetes Mellitus.* **Florentina Geanina Lupașcu.** Ioana Vasincu. Andreea-Teodora Iacob. Maria Apotrosoaei. Dan Lupașcu. Georgiana Taușer. Maria Dragan. Andra Ababei. Lorena Herciu. Simona Rotariu. Lenuța Profire
- 10:30-10:45 – *A Novel Multi-Target Strategy for the Treatment of Alzheimer's Disease: Donepezil/Memantine/Curcumin-Loaded Nanofibers.* **Fadime Topal.** Busra Ertas. Ece Güler. Muhammet Emin Cam
- 10:45-11:00 – *Antifungal and Antibiotic Reinforced PMMA Nanofibers for the Treatment of Corneal Keratitis.* **Songul Ulag.** Mustafa Sengor. Oğuzhan Gündüz
- 11:00-11:15 – *The Development of Insulin-Loaded Sodium Alginate/Polyethylene Glycol Sublingual Scaffolds Produced by 3D-Printing Technology for the Treatment of Type 1 Diabetes Mellitus.* **Sevdenur Akkutuk.** Ece Guler. Muhammet Emin Cam
- 11:15-11:30 – *Donepezil/Curcumin-Loaded Polycaprolactone/Poly(lactic Acid) Nanofibers: A Novel Drug Delivery System for the Treatment of Alzheimer's Disease.* **Saliha Aydin.** Ilke Kabaoglu. Ece Guler. Fadime Topal. Ayse Nur Hazar Yavuz. Muhammet Emin Cam
- 11:30-11:45 – *A Combined Method for Fabrication of Chitosan/PLA 3D Printed Scaffold with Rifampicin-Encapsulated Microspheres for Therapy of Hidradenitis Suppurativa.* **Mert Gezek.** Hanne Meryem Kayadurmuş. Elif İlhan. Oğuzhan Gündüz



11:45-12:00 – *Production and Characterization of Empagliflozin-Loaded 3-Layer Polymeric*

Fibers for the Treatment of Diabetes Mellitus: An In-vitro Study. **Ayse Nur**

Hazar-Yavuz. Ece Guler. Muhammet Emin Cam

12:00-12:15 – *Fabrication and Characterization of Carbamazepine Loaded Poly(lactic acid)*

(PLA) Nanofibrous Scaffolds. **Dilek Bilgic Alkaya.** Serap Ayaz Seyhan.

Sumeyye Cesur. Oğuzhan Gündüz

12:15-12:30 – *Antioxidant Activity of Taraxacum Officinale.* **Ala Fulga.** Valeriana Pantea

10:00-12:00 – SESSION VI. NANOSTRUCTURES FOR FOOD PACKAGING,

BIOREMEDIATION, AND INDUSTRIAL APPLICATIONS (II)

Chairs – Jörg OPITZ. Bogdan Ștefan VASILE

10:00-10:15 – *The Effect of Nanofiller Concentration on the Piezoresistive Properties of*

Electrospun Multiwalled Carbon Nanotubes (MWCNTS)/Thermoplastic

Polyurethane (TPU). **Mert Taş.** Fatih İhsan Ertaş. Selin Gençay. Abdulkadir

Şanlı. Muhammed Uzun

10:15-10:30 – *Effect of Manufacturing Parameters on Mechanical Properties of Graphene-*

Based Nanocomposites. **J.M. Parente.** M.P. Silva. P.N.B. Reis

10:30-10:45 – *Air Pollution and its Effects on Sars-Cov-2 Variants.* **Cristina Roxana Popa.**

Gheorghe Tomoaia. Aurora Mocanu. Maria Tomoaia-Cotisel

10:45-11:00 – *The Influence of Proteins on Metallic Biomaterials.* **Radu Nartîță.** Daniela

Ioniță. Ioana Demetrescu

11:00-11:15 – *Ferrocene Catalyzed Production of Carbon Nanotubes.* **A.P. Kozlov.** D.N.

Stolbov. E.V. Suslova

11:15-11:30 – *Perspectives of Waste Management Resulting from the Bakery Industry.* **Simona**

Ilău (Olteanu). Ersilia Daniela Coşbuc. Elena-Diana Ungureanu-Comăniță.

Maria Gavrilescu

11:30-11:45 – *A Novel Biodegradable Material Application for Sustainable Button Design.*

Bahar Aşilioğlu. Akio Kobayashi. Türkan Özger. Muhammet Uzun

11:45-12:00 – *Chemical Removal of Residual Lead from the Candidate Materials for Lead*

Cooled Fast Reactors. **Daniel Petrescu.** Florentina Golgovici. Manuela Fulger.

Valentin Lăutaru

12:15-13:30 – LUNCH BREAK



**13:30-15:00 – SESSION VII. NANOMATERIALS AND BIOMATERIALS FOR THE
CONTROLLED RELEASE OF BIOACTIVE MOLECULES (II)**

Chairs – Viorel NACU. Radu Claudiu FIERASCU

- 13:30-13:45 – *Influence of Sulfated Polysaccharides from Spirulina Platensis on the Content of Malonic Dialdehyde in Muscle Tissue in Oxidative Stress.* **Veaceslav Popa.** Valeriana Pantea
- 13:45-14:00 – *Evaluation and Production of Chitosan-Based Self-Assembled Nanoparticles for Oral Insulin Delivery.* **Enfal Eser.** Ece Guler. Muhammet Emin Cam
- 14:00-14:15 – *A Nanotechnological Approach to Wound Healing: Beta-Glucan-Loaded Polyethylene Oxide/Sodium Alginate Fibers Produced by Pressurized Gyration* **Beyzanur Uludogan.** Enfal Eser. Busra Ertas. Muhammet Emin Cam
- 14:15-14:30 – *Mesoporous Systems Loaded with Polyphenols for the Treatment of Dysbiosis.* **Gabriela Petrișor.** Ludmila Motelică. Roxana Trușcă. Vladimir Lucian Ene. Denisa Ficai. Ovidiu Oprea. Anton Ficai
- 14:30-14:45 – *Fabrication of Whey Protein-Loaded 3D-Printed Poly(lactic) Acid Patches for Functional Burn Wound Healing.* **Hanne Meryem Kayadurmuş.** Elif İlhan. Oğuzhan Gündüz
- 14:45-15:00 – *Impact of New Thiosemicarbazone Derivatives for Erythrocytes Antioxidant System Indices: An Ex Vivo Study.* **Valeriana Pantea.** Marina Gamaniuc. Cristina Popușoi. Ala Fulga. Veaceslav Popa

**13:30-15:00 – SESSION VIII. ADVANCED AND NOVEL TECHNIQUES FOR MATERIAL
PROCESSING**

Chairs – Cem Bülent ÜSTÜNDAĞ. Andreea-Teodora IACOB

- 13:30-13:45 – *Hyaluronic Acid Production from Rooster Comb and Analysis.* **Elif Saatçioğlu.** Cevriye Kalkandelen. Sena Su. Oğuzhan Gündüz
- 13:45-14:00 – *The Investigation of the Mechanical Properties of the Coronary Stent with Finite Element Analysis.* **Merve Sirtikara.** Mustafa Şengör
- 14:00-14:15 – *An Innovative Experimental Technique for Material System Dynamical Investigations on Nanoscopic Scale: Elastic Neutron Scattering Measurements Based on Statistical Chopper.* **Maria Teresa Caccamo**



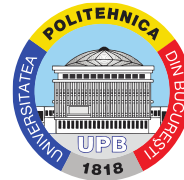
14:15-14:30 – *New Route for Synthesis of Silver Nanoparticles Using a Microfluidic Platform.*

Alexandra Cătălina Bîrcă. Alexandru Mihai Grumezescu. Ecaterina Andronescu

14:30-14:45 – *Corrosion Resistance Investigation in Liquid Lead of a Coated 316L Austenitic Steel.* **Daniel Petrescu.** Manuela Fulger. Florentina Golgovici. Mircea Corban

14:45-15:00 – *Development of Sublingual Rivastigmin/Memantine/Ginkgo Biloba-Loaded Nanofibers for the Treatment of Alzheimer's Disease: In Vitro Studies.* **Büşra Ertaş.** Ece Güler. Muhammet Emin Cam

15:00-15:30 – CLOSING CEREMONY



Poster Sessions

25 June 2021

Chairs – Irina FIERASCU. Faik N. OKTAR

1. *Alginate Films with ZnO Nanoparticles and Citronella Essential Oil – Novel Antimicrobial Packaging for Cheese.* **Ludmila Motelica.** Denisa Ficai. Ovidiu Oprea. Anton Ficai. Roxana-Doina Truşcă. Ecaterina Andronescu. Alina Maria Holban
2. *Cotton Fiber Coated with Zinc Oxide Nanoparticles.* **Manuela-Daniela Preda.** Ecaterina Andronescu. Alexandra Cătălina Bîrcă. Vladimir-Lucian Ene. Alina Maria Holban
3. *In-depth Characterization of Electrospun Polylactic Acid (PLA) Nanofibers on TiZr Oxide.* **Manuela Elena Voicu.** Andrei Bogdan Stoian. Ioana Demetrescu. Daniela Ionita
4. *Lead Free Alkali Niobates Nanopowders.* **Cristina Rodica Dumitrescu.** Adrian Vasile Surdu. Adrian Ionut Nicoara. Ionela Andreea Neacsu. Roxana Trusca. Anton Ficai. Ecaterina Andronescu
5. *Quercetin/Curcumin Enhanced Chitosan-ZnO Composite for Antibacterial Delivery Systems.* **Maria Leila Popa.** Vladimir-Lucian Ene. Alina Maria Holban
6. *Production and Characterization of Memantine/Donepezil/Metformin Loaded PVA/PEO Fibers for Alzheimer's Disease by Pressurized Gyration.* **Aysen Kopuz.** Ece Guler. Muhammet Emin Cam
7. *Preparation, Characterization, and In Vitro Evaluation of Donepezil/Vitamin B12-Loaded Polycaprolactone/Polyvinyl Pyrrolidone Fibers Produced by Pressurized Gyration for Treatment of Alzheimer's Disease.* **Irem Nur Onay.** Elif Beyzanur Polat. Busra Ertas. Muhammet Emin Cam
8. *A Novel Treatment Strategy for Diabetes Mellitus: Empagliflozin-Loaded Polylactic acid/Polycaprolactone Fibrous Patches Produced by Electrospinning and Pressurized Gyration.* **Humeyra Betul Yekeler.** Ilke Kabaoglu. Busra Ertas. Muhammet Emin Cam

26 June 2021

Chairs – Irina FIERASCU. Faik N. OKTAR

1. *Viticultural Waste Management for Obtaining Nanostructures with Medical Applications.* **Anda Maria Baroi.** Radu Claudiu Fierascu. Roxana Ioana Brazdis. Toma Fistos. Lia-Mara Ditu. Raluca Somoghi. Irina Fierascu
2. *Adsorption Studies for the Removal of Organic and Emerging Pollutants from Aqueous Solutions Using Metal-Substituted Hydroxyapatite.* **Roxana-Ioana Brazdis.** Radu Claudiu Fierascu. Sorin-Marius Avramescu. Anda Maria Baroi. Toma Fistos. Irina Fierascu. Valentin Raditoiu
3. *Enhancement of the Apatitic Materials' Antimicrobial Potential for Cultural Heritage Applications.* **Toma Fistos.** Roxana Ioana Brazdis. Anda Maria Baroi. Irina Fierascu. Lia-Mara Ditu. Radu Claudiu Fierascu
4. *Latest Advances in Calcium Phosphate Surface Coatings for Microbial Biofilm Modulation.* **Diana-Elena Radulescu.** Ecaterina Andronescu. Alexandru-Mihai Grumezescu. Ionela-Andreea Neacsu. Vasile-Adrian Surdu. Otilia Ruxandra Vasile



5. *Future Trends and Perspectives of Scaffolds based on Hydrogels in Tissue Engineering.* **Denisa-Maria Radulescu.** Ecaterina Andronesu. Alexandru-Mihai Grumezescu. Ionela-Andreea Neacsu. Adrian-Ionut Nicoara
6. *Biomaterials Based on Bee Products for Dermal Tissue Regeneration.* **Corina-Dana Dumitru.** Ecaterina Andronesu. Ionela-Andreea Neacsu. Alexandru Mihai Grumezescu. Denisa Ficai
7. *Highly Porous Materials for Wound Healing.* **Daniela-Alina Ioniță.** Ecaterina Andronesu. Ionela-Andreea Neacsu. Vasile-Adrian Surdu. Alexandru-Mihai Grumezescu
8. *Black Phosphorus in Bone Tissue Engineering.* **Andra-Maria Sîrmon.** Ecaterina Andronesu. Ionela-Andreea Neacsu. Vasile-Adrian Surdu. Alexandru-Mihai Grumezescu
9. *The Synthesis and Integration of Three Metal Organic Frameworks (MOFs) Compounds into Thin Films for Sensors of Gases and VOCs.* **Catalin Paun.** Octavian Buiu. Ovidiu Cristian Oprea. Denisa Ficai. Anton Ficai. Ecaterina Andronesu
10. *Recovery of Critical Raw Materials from Waste – An Overview.* **Mihaela David.** Camelia Bețianu, Petronela Cozma, Maria Gavrilescu
11. *Glass Fabrics Functionalisation for the Development of High Performances Sandwich Structures.* **George Valentin Săftoiu.** Carolina Constantin. Adrian Ionut Nicoară. George Pelin. Anton Ficai
12. *Metal-based Anticancer Complexes.* **Irina-Gabriela Voinea.** Anton Ficai. Denisa Ficai
13. *HAp-Zn Based Biomaterials for Bone Tissue Regeneration.* **Florina-Cristina Ilie (Marinescu).** Ecaterina Andronesu. Ionela Andreea Neacsu. Vasile Adrian Surdu. Roxana Trusca
14. *Natural and Synthetic Polymers for Bone Nanocomposites.* **Alexandra-Cristina Burdusel.** Ecaterina Andronesu. Anton Ficai. Alina Maria Holban. Alexandru Mihai Grumezescu
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18. *In Situ Evaluation of Fly Ash as Potential EOL Material Replacement in Cement Pastes.* **Bogdan Ștefan Vasile.** Adrian-Ionuț Nicoara. Vasile-Adrian Surdu. Vladimir Lucian Ene. Ionela Andreea Neacsu. Alexandra Elena Stoica. Ovidiu Oprea. Iulian Boierasu. Roxana Trusca. Mirijam Vrabec. Nastja Šmuc Rogan. Saso Sturm. Cleve Ow-Yang. Mehmet Ali Gulgun. Zeynep Basaran Bundur