

Virtual International Scientific Conference on
“Applications of Chemistry in Nanosciences and Biomaterials Engineering –
NanoBioMat 2022”

24-26 November 2022

Program

The program will be published on the official webpage of AOSR and UPB on 21.11.2022, as well as in the TEAMS Class. The link for the TEAMS Class will be provided in due time, on or before 21.11.2022.

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: | 15.10.2022 |
| 2. Extended registration: | 06.11.2022 |
| 3. Abstract submission: | 07.11.2022 |
| 4. Acceptance Notification: | 15.11.2022 |
| 5. Final Program announcement: | 21.11.2022 |
| 6. Conference: | 24-26.11.2022 |

Registration:

Registration should be done using the link: <https://nanobiomat.eu/registration/>.

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

Abstract submission:

Abstract should be submitted in MS Word document using the link <https://nanobiomat.eu/registration/> on or before 07.11.2022. The abstract should be 150 – 300 words and it must contain the title, authors, and their full affiliation.

Scientific Committee

Acad. Maria ZAHARESCU, Romanian Academy (Romania)

Prof. Ecaterina ANDRONESCU, UPB&AOSR (Romania)

Dr. Vladimir BAULIN, URV (Spain)

Prof. Aldo R. BOCCACCINI, FAU (Germany)

Prof. Luigi CALABRESE, UniME (Italy)

Prof. Joan CERDÀ, UIB (Spain)

Prof. Carmen CHIFIRIUC, UniBuc (Romania)

Prof. Eduard COROPCEANU, UST (Moldova)

Prof. Ioana DEMETRESCU, UPB&AOSR (Romania)

Prof. Anton FICAI, UPB&AOSR (Romania)

Dr. Victor FRUTH-OPRIȘAN, ICF (Romania)

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

Dr. Oguzhan GUNDUZ, Marmara Univ (Turkey)

Prof. Domenico LOMBARDO, CNR-IPCF Messina (Italy)

Prof. Herbert Ryan MARINI, UNIME (Italy)

Prof. Carlos MARQUES, UniStra (France)

Prof. Lluís MARSAL, URV (Spain)

Prof. Dr. Viorel NACU, USMF (Moldova)

Prof. Ion NEDA, TU Braunschweig (Germany)

Prof. Faik OKTAR, Marmara Univ (Turkey)

Dr. Jörg OPITZ, IKTS (Germany)

Dr. Radu-Robert PITICESCU, IMNR (Romania)

Prof. Lenuta PROFIRE, UMF Iasi (Romania)

Prof. Serguei SAVILOV, MSU (Russia)

Prof. Ze Xiang SHEN, NTU (Singapore)

Organizing Committee

Prof. Ecaterina ANDRONESCU – president

Prof. Maria GAVRILESCU

Prof. Anton FICAI

PhD Student, Eng. Cristina CHIRCOV – Conference Secretary

Dr. Eng. Angela SPOIALĂ – Technical Staff

PhD Student, Eng. Cornelia-Ioana ILIE – Technical Staff

Access Links

Meeting first day:

[Click here to join the meeting](#)

Meeting ID: 353 600 089 571

Passcode: rJQLym

Meeting second day:

[Click here to join the meeting](#)

Meeting ID: 361 884 517 145

Passcode: eJXQ9T

Meeting third day:

[Click here to join the meeting](#)

Meeting ID: 338 758 778 635

Passcode: vDCmr8

Program**Thursday, 24 November 2022**[Click here to join the meeting;](#) Meeting ID: 353 600 089 571; Passcode: rJQLym

10:00-10:15 – Opening Ceremony	Chair: Ecaterina ANDRONESCU
10:15-12:00 – Plenary Session (I)	Chairs: Christophe EGLES, Anton FICAI
12:00-13:00 – Lunch Break	
13:00-14:00 – Poster Session (I)	Chairs: Carlos MARQUES, Denisa FICAI
14:00-16:35 – Session I. Advanced Techniques for Material Design and Synthesis	Chairs: Serguei SAVILOV, Ovidiu OPREA
16:35-17:00 – Coffee Break	
17:00-18:45 – Plenary Session (II)	Chairs: Domenico LOMBARDO, Ioana DEMETRESCU

Friday, 25 November 2022[Click here to join the meeting;](#) Meeting ID: 361 884 517 145; Passcode: eJXQ9T

10:00-12:00 – Session II. Biomaterials for Tissue Engineering and Regeneration	Chairs: Viorel NACU, Lenuța PROFIRE
12:00-13:00 – Lunch Break	
13:00-15:30 – Session III. Materials and Nanomaterials for Antimicrobial and Anticancer Applications	Chairs: Cem Bulent USTUNDAG, Carmen CHIFIRIUC
15:30-17:50 – Session IV. Applications of Smart Materials	Chairs: Jorg OPITZ, Maria TOMOAI-COTISEL

Saturday, 26 November 2022[Click here to join the meeting;](#) Meeting ID: 338 758 778 635; Passcode: vDCmr8

10:00-12:30 – Session V. Materials for Advanced Applications	Chairs: Oguzhan GUNDUZ, Maria GAVRILESCU
12:30-13:30 – Lunch Break	
13:30-14:30 – Poster Session (II)	Chairs: Luigi CALABRESE, Radu Claudiu FIERASCU
14:30-15:00 – Closing Ceremony	Chair: Ecaterina ANDRONESCU

24 November 2022

[Click here to join the meeting;](#) Meeting ID: 353 600 089 571; Passcode: rJQLym

10:00-10:15 – OPENING CEREMONY

Chair: Ecaterina ANDRONESCU

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

10:15-12:00 – PLENARY SESSION (I)

Chairs – Christophe EGLES, Anton FICAI

10:15-10:45 – *Contribution of Additive Manufacturing Techniques to the Design of Personalized Implants. Application to Reparative Hand Surgery.* A. Lerebours, **Christophe Egles**

10:45-11:15 – *Environmental Contamination Assessment Using Nanomaterial: Sustainable Analytical Approaches.* **Bárbara Socas-Rodríguez**, Ruth Rodríguez-Ramos, Álvaro Santana-Mayor, Antonio V. Herrera-Herrera, Adrián Conde-Díaz, Miguel Ángel Rodríguez Delgado

11:15-11:45 – *Features of the Carbon Nanostructures Formation.* **Serguei V. Savilov**, Anna D. Krot, Ekaterina A. Arkhipova, Stepan N. Kalmykov

11:45-12:00 – Q & A Session

12:00-13:00 – LUNCH BREAK

13:00-14:00 – POSTER SESSION (I)

Chairs – Carlos MARQUES, Denisa FICAI

1. *Serum Malondialdehyde Level: Oxidative Stress Marker in Pulmonary Drug-Susceptible and Resistant Tuberculosis.* **Lesnic Evelina**, Pantea Valeriana
2. *Acoustic Properties of Bio-Polyol and Unsaturated Fatty Acid- Modified Fillers Enhanced Integral Skin Polyurethane Foams in Automotive Industry.* **Aykut Aykac**, Cem Yigit, Ethem Gokhan Ozcelik
3. *The Integration of Oxide Nanoparticles with Carbon Materials for the Development of Nanocomposites with Applicability in Biotechnology.* **Vasilica Țucureanu**, Cosmin Alexandru Obreja, Cristina Pachiu, Oana Brâncoveanu, Alina Matei
4. *Influence of Process Parameters for Biogenic Synthesis of Zinc Oxide Nanoparticles.* **Alina Matei**, Gabriel Crăciun, Cosmin Romanițan, Cristina Pachiu, Vasilica Țucureanu

-
5. *Composite Systems for Bone Tissue Regeneration*. **Alina Florentina Vladu**, Ludmila Motelica, Roxana Trusca, Anton Fikai
 6. *Application of Phosphate Materials Enhanced with Different Metals with Potential Antimicrobial Properties on Different Types of Bricks*. **Toma Fistos**, Roxana Ioana Matei, Anda Maria Baroi, Irina Fierascu, Lia-Mara Ditu, Valentin Raditoiu, Radu Claudiu Fierascu
 7. *Application of Phosphatic Nanomaterials on Polluted Water Decontamination – Case Study*. **Roxana Ioana Matei (Brazdis)**, Sorin-Marius Avramescu, Irina Fierascu, Anda Maria Baroi, Toma Fistos, Radu Claudiu Fierascu
 8. *Film-Forming Properties of Different Starch Products Present on The Romanian Market*. **Andra-Ionela Ghizdareanu**, Alexandra Banu
 9. *Pollen Grain Evolution After Nanomaterials Application*. **Daniela-Ionela Sărdărescu**, Diana E. Vizitiu, Radu C. Fierăscu, Irina Fierăscu, Liliana C. Soare, Camelia Ungureanu, Anda M. Baroi, Alin C. Din
 10. *Development and Optimization of Nose-To-Brain Delivery of Thermoreversible In Situ Gel Incorporating Aripiprazole Loaded Nanostructured Lipid Carriers*. **Kamini Sharma**, Manish Kumar
 11. *Current Review of Nanocarriers in Cosmetic Science*. **Pragya Bharti**, Vaishnavi Chauhan, Manish Kumar
 12. *Ph Sensitive Controlled Release Nanostructured Lipid Carriers of Prednisolone Acetate as Ocular Drug Delivery System Development: Ex Vivo Transcorneal Permeation And In Vivo Ocular Irritation*. **Sheetal Devi**, Manish Kumar
 13. *Review On Antimicrobial Natural Compounds: Open-Source Alternatives Against Antibiotic Resistant Bacteria*. **Marian Raşcov**, Anton Fikai, Ovidiu Cristian Oprea, Otilia-Ruxandra Vasile, Ecaterina Andronescu
 14. *Weathering Evidences Of The Banloc Castle (Romania)*. **Alina Moşiu**, Lorena Iancu, Ramona Marina Grigorescu, Anca Irinagheboianu, Marius Moşoarcă, Rodica-Mariana Ion

14:00 - 16:35 – SESSION I. ADVANCED TECHNIQUES FOR MATERIAL DESIGN AND SYNTHESIS**Chairs – Serguei SAVILOV, Ovidiu OPREA**

- 14:00-14:20 – *Nanostructured Photocatalysts Integration in Composites for Environmental Applications.* **Mirela Petruta Suche**a, Ioan Valentin Tudose, Petronela Pascariu, Cosmin Romanitan, Oana Brincoveanu, Cristina Pachiu, Emmanouel Koudoumas
- 14:20-14:35 – *Improving Corrosion Resistance and Biocompatibility Of GO/Ser Modified Ti₆Al₇Nb Alloy By Electrophoretic Deposition.* **Aysel Oktay**, Cem Bülent Ustundag
- 14:35-14:50 – *Fabrication of Electrospun Polylactic Acid/Polyhydroxybutyrate/Silk Fibroin Nanofibers To Obtain Retinal Nerve Fiber Layer.* **Sureyya Elif Celik**, Songul Ulag, Ayse Ceren Calikoglu Koyuncu, Oguzhan Gunduz
- 14:50-15:05 – *Ethosuximide loaded Alginate/Polyethylene Oxide 3D-printed Scaffolds for Epilepsy Treatment.* **Aysim Cisen Akyol**, Hatice Karabulut, Songul Ulag, Banu Aydin, Rezzan Gulhan, Oguzhan Gunduz
- 15:05-15:20 – *Maple Functionalization of Medical Surfaces Based on Sustainable Natural Resources.* **Anita Ioana Visan**, Socol Gabriel, Rodica Cristescu, Gianina Pelin Popescu, Luiza Izabela Jinga, Consuela Elena Matei, Marcela Popa, Mariana Carmen Chifiriuc
- 15:20-15:35 – *The Structural, Morphological and Electrochemical Stability Characterization of Two Chromium Coatings Deposited on Zy-4 Alloy for Generation IV Reactors.* **Diana Diniasi**, Florentina Golgovici, Manuela Fulger, Ioana Demetrescu
- 15:35-15:50 – *Improving Corrosion Resistance of 310 H Stainless Steel Candidate for Generation IV Reactors by Deposition of Chromium Nitride Ceramic Layers.* **Aurelia Elena Tudose**, Ioana Demetrescu, Florentina Golgovici, Manuela Fulger, Alexandru Anghel, Oana Brincoveanu
- 15:50-16:05 – *Hybrid Alignment of Liquid Crystal for Higher Electro-optic Applications.* **Ashok Chaudhary**
- 16:05-16:20 – *Development of Janus Microbubbles with Varied Morphologies by the Effect of Different Solvents.* **Tugce Yesilyurt**, Sumeyye Cesur, Cem Bulent Ustundag, Oguzhan Gunduz

16:20-16:35 – *Functionalized Ferroelectric Coating of Potassium Sodium Niobate on Nickel*

Substrate by Using Electrophoretic Deposition Technique. **Muhammad Salman**

Habib, Muhammad Asif Rafiq, Adnan Maqbool, Huraira Hashim, Ali Raza, Mohsin Ali

16:35-17:00 – BREAK

17:00-18:45 – PLENARY SESSION (II)

Chairs – Domenico LOMBARDO, Ioana DEMETRESCU

17:00-17:30 – *Meniscal Tissue Engineering – A Novel Approach To The 3D Bioprinted Meniscal Implant.* **Jakub D. Rybka**

17:30-18:00 – *Global Warming Due to Biomaterials? Can Nanomaterials Be the Answer?*
Thomas J. Webster

18:00-18:30 – *Intelligent Material Design.* **Marius Stan**

18:30-18:45 – Q & A Session

25 November 2022

[Click here to join the meeting](#); Meeting ID: 361 884 517 145; Passcode: eJXQ9T

10:00 - 12:00 – SESSION II. BIOMATERIALS FOR TISSUE ENGINEERING AND REGENERATION

Chairs – Viorel NACU, Lenuța PROFIRE

10:00-10:15 – *Vitamin E Particles Coated on PLA/PMS-MK Based Scaffold for Wound Healing.*
Nasma Anjrumi, Songul Ulag, Oguzhan Gunduz

10:15-10:30 – *3D-printed Cardiac Patches based on Fabrication and Characterization of Fucoidan Loaded Chitosan/Silk Fibroin/PANI Scaffolds.* **Armaghan Moradi**, Kudret Irem Deniz, Songul Ulag, Oguzhan Gunduz

10:30-10:45 – *Fabrication and Characterization of Electrospun Polylactic acid/B-KerMA Nanofibers for Wound Dressing Applications.* **Zekiye Akdag**, Elif Nur Yildiz, Hilal Calik, Rabia Cakir Koc, Songul Ulag, Oguzhan Gunduz

10:45-11:00 – *Production and Characterization of Drug-Loaded Tissue Healing Fiber Dressing for Corneal Ulcer Treatment.* **Rabia Betul Sulutas**, Sumeyye Cesur, Elif Ilhan, Ewa Kijewska-Gawrońska, Oguzhan Gunduz

11:00-11:15 – *Production of Biofunctional Wound Dressing for Wound Healing Applications.*

Kaan Danis, Burcak Bulut, Sule Ilgar, Songul Ulag, Cem Bulent Ustundag,
Oguzhan Gunduz

11:15-11:30 – *Keratin Loaded PVA/Silk Fibroin Electrospun Nanofibers for Wound Dressing Applications.* **Tufan Arslan Tut**, Sumeyye Cesur, Oguzhan Gunduz

11:30-11:45 – *Promoting Effect of Nano Hydroxyapatites and Vitamin D3 on the Osteogenic Differentiation of Osteoblasts and Bone Regeneration.* **Alexandra Avram**, Teodora Mocan, Aurora Mocanu, Gheorghe Tomoaia, Sorin Riga, Maria Tomoaia-Cotisel

11:45-12:00 – *Hydroxyapatite Functionalized with Essential Oils.* **Alexandra-Cristina Burduşel**, Robert Grigore, Ecaterina Andronescu

12:00-13:00 – LUNCH BREAK

13:00 - 15:30 – SESSION III. MATERIALS AND NANOMATERIALS FOR ANTIMICROBIAL AND ANTICANCER APPLICATIONS

Chairs – Cem Bulent USTUNDAG, Carmen CHIFIRIUC

13:00-13:15 – *Synthesis of PVA and Fucoidan Nanofibers for Skin Cancer Melanoma Treatment Through Electrospinning Mechanisms.* **Eray Altan**, Songul Ulag, Oguzhan Gunduz

13:15-13:30 – *Fabrication of Chitosan/Collagen Membranes Coated with Polyvinyl Alcohol/ Amoxicillin Nanofibers for Dental Applications.* **Ayca Aydin**, Songul Ulag, Cem Bulent Ustundag, Oguzhan Gunduz

13:30-13:45 – *Investigation of Antimicrobial and Biofilm Properties of 3D Alginate/Polyethylene Glycol/Phenethyl Alcohol Scaffolds.* **Sena Nur Aslan**, Eray Altan, Songul Ulag, Oguzhan Gunduz, Gulgun Bosgelmez Tinaz

13:45-14:00 – *Fabrication of 3D Scaffolds with Antibacterial and Antibiofilm Properties for the Treatment of Chronic Wounds.* **Furkan Canli**, Turac Ozan Anilir, Yagmur Zeynep Demir, Sule Ilgar, Songul Ulag, Gulgun Bosgelmez Tinaz, Oguzhan Gunduz

14:00-14:15 – *Chicoric Acid of Taraxacum Officinale Leaves as a Potential Agent Against Glioblastoma.* **Ala Fulga**, Valeriana Pantea

14:15-14:30 – *Fabrication and Characterization of Antibiotic-Loaded GelMA Microneedle for Transdermal Drug Release.* **Huseyin Erkus**, Tuba Bedir, Oguzhan Gunduz, Cem Bulent Ustundag

14:30-14:45 – *Fabrication and Characterization of Naringenin-loaded Poly(Lactic Acid) (PLA)*

Nanofibrous Scaffolds. **Zeynep Erdağ**

14:45-15:00 – *Miconazole and Neomycin Non-pressurized Topical Spray.* **Neelam Pawar**

15:00-15:15 – *Magnetite Nanoparticles in Cancer Drug Delivery.* **Paul Adrian Tărăbuță,**
Anton Fikai

15:15-15:30 – *Encapsulation of Anti-cancer Drug (Tamoxifen Citrate) Conjugated with Magnetite Nanoparticle for Targeted Drug Delivery.* **Emmellie Laura Albert,** Dalila Alias, Che Azurahamanim Che Abdullah

15:30 - 17:50 – SESSION IV. APPLICATIONS OF SMART MATERIALS

Chairs – Jorg OPITZ, Maria TOMOAI-COTISEL

15:30-15:50 – *Emerging Biological Application of Smart Materials.* **Rupak Kumar**

15:50-16:05 – *Functionalized Mesoporous Silica Materials Loaded with Ferulic Acid.* **Gabriela Petrisor,** Ludmila Motelica, Denisa Fikai, Roxana Doina Trusca, Adrian Vasile Surdu, Georgeta Voicu, Ovidiu Cristian Oprea, Anton Fikai

16:05-16:20 – *The Coatings of Iron Oxide Nanoparticles using Polyethylene Glycol for Biomedical Application.* **Siti Nor Hanis Nor Halim,** Emmellie Laura Albert, Che Azurahamanim Che Abdullah

16:20-16:35 – *Biogenic Synthesis and Optimisation of Gold Nanoparticles Using Roselle Extract for Biomedical Application.* **Nur Iffah Auni Mohamed,** Emmellie Laura Albert, Siti Nadiyah Zulkifli, Che Azurahamanim Che Abdullah

16:35-16:50 – *Plant Derived Triterpenoids as Potential Anticancer Agents.* **Nidhi Gupta**

16:50-17:05 – *Development of Qcm-Based Biosensors by Determining Antibacterial Properties of Silver Nanoparticle Graphene Oxide Quantum Dots.* **Büşra Oktay,** Azime Erarslan, Ahmet Altında, Cem Bülent Üstündağ, Esma Ahlatcioğlu Özerol

17:05-17:20 – *Management of Non-Melanoma Skin Cancer by Binding of Tretinoin Loaded Micellar Gel With A-B- γ Retinoic Acid Receptor.* **Navneet Mehan,** Manish Kumar

17:20-17:35 – *Eggshell Membrane as an Efficient Bioadsorbent for Removing Heavy Metal Ions from Wastewater.* **Hamza Badamasi**

17:35-17:50 – *Antimicrobial Effect of Silver Nanoparticles Applied on Stone Substrates.* **Liliana Marinescu,** Anton Fikai, Denisa Fikai, Alina-Maria Holban, Ovidiu Oprea, Roxana Trusca, Motelica Ludmila, Ecaterina Andronescu

26 November 2022

[Click here to join the meeting](#); Meeting ID: 338 758 778 635; Passcode: vDCmr8

10:00 - 12:30 – SESSION V. MATERIALS FOR ADVANCED APPLICATIONS

Chairs – Oguzhan GUNDUZ, Maria GAVRILESCU

- 10:00-10:15 – *In Vitro Testing of Influence of Some Copper Coordination Compounds, Thiosemicarbaside Derivates on the Level of Malondialdehyde.* **Valeriana Pantea**, Evelina Lesnic, Sardari Veronica, Ala Fulga, Veaceslav Popa
- 10:15-10:30 – *Can High Entropy Alloys Be Used as Structural Nuclear Materials for Future Nuclear Applications?* **Radu Nartita**, Manuela Fulger, Ioana Demetrescu
- 10:30-10:45 – *Fabrication and Characterization of Microparticle-Coated Microneedle Scaffolds for Transdermal Drug Delivery.* **Esra Pilavci**, Sumeyye Cesur, Oguzhan Gunduz
- 10:45-11:00 – *Piezoelectric Polymer-Based Electrospun Fiber Design for Advanced Arthritis Treatments.* **Beyza Topçu**, Elif İlhan, Dilek Kazan, Orkun Pınar, Oğuzhan Gündüz
- 11:00-11:15 – *Retinoids: New Approach to Decrease Their Side Effects While Increasing Their Effectiveness.* **Ioana Lavinia Lixandru (Matei)**
- 11:15-11:30 – *Eco-Friendly Magnetic Nanomaterials for Heavy Metal Contaminated Wastewater Treatment.* **Ganea Iolanda-Veronica**, Nan Alexandrina, Baciu Calin
- 11:30-11:45 – *Morphological Changes of Human Erythrocyte During the Interaction with Deferoxamine. An AFM Study.* **Gertrud-Alexandra Paltinean**, Gheorghe Tomoaia, Sorin Riga, Aurora Mocanu, Maria Tomoaia-Cotisel
- 11:45-12:00 – *Low-Cost Adsorbent for the Removal Xenobiotic pollutant Morpholine: A Proof of Concept.* **Rupak Kumar**
- 12:00-12:15 – *Development and Evaluation of Prednisolone Acetate Containing Polymeric Micelles Loaded In Situ Gel for The Treatment of Ocular Inflammation.* **Nikita Kaushal**, Manish Kumar
- 12:15-12:30 – *Electrochemical Anodization as a Nanostructuring Tool for Biomedical Applications.* **Anca Mazare**, Patrik Schmuki

12:30-13:30 – LUNCH BREAK

13:30-14:30 – POSTER SESSION (II)

Chairs – Luigi CALABRESE, Radu Claudiu FIERASCU

1. *Ferrostatin Loaded Polylactic Acid/Tricalcium Phosphate Microparticles for Bone Tissue Engineering.* **Adrian Moraru**, Nicoleta Florina Labonc, Ana-Maria Pușcașu, Eray Altan, Songul Ulag, Anton Fikai, Oguzhan Gunduz
2. *Fabrication of Vitamin E Loaded 3D-printed Sodium Alginate/Xanthan Gum Scaffolds for Wound Healing Applications.* **Nicoleta Florina Labonc**, Ana-Maria Pușcașu, Adrian Moraru, Eray Altan, Songul Ulag, Anton Fikai, Oguzhan Gunduz
3. *Evaluating The Photo-Oxidation Efficiency of an Organic Water Contaminant Through a Cost-Effective Ecotoxicity Method.* **Maria Paiu**, Lidia Favier, Raluca-Maria Hlihor, Maria Gavrilescu
4. *Assessment of the In Vitro Toxicity Induced by Rare Earth-Doped Phosphor Nanoparticles on Human Lung Fibroblast Cells.* **Sorina N. Voicu**, Ionela C. Voinea, Miruna S. Stan
5. *The Potential of Bee Products in Dermal Tissue Engineering.* **Dumitru Corina Dana**, Ionela Andreea Neacșu, Ecaterina Andronescu, Alexandru Mihai Grumezescu, Denisa Fikai
6. *Skin Regeneration: Highly Porous Materials and Their Properties.* **Daniela Alina Ionita**, Ecaterina Andronescu, Ionela Andreea Neacsu, Vasile Adrian Surdu, Alexandru Mihai Grumezescu
7. *Black Phosphorus-Based Materials for Bone Regeneration.* **Andra-Maria Sîrmon**, Ecaterina Andronescu, Ionela-Andreea Neacșu, Vasile-Adrian Surdu, Alexandru-Mihai Grumezescu
8. *Latest Research in Green Synthesis of Metal Oxide Nanoparticles Applied in Tissue Engineering.* **Denisa-Maria Radulescu**, Ecaterina Andronescu, Alexandru-Mihai Grumezescu, Ionela Andreea Neacsu, Adrian-Ionut Nicoara
9. *Latest Developments of Calcium Phosphate Synthesis from Natural Sources Applied in Bone Tissue Engineering.* **Diana-Elena Radulescu**, Ecaterina Andronescu, Alexandru-Mihai Grumezescu, Ionela Andreea Neacsu, Otilia Ruxandra Vasile, Adrian Vasile Surdu
10. *Antimicrobial platforms based on natural polymers for drug delivery applications.* **Angela Spoyală**, Cornelia-Ioana Ilie, Ludmila Motelica, Denisa Fikai, Roxana Doina Trușcă, Ovidiu Cristian Oprea, Anton Fikai, Ecaterina Andronescu
11. *Investigation of Universal Stress Protein from Mycobacterium Tuberculosis.* **Onyewuchi Njoku**
12. *Natural Polymer Based Hydrogels: An Accelerator in Wound Healing.* **Neeti Angaria**, Rajesh Kumar
13. *Incorporation of iron compounds in MCM-41 structure.* **Dan Adrian Vasile**, Ludmila Motelica, Ovidiu Oprea, Adrian Vasile Surdu, Roxana Trusca, Anton Fikai

14. *Relative Interdistance Distributions Between Er^{3+} And Yb^{3+} Dopant Ions in Some Crystal Matrix*

Hosts Used for Upconversion Luminescence. Liviu Dudas

14:00-14:30 – CLOSING CEREMONY

Chair: Ecaterina ANDRONESCU