



Virtual International Scientific Conference on
“Applications of Chemistry in Nanosciences and Biomaterials Engineering –
NanoBioMat 2021”
25-27 November 2021

Program

The program will be published on the official webpage of AOSR and UPB on 21.11.2021 as well as in the TEAMS Class. The link for the TEAMS Class is <https://bit.ly/3wbHTfk>.

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:

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|--------------------------------|---------------|
| 1. Registration: | 15.10.2021 |
| 2. Extended registration: | 07.11.2021 |
| 3. Abstract submission: | 11.11.2021 |
| 4. Acceptance Notification: | 15.11.2021 |
| 5. Final Program announcement: | 21.11.2021 |
| 6. Conference: | 25-27.11.2021 |

Registration:

Registration should be done using the link: <https://forms.office.com/r/yqE1NbmAER>.

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 11.11.2021. The abstract should be 150 – 300 words and it must contain the title, authors, and their full affiliation.

Scientific Committee

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Prof. Anton FICAI, UPB&AOSR (Romania)

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Organizing Committee

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Drd. Eng. Cristina CHIRCOV – Conference Secretary

Technical Staff

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Program

25 November 2021

10:00-10:15 – OPENING CEREMONY

Ecaterina ANDRONESCU – President of the Scientific Committee

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

Mihnea Cosmin COSTOIU – Rector of the University Politehnica of Bucharest

Tudor PRISECARU – President of the University Politehnica of Bucharest Senate

10:15-13:15 – PLENARY SESSION

Chairs – Serguei SAVILOV. Anton FICAI

10:15-10:45 – *Property Tuning of Two-Dimensional Materials by Stacking Order and Applications of Homo and Hetero Structure Devices.* Juan XIA, Jiaxu YAN,
Ze Xiang SHEN

10:45-11:15 – *Role of Cholesterol in Passive Translocation of Nanoobjects Across Lipid Membranes.* Yachong GUO, Marco WERNER, Jean-Baptiste FLEURY,
Vladimir BAULIN

11:15-11:45 – *Ferromagnetic Colloidal Filaments and Brushes: A Material for the Future.*
Joan CERDÀ

11:45-12:15 – *Carbon Nanostructures: Contribution to Environmental Chemistry and Material Science.* **Serguei V. SAVILOV**

12:15-12:45 – *Dietary Bioactive Compounds, Nutraceuticals and Biofunctionality of Cell Membranes.* **Herbert Ryan MARINI**

12:45-13:15 – *TBA.* **Lluís MARSHAL**

13:15-14:15 – LUNCH BREAK

14:15-15:00 – POSTER SESSION (I)

Chairs – Oguzhan GUNDUZ. Denisa FICAI

1. *Crown Ether-Functionalized Cellulose Acetate Membranes for Potential Osseointegration Applications.* **Madalina OPREA**, Stefan Ioan VOICU, Andreea Madalina PANDELE, Adrian Ionut NICOARA, Cristina TUNCEL
2. *Antibacterial Biodegradable Films Based on Alginate with Silver Nanoparticles and Lemongrass Essential Oil–Innovative Packaging for Cheese.* **Ludmila MOTELICA**, Denisa FICAI, Ovidiu-Cristian OPREA, Anton FICAI, Vladimir-Lucian ENE, Bogdan-Stefan VASILE, Ecaterina ANDRONESCU, Alina-Maria HOLBAN



3. *Preparation of Drug Delivery Systems from Polylactic-Acid Based Nanofibers.* **Laura MARINCAȘ**, Noémi-Izabella FARKAS, Réka BARABÁS, Monica TOȘA
4. *Investigation of Silicon-Doped Hydroxyapatite Drug Carrier for Different Active Substances.* **Noémi-Izabella FARKAS**, Laura MARINCAȘ, Liliana BIZO, Réka BARABÁS, Graziella Liana TURDEAN
5. *Light Responsive MOFs for Biomedical Applications.* **Catalin PAUN**, Ovidiu Cristian OPREA, Denisa FICAI, Anton FICAI, Ecaterina ANDRONESCU
6. *Development and Characterization of Topical Niosomal Gel of Loxapine Succinate.* **Rama SHUKLA**, Sumit PANDEY
7. *Phosphate Materials with Potential Antimicrobial Properties for the Conservation of Cultural Heritage.* **Toma FISTOS**, Roxana Ioana BRAZDIS, Anda Maria BAROI, Irina FIERASCU, Lia-Mara DITU, Radu Claudiu FIERASCU
8. *Evaluation of the Potential Environmental Applications of Phosphatic Materials.* **Roxana-Ioana BRAZDIS**, Sorin-Marius AVRAMESCU, Anda Maria BAROI, Toma FISTOS, Irina FIERASCU, Valentin RADITOIU, Radu Claudiu FIERASCU

15:00 - 17:30 – SESSION I. ADVANCED TECHNIQUES FOR MATERIAL DESIGN AND PROCESSING

Chairs – Vladimir BAULIN. Ovidiu Cristian OPREA

- 15:00-15:15 – *Fabrication and Characterization of Eggshell Membrane Biotemplated Metal-Organic Framework Nanoclusters.* **Ash KATMIȘ**, Semra UNAL, Faik N. OKTAR
- 15:15-15:30 – *Anodic Nanostructured Coatings on Titanium and Titanium Alloys in Biomedical Applications – Current Status and Where to Next?* **Anca MAZĂRE**, Patrik SCHMUKI
- 15:30-15:45 – *Tailored Biofunctionalized Biosensor for the Label-Free Sensing of Prostate-Specific Antigen.* **Sachin MISHRA**, Eun-Seong KIM, Parshant Kumar SHARMA, Zhi-Ji WANG, Sung-Hyun YANG, Ajeet Kumar KAUSHIK, Cong WANG, Yang LI, Nam-Young KIM
- 15:45-16:00 – *Atmospheric Plasma Treatment to Modulate Bacterial Biofilms.* **Maria E. ZARIF**, Sasa A. YEHIA, Veronica SATULU, Gheorghe DINESCU, Sorin VIZIREANU, Alina-Maria HOLBAN, Florica MARINESCU, Alexandru GRUMEZESCU, Ecaterina ANDRONESCU, Titus FARCASIU



16:00-16:15 – *The Development of a MIP-Based Sensor for Electrochemical Detection.*

Elena Bianca STOICA, Iulia Elena NEBLEA, Elvira ALEXANDRESCU,
Sabina Georgiana BURLACU, Catalin Ionuț MIHAESCU, Andrei SARBU,
Tanta-Verona IORDACHE, Ana Mihaela GAVRILA

16:15-16:30 – *S,N-doped Graphene Nanoflakes: Synthesis and Characterization.* **Mikhail**

LEVIN, Ekaterina ARKHIPOVA, Anton IVANOV, Dmitrii STOLBOV,
Serguei SAVILOV

16:30-16:45 – *Continuous Hydrothermal Flow Synthesis of Biomass-Related Carbon*

Quantum Dots (CQDs) as Nanosensors for Carcinogenic Ions Detection. **Ioan**
Alexandru BARAGAU, Suela KELLICI

16:45-17:00 – *Electrospinning Fabricated TiO₂ Based Semiconductor Nanofibers with*

Enhanced Photocatalytic Properties. **P. Pascariu**, M.P. Sucheana

17:00-17:15 – *Effect of Surface Preparation Treatments on a TiZrTaAg Alloy Surface.* **Radu**

Nartita, Daniela Ionita, Ioana Demetrescu

17:15-17:30 – *Effect of Flow Rate on the Size of the Electrospun PMMA Nanofibers.* **Ethem**

Gökhan ÖZÇELİK, Mustafa ŞENGÖR, Oğuzhan GÜNDÜZ

17:30-18:30 – PATENT SESSION

Chairs – Mihail Aurel ȚÎȚU. Alexandru MARIN

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10:00 - 12:30 – SESSION II. BIOMATERIALS FOR TISSUE ENGINEERING AND REGENERATION

Chairs – Viorel NACU. Lenuța PROFIRE

10:00-10:15 – *3D-Printed Polycaprolactone (PCL)/Juglone Scaffolds for Skin Tissue*

Engineering. **Elif SAATCIOGLU**, Songul ULAG, Akif Yahya DIRICAN,
Alexa-Maria CROITORU, Denisa FICAI, Anton FICAI, Oguzhan GUNDUZ

10:15-10:30 – *Applications of Nanoparticles in Bone Healing.* **Alexandra-Cristina**

BURDUȘEL, Ecaterina ANDRONESCU, Alexandru Mihai GRUMEZESCU,
Anton FICAI, Alina-Maria HOLBAN

10:30-10:45 – *Core-Shell Nanostructures for Tissue Engineering Applications.* **Beatrice**

GIRBACIU, Vladimir-Lucian ENE



10:45-11:00 – *Production and Characterization of PLA/HA/GO Nanocomposite Scaffold.*

Busra OKTAY, Esmâ OZEROL, Ali SAHIN, Oguzhan GUNDUZ, Cem Bulent USTUNDAG

11:00-11:15 – *Electrospun Bilayer Vessel Model for Vascular Tissue Engineering.* **Büşra Ece GÜNAYDIN**, Hilal Gülsena Nur AKKUŞ, Cem Bülent ÜSTÜNDAĞ

11:15-11:30 – *Development of Oral Antidiabetic Agent-Loaded Scaffolds for Diabetic Wound Healing Using 3D Printing Technology.* **Sena HARMANCI**, Sumeyye CESUR Oguzhan GUNDUZ, Cem Bülent ÜSTÜNDAĞ

11:30-11:45 – *Production of PLA-GO Based Nanofibers for Wound Dressings by Electrospinning.* **Sumeyra AYAN**, Fatih CIFTICI, Nilufer DUYGULU, Yasemin YILMAZER, Zeynep KARAVELIOGLU, Meyrem VEHAPI, Rabia Cakır KOC, Mustafa SENGOR, Hakan YILMAZER, Didem OZCIMEN, Oguzhan GUNDUZ, Cem Bülent ÜSTÜNDAĞ

11:45-12:00 – *Selection of Wound Dressing Material with Analytic Hierarchical Process Model for Diabetic Foot Ulcer.* **Miyase Ezgi ŞEN**, Murat ŞEN, Cem Bülent ÜSTÜNDAĞ

12:00-12:15 – *Bone Graft Production with Eggshell-Derived Hydroxyapatite.* **Furkan Akif ALADAĞ**, Özge Ece AYDOĞAN, Nagehan BAŞ, Dilara ZALIM, Hatice ERIDEN, Cem Bülent ÜSTÜNDAĞ

12:15-12:30 – *Characterization of Novel Chitosan-Based Nanofibers for Biomedical Applications.* **Teodora IURAŞCU**, Teodora A. IACOB, Alexandru SAVA, Oana M. IONESCU, Lenuța PROFIRE

12:30-13:30 – POSTER SESSION (II)

Chairs – Herbert Ryan MARINI. Irina FIERĂSCU

1. *PCR Array Profiles the Expression of MiRNAs Involved in Differentiation of Amniotic Fluid Stem Cells Towards Endothelial Progenitor Cells.* **Florin IORDACHE**, Cosmin BUZILA
2. *Drug Delivery Systems Collagen-Alginate Based Using Natural Active Principles.* **Ruxandra Elena GEANALIU-NICOLAE**, Ecaterina ANDRONESCU
3. *Microstructure and Dielectric Properties of Sol-Gel BaTi_{1-x}Hf_xO₃ Ceramics.* **Elena Mirabela SOARE**, Cătălina-Andreea STANCIU, Roxana PĂTRU, Vasile-Adrian SURDU, Roxana-Doina TRUŞCĂ, Bogdan Ştefan VASILE, Ioana PINTILIE, Adelina-Carmen IANCULESCU



4. *Composite Hydrogels Based on Silver Decorated Carbon Nanotubes with Anti-Microbial Activity for Load-Bearing Tissue Engineering.* **Elena OLARET**, Ruxandra OPREA, Ioan Stefan VOICU, Andrada SERAFIM
5. *Chemically Obtained Mn / V Doped ZnO Nanostructures with Special Properties.* **Cristina VLADUT**, Susana MIHAIU, Silviu PREDA, José M. CALDERON-MORENO, Mihai ANASTASESCU, Hermine STROESCU, Irina ATKINSON, Nicoleta APOSTOL, Carmen MOLDOVAN, Maria ZAHARESCU, Mariuca GARTNER
6. *Iron Oxide Nanoparticles Stabilized with Sodium Carboxymethyl Cellulose for Biomedical Applications.* **Iulia Ioana LUNGU**, Ecaterina ANDRONESCU, Maria MERNEA, Florian DUMITRACHE
7. *Influence of Synthesis Parameters on the Properties of Iron Oxide Nanoparticles Obtained through the Microwave-Assisted Hydrothermal Method.* **Cristina CHIRCOV**, Raluca-Elena ȘTEFAN, Ecaterina ANDRONESCU, Anton FICAI
8. *Synthesis of Nanoparticles through Lab-on-Chip Devices.* **Alexandra Cătălina BÎRCĂ**, Alexandru Mihai GRUMEZESCU, Ecaterina ANDRONESCU
9. *Germination and Growth of Sinapis Alba L. in the Presence of Cobalt Ions.* **Mariana MINUȚ**, Petronela COZMA, Mihaela ROȘCA, Mariana DIACONU, Maria GAVRILESCU
10. *Fabrication of Electrospun Juglone Loaded Poly (Lactic-Acid) Scaffolds as a Potential Wound Dressing Material.* **Alexa-Maria CROITORU**, Eray ALTAN, Yasin KARACELEBI, Elif SAATCIOGLU, Songul ULAG, Ali SAHIN, Burak AKSU, Oguzhan GUNDUZ, Anton FICAI
11. *Textile Coatings Based on Ginger Extracts with Antimicrobial Activity.* **Georgiana Cornelia ISPAS**, Florentina Monica RADULY, Valentin RADITOIU, Raluca STAN, Alina RADITOIU, Violeta PURCAR
12. *Drug Delivery Platforms/Systems for Cardiovascular Applications.* **Cornelia-Ioana ILIE**, Angela SPOIALĂ, Denisa FICAI, Anton FICAI, Adrian-Ionuț NICOARĂ, Vasile-Adrian SURDU, Roxana Doina TRUȘCĂ, Ovidiu Cristian OPREA, Ecaterina ANDRONESCU

13:30 - 14:30 – LUNCH BREAK



**14:30 - 17:00 – SESSION III. NANOSTRUCTURES FOR FOOD PACKAGING,
BIOREMEDIATION, AND INDUSTRIAL APPLICATIONS**

Chairs – Maria TOMOAI A-COTIȘEL. Ze Xiang SHEN

14:30-14:45 – *Edible Exosomes and Biomedical Applications.* **Mustafa KAYA**, Israfil KUCUK, Esra MUTLU

14:45-15:00 – *Biomaterials Are the Suitable Way to Deliver Bacteria to Soil.* **Salma MOUHIB**

15:00-15:15 – *Biosynthesized Nano-materials for Heavy Metals Pollution Abatement. An Overview of the Present and Future Prospects.* **Hamza BADAMASI**

15:15-15:30 – *Innovative Industrial Bioengineering Application for Edible Oils Biorefining.* **Iuliana VINTILA**

15:30-15:45 – *Production and Characterisation of Metal Organic Framework/Bacterial Cellulose Composite Structures for CO₂ Adsorption.* **Faik Nüzhet OKTAR**, Semra ÜNAL, Gaye ÇIÇEKLI

15:45-16:00 – *Analysis of Heavy Metal Concentrations in the Fraction PM and TSP Measured in Dental Offices from Area with Different Level of Environment Pollution.*

Patricia Elena Maria LUNGU, Mariana PRODANA, Diana Mariana COCARȚĂ, Ioana DEMETRESCU

16:00-16:15 – *Novel Multifunctional Metal Oxide-Polymer Composite Coatings Used in Stone Heritage Preservation.* **Cosmin Iulian CODREA**, Ligia TODAN, Luminita PREDOANA, Victor FRUTH, Mariana CALIN, Iuliana RAUT

16:15-16:30 – *Composite Hydrogels with Potential Use in Dyes Removal.* **Claudia Mihaela NINCIULEANU**, Raluca IANCHIS, Elvira ALEXANDRESCU, Catalin MIHAESCU, Bogdan TRICA, Cristina SCOMOSROSCENCO, Cristina NISTOR, Sabina BURLACU, Catalina Gifu, Cristian PETCU, Silviu PREDA, Mircea TEODORESCU

16:30-16:45 – *Nanomaterials Based on Renewable Resources Applied in Mining Waters Decontamination.* **Iolanda-Veronica GANEA**, Alexandrina NAN, Carmen ROBA, Cristina SABLIOV, Calin BACIU

16:45-17:00 – *Equilibrium Study for the Adsorption of Murexide on Activated Carbon Produced from Waste Biomass Materials.* **Rimene DHAHRI**, Younes MOUSSAOUI

17:00 - 17:30 – BREAK



17:30 - 19:00 – SESSION IV. MATERIALS AND NANOMATERIALS FOR ADVANCED APPLICATIONS (I)

Chairs – Maria GAVRILESCU. Jörg OPITZ

17:30-17:45 – *Comparative Study of Piezoelectric Materials for 3D Bioprinting.* **Maria-Eliza PUȘCAȘU, Ștefania CHIRIAC**, Laura-Mădălina CURSARU, Roxana Mioara PITICESCU, Gabriela NEGROIU

17:45-18:00 – *An Overview of Fatigue and Fracture Behaviour in Graphene Composites.*
J.M. PARENTE

18:00-18:15 – *Amniotic Membrane in Treatment of Ulcers at Diabetic Patients.* **Viorica MIHALUȚA**, Viorel NACU

18:15-18:30 – *Modern Devices and Tools for the Cornea Collection and Processing. Synthesis Literature.* **Adrian COCIUG**, Olga MACAGONOVA, Valerius CUSNIT, Viorel NAVI

18:30-18:45 – *The Role of Nanocatalysts on Future Bioplastic Manufacturing Process.*
Payam GHORBANNEZHAD

18:45-19:00 – *Thermal Degradation and Non-Isothermal Kinetics of Decomposition of [P66614][NTf₂] Ionic Liquid.* **Sergei RESHETKO**, Ekaterina ARKHIPOVA, Anthon IVANOV

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10:00 - 12:30 – SESSION V. DRUG DELIVERY APPLICATIONS OF NANOMATERIALS AND NANOBIOMATERIALS

Chairs – Lluis MARSHAL. Ioana DEMETRESCU

10:00-10:15 – *Mesoporous Silica Loaded with Polyphenols.* **Gabriela PETRISOR**, Anton FICAI

10:15-10:30 – *Formulation of New Bioactive Hydrogels.* **S TATARUSANU**, Florentina LUPASCU, Lenuta PROFIRE

10:30-10:45 – *Bioactive Organometallic Compounds.* **Irina-Gabriela VOINEA**, Anton FICAI, Denisa FICAI

10:45-11:00 – *Covalent Chemistry in Organic Drug Delivery Systems.* **Paul Adrian TĂRĂBUTĂ**, Anton FICAI

11:00-11:15 – *Retinoids in Dermatology.* **Ioana Lavinia LIXANDRU MATEI**, Bogdan SAVA



11:15-11:30 – *Bio Glasses for Dermatological Applications*. **Ioana Lavinia LIXANDRU**

MATEI, Bogdan SAVA

11:30-11:45 – *Wound Dressing Design in Nanofiber Structure with Mixtures of Silk Fibroin and Clove Oil*. **Asyeli ALMASBYEK**, Ihsan Fatih ERTAS, Muhammet UZUN

11:45-12:00 – *Potential of Silk Fibroin and Black Cumin Oil Based Nanofibrous Structures for Wound Dressing Applications*. **Md Humayun KABIR**, Ihsan Fatih ERTAS, Muhammet UZUN

12:00-12:15 – *Manufactured with Purified Nanofibers, Silk Fibroin and Centaury Oil in Order to Contribute to the Medical Area in Wounds and Injuries*. **Grecia Daniela ZERPA VARELA**, Ihsan Fatih ERTAS, Muhammet UZUN

12:15-12:30 – *Silica-Based Plant Extracts Nanocomposite Thin Films with Low Release Capabilities for Green Phytosanitary Applications*. **Oana Maria MIHAIESCU**, Anton FICAI, Alina MOROSAN, Bogdan PURCAREANU, Daniela ISTRATI, Bogdan MIHAIESCU, Dan Eduard MIHAIESCU

12:30-13:30 – POSTER SESSION (III)

Chairs – Joan CERDÀ. Bogdan-Stefan VASILE

1. *Hydrothermal Synthesis of Dextran-Coated Magnetite Nanoparticles Loaded with Curcumin for Anticancer and Antimicrobial Applications*. **Raluca-Elena ȘTEFAN**, Cristina CHIRCOV, Ionela-Andreea NEACȘU, Bogdan Ștefan VASILE, Ovidiu Cristian OPREA, Georgiana DOLETE, Florin IORDACHE, Alina Maria HOLBAN, Ecaterina ANDRONESCU
2. *Evaluation and Optimization of Drug Loading Methods for Mesostructured Silica*. **Georgiana DOLETE**, Ovidiu Cristian OPREA, Anton FICAI, Ecaterina ANDRONESCU
3. *Composite Drug Delivery Systems for Bone Cancer Treatment*. **Alina Florentina VLADU**, Anton FICAI, Alexandra ENE, Ecaterina ANDRONESCU, Ionela Andreea NEACȘU
4. *The Biological Effect of Biomaterials Based on Bee Products in Wound Healing Process*. **Corina-Dana DUMITRU**, Ionela Andreea NEACȘU, Ecaterina ANDRONESCU, Alexandru Mihai GRUMEZESCU, Denisa FICAI
5. *Black Phosphorus in Bone Tissue Engineering*. **Andra-Maria ȘÎRMON**, Ecaterina ANDRONESCU, Ionela-Andreea NEACȘU, Vasile-Adrian SURDU, Alexandru-Mihai GRUMEZESCU



6. *Highly porous materials for wound healing.* **Daniela Alina IONITA**, Ecaterina ANDRONESCU, Ionela Andreea NEACSU, Vasile Adrian SURDU, Alexandru Mihai GRUMEZESCU
7. *Advanced Active Molecules for Wound Healing Applications.* **Denisa-Maria RADULESCU**, Ecaterina ANDRONESCU, Alexandru-Mihai GRUMEZESCU, Ionela Andreea NEACSU, Adrian-Ionut NICOARA
8. *Novel Insights into Calcium Phosphates Based on Natural Sources: From Synthesis to Application.* **Diana-Elena RADULESCU**, Ecaterina ANDRONESCU, Alexandru-Mihai GRUMEZESCU, Vasile Adrian SURDU, Otilia Ruxandra VASILE
9. *Core-Shell Structures and their Applications in Environmental Depollution.* **Dan Adrian VASILE**, Anton FICAI
10. *Biocomposites for Bone Addition in Dentistry.* **Cristina Rodica DUMITRESCU**, Ionela Andreea NEACSU, Adrian Vasile SURDU, Adrian Ionut NICOARA, Roxana TRUSCA, Ecaterina ANDRONESCU
11. *Degradation Improvement of an Emerging Organic Contaminant from Aqueous Suspensions by UV-A Photocatalytic Oxidation.* **A. C. CONSTANDACHE**, L. FAVIER, A. PREDESCU, A. BERBECARU, R. VIDU, E. MATEI
12. *Biodegradable Alginate/ Magnetite Polymeric Capsules for Targeted Drug Delivery Systems.* **Angela SPOIALĂ**, Cornelia-Ioana ILIE, Denisa FICAI, Anton FICAI, Roxana Doina TRUȘCĂ, Ovidiu Cristian OPREA, Ecaterina ANDRONESCU

13:30 - 14:30 – LUNCH BREAK

14:30-17:00 – SESSION VI. MATERIALS AND NANOMATERIALS FOR ADVANCED APPLICATIONS (II)

Chairs – Domenico LOMBARDO. Maria ZAHARESCU

14:30-14:45 – *Nanomaterials for Dentistry.* **Che Azurhanim Che ABDULLAH**, Emmellie Laura ALBERT, Dharshini PERUMAL, Ashreen NORMAN

14:45-15:00 – *Combined Designed Treatment for Melanoma Skin Cancer.* **Hilal Gulsena Nur AKKUS**, Cem Bulent USTUNDAG, Busra Ece GUNAYDIN



- 15:00-15:15 – *Synthesis, Development and Biological Evaluation of Silver Nanoparticles with Antimicrobial Potential.* **Emilian Ionuț BLEJAN**, Toma FISTOS, Radu Claudiu FIERĂSCU, Florica BĂRBUCEANU, Cristina ȚOCA, Bruno Ștefan VELESCU, Irina FIERĂSCU, Denisa Ioana UDEANU, Manuela GHICA, Doina DRĂGĂNESCU, Andreea Letiția ARSENE
- 15:15-15:30 – *Graphene Oxide-Based Nanomaterials for Cancer Detection.* **Fatemeh SHAFIEI**, Reyhaneh Sadat SABERI, Hassan NASROLLAHOPOUR, Ibrahim ISILDAK
- 15:30-15:45 – *A Short Introduction Over the Knowledge of Mortars with Micro and Nanometric Inserts of Different Geometries in the Field of Civil Engineering.* **Elena MOCANU**
- 15:45-16:00 – *Chiral Electrochemical Sensor for Warfarin Using Graphene-Beta Cyclodextrin Nanocomposite Employing Square Wave Voltammetry.* **Sharad S UPADHYAY**, Nayan GADHARI
- 16:00-16:15 – *Glass Fabrics Functionalisation for the Development of High Performance Sandwich Structures.* **George-Valentin SĂFTOIU**, Carolina CONSTANTIN, Adrian-Ionuț NICOARĂ, George PELIN, Anton FICAI
- 16:15-16:30 – *Electrodeposition of Ni-Sn / rGO Composite Coatings from Deep Eutectic Solvents.* **Sabrina Patricia ROSOIU**, Aida Ghiulnare PANTAZI, Aurora PETICA, Anca COJOCARU, Caterina ZANELLA, Stefania COSTOVICI, Teodor VISAN, Liana ANICAI, Marius ENACHESCU
- 16:30-16:45 – *Tailoring in Materials Engineering: The Influence of Synthesis Methods and Preparation Conditions on Forsterite (Mg_2SiO_4) Biomedical Applications.* **Alexandra AVRAM**, Maria GOREA, Aurora MOCANU, Maria TOMOAIACOTIȘEL
- 16:45-17:00 – *Preparation and Characterization of Nanohydroxyapatites Doped with Various Biological Active Compounds with Biomedical Applications.* **Reka BALINT**, Aurora MOCANU, Maria TOMOAIACOTIȘEL

17:00-17:30 – CLOSING CEREMONY