



UNIVERSITATEA „APOLLONIA” DIN IAȘI
în colaborare cu
ACADEMIA OAMENILOR DE ȘTIINȚĂ DIN ROMÂNIA, Filiala Iași
și
ACADEMIA DE ȘTIINȚE MEDICALE

**CONGRESUL INTERNAȚIONAL
AL UNIVERSITĂȚII „APOLLONIA” DIN IAȘI**
(EDIȚIA a XXXIII-a)

PREGĂTIM

**VIITORUL PROMOVÂND
EXCELENȚA!**



Vietnam, Sorin Adam

F MATERIALE AVANSATE ÎN MEDICINA MODERNĂ

F. ADVANCED MATERIALS in MODERN MEDICINE

Thursday, March 2, 2023, Congress Hall Palas, Mozart Hall

12⁰⁰-13⁵⁰ – Presentations and discussions

13³⁰-14⁰⁰- Coffee break

Board:

President: Prof. Habil. PhD Leonard Ionut Atanase

Members: Prof. PhD Marcel Popa

Prof. PhD Slim Salhi

Secretary: Sci. Sr. III Delia Mihaela Rata

1. Conducting nanoparticles and its incorporation onto polymeric matrices for biomedical applications (conference)

Silvestre Bongiovanni Abel¹, Ernesto Battaglia¹, César Alfredo Barbero², Gustavo A. Abraham¹

¹ Research Institute of Materials Science and Technology, INTEMA (UNMdP-CONICET), Mar del Plata, Argentina

² Nacional University of Rio Cuarto, Córdoba, Argentina



2. New trends in biomedical materials based on electroconducting polymers customised for bionic interfaces) (conference)

Anca-Dana Bendrea¹, Luminita Cianga¹, Elena-Gabriela Hitruc¹, Sorin Ibanescu¹, Ioan Cianga¹

¹Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania.



3. Synthesis, characterization, and application of BaFe₁₂O₁₉- (Ba-Ca)TiO₃ magnetoelectric nanoparticles for anti-cancer drug delivery (communication)

Hend H. Nada¹, Ahmed I. Ali¹, Leonard I. Atanase^{2,3}, Mohammed Sallah¹

¹Physics Department, Faculty of Science, Mansoura University, Egypt

²“Apollonia” University of Iasi, Iasi, Romania

³Academy of Romanian Scientists, Bucharest, Romania



4. Identification of novel TMPRSS4 inhibitors via homology modeling, molecular docking, and molecular dynamics (communication)

Mehdi Oubahmane¹, Ismail Hdoufane¹, Driss Cherqaoui¹

¹Department of chemistry, Faculty of Sciences Semlalia, Marrakech, Morocco



5. In silico studies toward the identification of potential glycoprotein inhibitors as anti-Ebola agents (communication)

Nouhaila Ait Lahcen¹, Mehdi Oubahmane¹, Khaoula Errafii², Ismail Hdoufane¹, Mohamed Maatallah¹, Rachid Daoud², Achraf El Allali², Adlane Sayede³, Driss Cherqaoui¹

¹Department of Chemistry, Faculty of Sciences Semlalia, Marrakech Morocco.

²African Genome Center, Mohammed VI Polytechnic University, Ben Guerir, Morocco.

³UCCS, Faculté des Sciences Jean Perrin, Université d'Artois, Lens, France



6. Fuzzy risk evaluation based model for failure mode, effects, and criticality analysis amelioration (communication)

Brahim Bouhadiba¹, Mohammed Chennoufi¹

¹University of Oran 2, Algeria



Friday, March 3, 2023, Congress Hall Palas, Vivaldi Hall

11⁰⁰-12⁵⁰ – Presentations and discussions

12⁵⁰-13⁰⁰- Coffee break

Board:

President: *Prof. PhD Makki Abdmouleh*

Members: *Prof. PhD Driss Cherqaoui*

Prof. Habil. PhD Leonard Ionut Atanase

Secretary: *Sci. Sr. III Anca Cadinoiu*

1. Intelligent polymers for biomedical applications (conference)

Gheorghe Fundueanu-Constantin¹, Sanda Bucatariu¹, Bogdan Cosman¹, Marieta Constantin¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



2. Curcumin-loaded electrospun nanofibers based on poly(vinyl alcohol) and alginate for wound healing (communication)

Delia M. Rață¹, Anca N. Cadinoiu¹, Leonard I. Atanase^{1,2}

¹“Apollonia” University of Iasi, Iasi, Romania

²Academy of Romanian Scientists, Bucharest, Romania



3. Harnessing MALDI mass spectrometry technique for tailored polyurethane prepolymers (communication)

Alexandra-Diana Diaconu¹, Diana-Andreea Blaj¹, Valeria Harabagiu¹, Cristian Peptu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



4. Clove oil-loaded nanofibers based on PCurd/PVA for wound dressing applications (communication)

Dana M. Suflet¹, Maria Bercea¹, Diana Serbezeanu¹, Cristina M. Rimbu²

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

²Faculty of Veterinary Medicine, “Ion Ionescu de la Brad” University of Life Sciences, Iasi, Romania



5. Methotrexate-functionalized multi-shell gold nanoparticles for drug delivery applications (communication)

Denisse-Iulia Boștiog¹, Natalia Simionescu¹, Bogdan Florin Crăciun¹, Mariana Pinteală¹

¹Centre of Advanced Research in Bionanoconjugates and Biopolymers, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



6. Ibuprofen incorporated poly(ϵ -caprolactone) nanofibers deposited on gelatin/hyaluronic acid film for wound healing applications (communication)

Tabinda Riaz¹, Nafisa Gull¹, Atif Islam¹, Leonard Ionut Atanase^{2,3}, Christelle Delaite⁴

¹Institute of Polymer and Textile Engineering, University of the Punjab, Lahore, Pakistan

²Faculty of Medical Dentistry, “Apollonia” University of Iasi, Iasi, Romania

³Academy of Romanian Scientists, Bucharest, Romania

⁴LPIM, University of Haute Alsace, Mulhouse, France



7. Tuning the rheological properties of casein-based systems suitable for encapsulation of bioactive compounds (communication)

Raluca Petronela Dumitriu¹, Elena Stoleru¹, Mihai Brebu¹, Nusrat Sharmin²

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

²Department of Food Safety and Quality, Nofima AS, Ås, Norway



13⁰⁰-15⁰⁰ – Presentations and discussions

15⁰⁰-16⁰⁰ – Lunch

Board:

President: Prof. PhD Juan Pereira

Members: Prof. PhD Mohammed Sallah

Sci. Sr. I Gheorghe Fundueanu

Secretary: Sci. Sr. III Delia Mihaela Rata

1. Synthesis of spirooxindoles and study of their antiviral activity (conference)

Gheorghe Duca¹, Natalia Sucman¹, Fliur Macaev¹

¹Institute of Chemistry, State University of Moldova, Chişinău, Republic of Moldova



2. The influence of cyclodextrin's cavity size on the ring-opening oligomerization of cyclic esters (communication)

Diana Blaj¹, Valeria Harabagiu¹, Cristian Peptu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



3. Synthesis and characterization of composites based on chitosan with potential in delivery of curcumin (communication)

Maria Marinela Lazăr¹, Ioana-Victoria Platon¹, Claudiu Augustin Ghiorghită¹, Irina Elena Răschip¹, Maria Valentina Dinu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



4. Dexamethasone-loaded microparticles for the treatment of pulmonary infections (communication)

Anca N. Cadinoiu¹, Delia M. Rata¹, Leonard I. Atanase^{1,2,3}, Gabriela Calin (Mihalache)^{1,3}, Marcel Popa^{1,2}

¹Department of Biomaterials, "Apollonia" University of Iasi, Iasi, Romania.

²Academy of Romanian Scientists, Bucharest, Romania.

³Faculty of Medical Dentistry, "Apollonia" University of Iasi, Iasi, Romania



5. Green synthesis of biocompatible, antibacterial and catalytic silver nanoparticles (communication)

Marieta Fundueanu-Constantin¹, Daniela Luminita Ichim², Oana Maria Darabă², Gheorghe Fundueanu¹

¹"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania

²Faculty of Medical Dentistry, "Apollonia" University of Iasi, Iasi, Romania



6. Calcium peroxide nanoparticles as new and effective solutions for duodenoscope reprocessing (communication)

Alexandra Sarghi (Iacobescu)¹, Ioana-Andreea Turin-Moleavin¹, Irina Rosca¹, Adrian Fifere¹, Elena-Laura Ursu¹, Mariana Pinteala¹

¹Centre of Advanced Research in Bionanoconjugates and Biopolymers, "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania



7. Nanotechnology: the method of combating antibiotic resistance (communication)

Denisa Florina Diaconu¹, Ionuț Iulian Lungu¹, Codrin Fuiuoga², Grigorie Deleu², Gabriela Mihalache², Alina Ștefanache¹

¹Discipline of General and Inorganic Chemistry, Faculty of Pharmacy, University of Medicine and Pharmacy "Grigore T. Popa", Iasi, Romania

²Faculty of Medical Dentistry, "Apollonia" University of Iasi, Romania



16⁰⁰-17⁵⁰ – Presentations and discussions

17⁵⁰-18⁰⁰ – Coffee break

Board:

President: *Sci. Sr. I Gheorghe Fundueanu*

Members: *Prof. PhD Lacramioara Ochiuz*
Prof. PhD Tabinda Riaz

Secretary: *Sci. Sr. III Delia Mihaela Rata*

1. Polysaccharide-based composite hydrogels: Sustainable sorbents for wastewater treatment (conference)

Claudiu Augustin Gheorghita¹, Maria Marinela Lazar¹, Ecaterina Stela Dragan¹, Maria Valentina Dinu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



2. β -cyclodextrin/curcumin complex immobilized in albumin-based hydrogel films cross-linked with oxidized gellan for biomedical applications (communication)

Camelia Elena Tincu (Iurciuc)^{1,2}, Oana-Maria Darabă³, Leonard I. Atanase^{3,4}, Marcel Popa^{1,4}, Lăcrămioara Ochiuz²

¹Department of Natural and Synthetic Polymers, “Cristofor Simionescu” Faculty of Chemical Engineering and Protection of the Environment, “Gheorghe Asachi” Technical University, Iasi, Romania

²Department of Pharmaceutical Technology, Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy, Iași, Romania

³Faculty of Dental Medicine, “Apollonia” University of Iasi, Iași, Romania

⁴Academy of Romanian Scientists, Bucharest, Romania



3. Design strategies of chitosan based hydrogels for biomedical applications (communication)

Daniela Pamfil¹, Elena Stoleru¹, Elena Butnaru¹, Mihai Brebu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



4. Design of double cross-linked smart hydrogel for biomedical applications (*communication*)

Bogdan Coşman¹, Sanda Bucătariu¹, Gheorghe Fundueanu¹, Marieta Constantin¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



5. Formation of calcium orthophosphates inside and outside of ternary hydrogels as scaffolds for bone tissue engineering (*communication*)

Irina Mihaela Pelin¹, Marieta Constantin¹, Manuela Călin²

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

²Institute of Cellular Biology and Pathology “Nicolae Simionescu”, Bucharest, Romania



6. Characterization and *in vitro* evaluation of the CS-g-PNIPAAm/PVA hydrogels as progesterone carriers (*communication*)

Oana-Teodora Lupei (Afloarea)¹, Cătălina Natalia Cheaburu Yilmaz¹, Alina Diana Panainte¹, Alexandru Sava¹, Larisa Păduraru¹, Nela Bibire¹

¹“Grigore T. Popa” University of Medicine and Pharmacy, Iaşi, Romania



7. Novel ice-templated hydrogels based on xanthan (*communication*)

Irina Elena Raschip¹, Nicusor Fişere¹, Maria Marinela Lazar¹, Elena Gabriela Hitruc¹, Maria Valentina Dinu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



18⁰⁰-20⁰⁰ – Presentations and discussions

Board:

President: *Prof. PhD Mohammed Sallah*

Members: *Prof. PhD Driss Cherqaoui*

Prof. PhD Marcel Popa

Secretary: *Sci. Sr. III Anca Cadinoiu*

1. Mass spectrometry drove progress in the synthesis of cyclodextrin derivatives (conference)

Cristian Peptu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



2. QSAR modeling, ADMET predictions and molecular docking analysis of a series of Dimeric phenylthiazole derivatives as NS5A inhibitors (communication)

Wissal Liman¹, Nouhaila Ait Lahcen², Mehdi Oubahmane², Ismail Hdoufane², Driss Cherqaoui², Rachid Daoud¹, Achraf El Allali¹

¹African Genome Center, Mohammed VI Polytechnic University, Morocco

²Department of Chemistry, Faculty of Sciences Semlalia, Morocco



3. Using the right tools for the right job: Force Field comparison for *in silico* analysis of gene carrier (communication)

Razvan Puf¹, Tudor Vasiliu¹, Dragos Peptanariu¹, Razvan Ghiarasim¹, Mariana Pinteala¹, Aatto Laaksonen^{1,2,3,4,5}

¹Centre of Advanced Research in Bionanoconjugates and Biopolymers, “Petru Poni” Institute of Macromolecular Chemistry

²Dipartimento di Scienze Chimiche e Geologiche, Cagliari University, Cagliari, Italy.

³Division of Energy Science, Energy Engineering, Luleå University of Technology, Luleå, Sweden

⁴Division of Physical Chemistry, Department of Materials and Environmental Chemistry, Arrhenius Laboratory, Stockholm University, Stockholm, Sweden.

⁵State Key Laboratory of Materials-Oriented and Chemical Engineering, Nanjing Tech University, Nanjing, China.



4. Poloxamer 407/carboxymethyl pullulan *in situ* forming hydrogels (communication)

Irina Popescu¹, Maria Bercea¹, Marieta Fundueanu-Constantin¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



5. New nanocarrier for inner ear pathology (communication)

Loredana Iftode^{1,2}, Anca N. Cadinoiu³, Delia M. Rata³, Leonard I. Atanase^{3,4}, Daniela Gherghel⁵, Marcel Popa^{2,3,4}, Luminita Radulescu¹

¹Faculty of Medicine, “Grigore T. Popa” University of Medicine and Pharmacy Iasi

²“Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, „Gheorghe Asachi” Technical University of Iasi

³Department of Biomaterials, “Apollonia” University of Iasi, Iasi, Romania

⁴Academy of Romanian Scientists, Bucharest, Romania.

⁵Department of Experimental and Applied Biology, NIRDBS—Institute of Biological Research Iasi



6. Plant-derived residues as source of valuable materials (communication)

Elena Butnaru¹, Elena Stoleru¹, Elena Marlica¹, Cristian Grigoras¹, Mihai Brebu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



Saturday, March 4, 2023, Congress Hall Palas, Vivaldi Hall

11⁰⁰-12⁵⁰ – Presentations and discussions

12⁵⁰-13⁰⁰ – Coffee break

Board:

President: Prof. Habil. PhD Leonard Ionut Atanase

Members: Prof. PhD Mohammed Sallah

Prof. PhD Marcel Popa

Secretary: Sci. Sr. III Anca Cadinoiu

1. The importance of particulate systems as drug delivery systems in dermal therapy (conference)

Lăcrămioara Ochiuz¹, Alina Ștefanache², Cristina Mihaela Ghiciuc¹

¹Faculty of Pharmacy, "Grigore T. Popa" University of Medicine and Pharmacy of Iasi, Iasi, Romania

²Faculty of Medicine, "Grigore T. Popa" University of Medicine and Pharmacy of Iasi, Iasi, Romania



2. Challenges in evaluating the pharmacotechnical properties of oromucosal films (communication)

Alexandra Bujor¹, Mousa Sha'at¹, Monica Iliuța Stamate¹, Ciprian Stamate², Iulian Stoleriu³, Camelia Iurciuc⁴, Anca Miron¹, Lăcrămioara Ochiuz¹

¹Faculty of Pharmacy, "Grigore T. Popa" University of Medicine and Pharmacy Iași, Iași, Romania

²Faculty of Mechanical Engineering, "Gheorghe Asachi" Technical University of Iași, Iași, Romania

³Faculty of Mathematics, "Alexandru I. Cuza" University, Iasi, Romania

⁴Faculty of Faculty of Chemical Engineering and Environmental Protection, "Gheorghe Asachi" Technical University of Iași, Iași, Romania



3. Sodium cholate sorption on cationic dextran gels (communication)

Magdalena-Cristina Stanciu¹, Marieta Nichifor¹

¹"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania



4. Fabrication of self-antibacterial polyelectrolyte complex composite cryogels with excellent performance in removal of multiple contaminants (*communication*)

Maria Valentina Dinu¹, Ecaterina Stela Dragan¹, Claudiu Augustin Ghiorghita¹, Doina Humelnicu², David Díaz Díaz^{3,4,5}

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

²Faculty of Chemistry, “Al. I. Cuza” University of Iasi, Iasi, Romania

³Departamento de Química Orgánica, Universidad de La Laguna, Avda. Astrofísico Francisco Sánchez, Tenerife, Spain

⁴Instituto Universitario de Bio-Orgánica Antonio González, Universidad de La Laguna, Avda. Astrofísico Francisco Sánchez, Tenerife, Spain

⁵Institut für Organische Chemie, Universität Regensburg, Regensburg, Germany



5. Surface roughness - an essential parameter in the release of drugs from erodible solid pharmaceutical forms (*communication*)

Monica Iliuta Stamate Cretan¹, Lacramioara Ochiuz¹, Alexandra Bujor¹, Mousa Sha 'at¹, Ciprian Stamate²

¹Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Medicine and Pharmacy “Grigore. T. Popa”, Iasi, Romania,

²Mechanical Faculty, Technical University “Gheorghe Asachi”, Iasi, Romania.



6. Evaluation of mineral levels in dairy products – A comparison study (*communication*)

Ioana Babarus¹, Ionut-Iulian Lungu¹, Laura Dartu², Dragomirescu Cezarina², Gabriela Mihalache², Alina Stefanache¹

¹Discipline of General and Inorganic Chemistry, Faculty of Pharmacy, University of Medicine and Pharmacy “Grigore T. Popa”, Iasi, Romania

²Faculty of Medical Dentistry, “Apollonia” University of Iasi, Romania



13⁰⁰-15⁰⁰ – Presentations and discussions

Board:

President: *Prof. Habil. PhD Leonard Ionut Atanase*

Members: *Prof. PhD Mohammed Sallah*

Prof. PhD Marcel Popa

Secretary: *Univ. Assist. PhD student Codrin Fuiuoga*

1. Tailoring bioactive properties in ecofriendly polymeric materials (conference)

Elena Stoleru¹, Raluca Dumitriu¹, Daniela Pamfil¹, Mihai Brebu¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania



2. Implementation of QBD approach to the analytical method development and validation for the estimation of metformin hydrochloride in tablet dosage forms by HPLC (communication)

Mousa Sha'at¹, Adrian Florin Şpac¹, Alexandra Bujor¹, Monica-Iliuţa Stamate Creţan¹, Iulian Stoleriu², Lăcrămioara Ochiuz¹

¹Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy Iaşi, Iaşi, Romania

²Faculty of Mathematics, “Alexandru Ioan Cuza” University from Iasi, Iasi, Romania



3. Iron and innate antimicrobial immunity - Depriving the pathogen, defending the host (communication)

Ioan-Adrian Butnariu¹, Ionuţ Iulian Lungu¹, Alexandru Armenia², Liliana Sachelarie², Cornelia Ursu², Alina Ştefanache¹

¹Discipline of General and Inorganic Chemistry, Faculty of Pharmacy, University of Medicine and Pharmacy “Grigore T. Popa”, Iasi, Romania

²Faculty of Medical Dentistry, “Apollonia” University of Iasi, Romania



POSTER SESSION

The evaluation committee:

Prof. PhD. Mohammed Sallah

Prof. PhD Lacramioara Ochiuz

Sci. Sr. I PhD Gheorghe Fundueanu

Prof. PhD Marcel Popa

Prof. Habil. PhD. Leonard Ionut Atanase

Thursday, March 2, 2023, Congress Hall Palas

1. Hormonal modification in women with Covid-19

Ioana Babarus¹, Ionut-Iulian Lungu¹, Marcel Stoenescu², Maricica Pavaleanu², Mariana Holicov², Alina Stefanache¹

¹Discipline of General and Inorganic Chemistry, Faculty of Pharmacy, University of Medicine and Pharmacy "Grigore T. Popa", Iasi, Romania

²Faculty of Medical Dentistry, "Apollonia" University of Iasi, Romania



2. The role of self-assembly mechanisms in development of ferritin-based vaccines

D.D. Kuklina¹, L. Ryzhykau Yu^{1,2}, V.V. Sudarev¹, S.M. Dolotov^{1,3}, N.A. Bondarev¹, S.D. Osipov¹, A.I. Kuklin^{1,2}, A.V. Vlasov^{1,2}

¹ Research Center for Molecular Mechanisms of Aging and Age-Related Diseases, Moscow Institute of Physics and Technology, Dolgoprudny, Russia

² Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Russia

³ Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry RAS, Moscow, Russia

² Faculty of Medical Dentistry, "Apollonia" University of Iasi, Romania



3. Phyto-therapeutic extracts delivery system based on nanotechnology: biological activities and nano-encapsulation

Djamila Aouameur¹, Omar Larbi Bouamrane^{1,2}, Redha Benomar³, Rachid Ameraoui³

¹Laboratoire de Valorisation des Substances Naturelles, Université Djilali Bounaâma, Khemis-Miliana, Algeria

²Centre Universitaire de Tipaza, Algeria

³Centre de recherche scientifique et techniques en analyse physico-chimique (CRAPC), Bou Ismail, Algeria



4. The interaction of drugs with vitamins and supplements: harmful or helpful?

Sabina-Elena Stănescu¹, Iulian Ionuț Lungu¹, Florina Denisa Diaconu¹, Laura Dartu², Gabriela Turcu², Alina Ștefanache¹

¹ Discipline of General and Inorganic Chemistry, Faculty of Pharmacy, University of Medicine and Pharmacy “Grigore T. Popa”, Iasi, Romania



5. Self-assembly of block copolymers on surfaces exposed to space-confined solvent vapor annealing

Iulia Babutan^{1,2}, Otto Todor-Boer³, Leonard Ionut Atanase^{4,5}, Adriana Vulpoi¹, Simion Simon¹, Ioan Botiz¹

¹Interdisciplinary Research Institute on Bio-Nano-Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania;

²Faculty of Physics, Babeș-Bolyai University, Cluj-Napoca, Romania;

³INCDO-INOE 2000, Research Institute for Analytical Instrumentation, Cluj-Napoca, Romania;

⁴Department of Biomaterials, Faculty of Medical Dentistry, “Apollonia” University of Iasi, Iasi, Romania;

⁵Academy of Romanian Scientists, Bucharest, Romania



6. ZnO - Epoxy Resin anti-corrosive coatings for navy ships applications

Raluca Somoghi^{1,2}, Zina Vuluga¹, Daniel Mihai Stanescu Vatau¹, George Mihail Teodorescu¹, Raluca Augusta Gabor¹, Cristian Andi Nicolae¹, Adriana Frone¹

¹National Research & Development Institute for Chemistry and Petrochemistry, ICECHIM, Bucharest, Romania

²Faculty of Petroleum Refining and Petrochemistry, Petroleum-Gas University of Ploiesti, Ploiesti, Romania



7. Designing liposomal formulations of 5-fluorouracil for cancer therapy

Roxana-Maria Amărăndi¹, Luminița Marin^{1,2}, Andrei Neamțu¹, Brîndușa Drăgoi^{1,3}

¹Regional Institute of Oncology, TRANSCEND Research Department, Iași, Romania;

²“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

³Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iași, Iași, Romania



10. Nanofibrous membranes loaded with vitamin E as transdermal patches for wound dressings tested in a Wistar rat model

Stella Maris Echarte², Dalila Orallo², Carolina Cámara², Anabela LaColla², Andrea Chisari², Guadalupe Rivero¹

¹Instituto de Investigaciones en Ciencia y Tecnología de Materiales (INTEMA), Argentina

²Grupo de investigación “Enfermedades Metabólicas”. Departamento de Química y Bioquímica (FCEyN, Universidad Nacional de Mar del Plata), Argentina



11. Structure-property relationships in photo-polymerisable terpolymers

G. F-Z. Hakem¹, D. Bendeddouche¹, A. Bouriche¹, M. Popa^{2,3}, L. Bedjaoui-Alachaher¹

¹Laboratory of Research on Macromolecules (LRM), Faculty of Sciences, University of Tlemcen, Algeria.

²Gheorghe Asachi Technical University, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, Department of Natural and Synthetic Polymers, Iași, Romania

³Academy of Romanian Scientists, Bucharest, Romania



12. Cancer: a growing challenge for humanity

Maria Spiridon¹

¹Regional Institute of Oncology, Iași, Romania



13. New inhibitors for effective HIV control based on protease enzyme inhibition

Mehdi Yoosefian¹

¹Department of Nanotechnology, Graduate University of Advanced Technology, Kerman, Iran



12. Study and comparison of the ZnONi material on different substrates

Sara Taghzouti¹, Hamza Hailou¹, Mohammed Ait Himi¹, Mohamed Ebn Touhami¹, El Hassan El Kafssaoui¹

¹Advanced Materials and Process Engineering Laboratory, Ibn Tofail University, Kénitra, Morocco



13. Bio-based polyesteramides derived from natural amino acids

Slim Salhi¹, Leonard Ionut Atanase^{2,3}, Marcel Popa^{3,4}, Christelle Delaite⁵, Houcine Ammar¹

¹Laboratoire de Chimie Appliquée, Faculté des Sciences de Sfax, Sfax University, Sfax, Tunisia.

²Faculty of Medical Dentistry, Apollonia University of Iasi, Iasi, Romania

³Faculty of Chemical Engineering and Protection of the Environment, Department of Natural and Synthetic Polymers, Gheorghe Asachi' Technical University, Iași, Romania

⁴Academy of Romanian Scientists, Bucharest, Romania

⁵Laboratoire de Photochimie et d'Ingenierie Macromoleculaires (LPIM), University of Haute Alsace, Mulhouse, France



14. Dielectric elastomers with PDMS matrix and metal complexes as filler

Alina Soroceanu¹

¹"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania



15. Effect of hydroxyapatite content on poly(lactic acid) composites

Nadjet Dehouche¹, Nedjma Tazibt¹, Mustapha Kaci¹, Mohamed Ragoubi², Leonard Ionut Atanase^{3,4}

¹Laboratoire des Matériaux Polymères Avancés, Université de Bejaia, Algeria

²UnilaSalle, Unité de Recherche Transformation et Agro-Ressources, VAM2 IN (EA 7519 UniLaSalle – Université d'Artois), Mont-Saint-Aignan, France

³Faculty of Medical Dentistry, "Apollonia" University of Iasi, Iasi, Romania

⁴Academy of Romanian Scientists, Bucharest, Romania.



Friday, March 3, 2023, Congress Hall Palas

1. Preparation and characterization of ZrO₂ nanoparticles using High Energy Ball Milling for antimicrobial activity

E. A. Farrag¹, A. Sarhan¹, M. S. Abd El-Sadek¹, M. Sallah¹

¹Physics Department, Faculty of Science, Mansoura University, Egypt



2. Preparation and characterization of novel chemically cross-linked xanthan-based films entrapping cerium oxide nanoparticles

Nicusor Fifere¹, Irina Elena Raschip¹, Elena Gabriela Hitruc¹, Maria Marinela Lazar¹, Maria Valentina Dinu¹

¹"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania



3. New drug release system based on functionalized albumin cross-linked with oxidized polysaccharides for the potential treatment of brain tumors

Camelia Elena Tincu (Iurciuc)^{1,2}, Silvia Vasiliu³, Ștefania Racoviță³, Leonard Ionuț Atanase^{4,5}, Marcel Popa^{1,4,5}, Ochiuz Lăcrămioara²

¹Department of Natural and Synthetic Polymers, “Cristofor Simionescu” Faculty of Chemical Engineering and Protection of the Environment, “Gheorghe Asachi” Technical University, 73, Iasi, Romania

²Department of Pharmaceutical Technology, Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy, Iași, Romania

³“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania;

⁴Faculty of Dental Medicine, “Apollonia” University of Iasi, Iași, Romania

⁵Academy of Romanian Scientists, Bucharest, Romania



4. Tunable Properties of electrospun poly(vinyl alcohol) loaded with plant extracts for new biodegradable and bioresorbable materials

Diana Serbezeanu¹, Alina-Mirela Ipate¹, Cristina Mihaela Rîmbu², Tăchiță Vlad-Bubulac¹

¹“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

²Department of Public Health, Faculty of Veterinary Medicine, Iasi University of Life Sciences (IULS), Iasi, Romania



5. S-benzoylthiamine O-monophosphate as corrosion inhibitor for brass in 200ppm NaCl and Mild steel in 1M HCl medias

Hamza Hailou¹, Sara Taghzouti¹, El Hassan El Kafssaoui¹, Mohammed Bouziani Idrissi¹, Mohammed Ait Himmi¹, Rachid Touir¹

¹Advanced Materials and Process Engineering Laboratory, Ibn Tofail University, Kénitra, Morocco



6. Random poly(ester-amide)s based on α -amino acids and ϵ -caprolactone by direct melt copolymerization

Lina Kadri¹, Slim Salhi¹, Cristian Peptu², Leonard Ionut Atanase^{3,4}, Marcel Popa^{3,4,5}, Anne-Sophie Schuller⁶, Christelle Delaite⁶, Houcine Ammar¹



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⁶Laboratoire de Photochimie et d'Ingenierie Macromoleculaires (LPIM), University of Haute Alsace, Mulhouse, France

7. Coffee grounds-polyethylene as supporting materials to produce bio-composite PCM with natural waxes

Makki Abdmouleh¹, Moez Souissi¹, Abdelwaheb Trigui², Ilyes Jedidi³, Mohamed Loukil⁴



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⁴Division of Engineering Materials (KMAT). Department of Management and Engineering (IEI), Linköping University, Sweden.

8. The therapeutic effects of fluorouracil-MgAl layered double hydroxides nanohybrids on glioblastoma

Paula Alexandra Postu¹, Alina Ibanescu^{1,3}, Dragos-Ioan Olariu^{1,2}, Brindusa Dragoi^{1,2}



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²Faculty of Chemistry, „Alexandru Ioan Cuza” University of Iasi, Iasi, Romania

³“Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, “Gh. Asachi” Technical University, Iasi, Romania.

9. Self-assembly mechanism of cyclic peptide nanotubes as a new gene delivery system

Razieh Dashti¹, Mehdi Yoosefian¹, Mohamad Mahani¹

¹Department of Nanotechnology, Graduate University of Advanced Technology, Kerman, Iran



10. Synthesis, characterization and biological activities of some metal complexes with salen-type ligand

Alina Soroceanu¹, Maria Cazacu¹

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11. Architected piezoelectric bio-based materials for healthcare

Paul Burel^{1,2}, Mohamed Ragoubi¹, Sébastien Alix², Pierre Millet², Richard Gattin¹

¹UT&A, Unilasalle Rouen, France

²ITheMM, Université Reims Champagne-Ardenne, France



12. Evaluation of some new synthesized peptide and non-peptide nanocapsules toxicity useful in drug delivery applications

Gabriela Vochița¹, Delia-Mihaela Rață², Leonard Ionuț Atanase^{2,3}, Marcel Popa^{2,3}, Bo Nyström⁴, Cosmin-Teodor Mihai¹, Cristina-Veronica Moldovan⁵, Daniela Gherghel¹

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⁴Department of Chemistry, University of Oslo, Oslo, Norway

⁵Department of Biology, Faculty of Biology, “Alexandru Ioan Cuza” University of Iasi, Iasi, Romania



13. Chitosan grafted poly(ethylene glycol) methyl ether acrylate nanoparticles: synthesis, characterization, and use as drug delivery system

Corina-Lenuța Logigan¹, Christelle Delaite², Crina-Elena Tiron³, Cristian Peptu⁴, Marcel Popa^{1,5}, Cătălina Anișoara Peptu¹

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14. 3D printed medicine for the management of diabetes mellitus

Mousa Sha'at¹, Alexandra Bujor¹, Monica-Iliuța Stamate Crețan¹, Alina Ștefanache¹, Florin Adrian Șpac¹, Lăcrămioara Ochiuz¹

¹Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy Iași, Iași, Romania



15. Using FDA to understand the effects of composition on the biodegradable films from corn starch and brazilian flora extract's

João Paulo Oliveira Silva¹, Leonardo Silva Santos Lapa¹, Tonimar Domiciano Arrighi Senra¹

¹Minas Gerais Federation Institute of Education, Science and Technology – Campus Governador Valadares (Ifmg-Gv) / Brazil



Saturday, March 4, 2023, Congress Hall Palas

1. Minerals in gastro-duodenal ulcer treatment

Sabina-Elena Stănescu¹, Ionuț Iulian Lungu¹, Florina Denisa Diaconu¹, Dan Sava², Stefan Leica², Alina Ștefanache¹

¹Discipline of General and Inorganic Chemistry, Faculty of Pharmacy, University of Medicine and Pharmacy “Grigore T. Popa”, Iasi, Romania

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2. Nanoscale block copolymeric micellar templates with varying %EO content for controlled drug release

Ketan Kuperkar¹, Pratap Bahadur²

¹Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat, India.

²Department of Chemistry, Veer Narmad South Gujarat University (VNSGU), Surat, Gujarat, India.



3. The influence of lapis (caustic silver) solution on stability of dipalmitoylphosphatidylcholine membranes

V.V. Skoi^{1,2}, D.V. Soloviov³, A.V. Rogachev^{1,2}, V.V. Chupin², A.I. Kuklin^{1,2}

¹Joint Institute for Nuclear Research, Dubna, Russia

²Moscow Institute of Physics and Technology, Dolgoprudny, Russia

³European Molecular Biology Laboratory (EMBL), Hamburg Outstation c/o DESY, Hamburg, Germany



4. Poly(L-lactide- β -alanine) : Synthesis and Characterizations via direct melt copolymerization

Slim Salhi¹, Lina Kadri¹, Cristian Peptu², Leonard Ionut Atanase^{3,4}, Marcel Popa^{4,5}, Anne-Sophie Schuller⁶, Christelle Delaite⁶, Houcine Ammar¹

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5. Compatibilization effect of PHBV-g-MA on morphology and physical properties of poly(3-Hydroxybutyrate-co-3-Hydroxyvalerate)/ZnO nanocomposites

Mustapha Kaci¹, Nadjet Dehouche¹

¹*Laboratoire des Matériaux Polymères Avancés (LMPA), University of Bejaia, Algeria*

¹*Department of Nanotechnology, Graduate University of Advanced Technology, Kerman, Iran*



6. In vitro biocompatibility assessment of new functionalized chitosan-coated liposome nanoparticles

Daniela Gherghel¹, Anca Niculina Cădinoiu², Leonard Ionuț Atanase^{2,3}, Marcel Popa^{2,3}, Arne Sverre Sande⁴, Cosmin-Teodor Mihai¹, Alexandru-Bogdan Stache⁵, Gabriela Vochița¹

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⁵*Department of Biology, Faculty of Biology, “Alexandru Ioan Cuza” University of Iasi, Iasi, Romania*



7. Treatment of SARS-CoV-2 by other antiviral drugs

Mehdi Yoosefian¹

¹Department of Nanotechnology, Graduate University of Advanced Technology, Kerman, Iran



8. Complete characterization of Fatty Acid Cellulose Esters (FACEs) according to both substitution degree and fatty chain length – Applications of FACEs as Biomaterials, electronics support and biopolymer additives

Nicolas Joly¹, Patrick Martin¹

¹Unité Transformations & Agroressources—ULR7519, UniLasalle, Univ. Artois, Béthune, France



9. New cross-linked hydrogel based on biopolymers as potential support for curcumin immobilization with biomedical applications-obtaining and characterization.

Mohammed Dellali^{1,2}, Camelia Elena Iurciuc (Tincu)², Kheira Zanoune Dellali^{1,2}, Nawel Spahis¹, Hacene Mahmoudi¹, Marcel Popa^{2,3}

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10. Current trends in toothpaste formulation

Alexandra Bujor¹, Mousa Sha'at¹, Monica-Iliuța Stamate Crețan¹, Anatolia Carmen Gațițanu¹, Eliza Grațiela Popa¹, Lăcrămioara Ochiuz¹

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11. Preparation and physicochemical characterization of a biocompatible hydrogel based on gelatin cross-linked with oxidized alginate for biomedical applications

*Chahrazed Mahmoudi^{1,2}, Camelia Elena Iurciuc^{2,3}, Marcel Popa^{2,4},
Naima Tahraoui Douma¹*



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⁴*Academy of Romanian Scientists, Romania*

12. In vivo biological study of nanocapsules based on Chitosan and Poly(N-vinyl pyrrolidone-alt-itaconic anhydride)

Kheira Zanoune Dellali¹, Mohammed Dellali¹, Delia Mihaela Rata², Anca Niculina Cadinoiu², Leonard Ionut Atanase^{2,3}, Marcel Popa^{2,3,5}, Mihaela-Claudia Spataru⁴, Carmen Solcan⁴



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13. In vitro antibacterial activity of silver nanoparticles incorporated in bicomposite films

*Daniela Luminița Ichim¹, Delia M. Rață¹, Oana Maria Darabă¹,
Leonard I. Atanase^{1,2}, Anca N. Cadinoiu¹*



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14. Crystallization behavior of CSA deposited Poly(3-hexylselenophene)

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²Interdisciplinary Research Institute on Bio-Nano-Sciences, Babeş-Bolyai University, Cluj-Napoca, Romania



15. Protective effects of chrysin in calixarene 0118 (OTX008) and sulfobutylether- β -cyclodextrin (SBE β CD) nanoformulation on diabetes-associated liver fibrosis

Anca Hermenean^{1,3}, Alina Ciceu¹, Cornel Balta¹, Herman Hildegard¹, Judit Váradi², Bianca Mladin¹, Marcel Rosu¹, Ferenc Fenyvesi²

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