E. HIGHLIGHTS IN ADVANCED MEDICINE
C. RECENT DEVELOPMENTS IN NANOMEDICINE
POSTER SESSION

The evaluation committee:
Alin Stelian Ciobica
Marcel Popa
Gabriela Vochita

Thursday, February 27, 2025

P01. Zwitterionic semi-interpenetrating networks as carriers for antibiotic drugs

Ștefania Racoviță[1], Diana Felicia Loghin[1], Silvia Vasiliu[1], Marcel Popa[2,3]
[1]„Petru Poni" Institute of Macromolecular Chemistry, Iași
[2]Faculty of Chemical Engineering and Environmental Protection, „Gheorghe Asachi" Technical University of Iasi
[3]Academy of Romanian Scientists

P02. Anthocyanin-based intelligent pH-sensitive films for real-time food freshness monitoring

Oumaima Fakraoui[1,2], Leonard Ionut Atanase[3,4], Slim Salhi[5], Isabelle Royaud[2], Mourad Arous[1], Zoubir Ayadi[2]
[1]LaMaCoP, Faculty of Sciences of Sfax, University of Sfax, Sfax, Tunisia;
[2]IJL, CNRS, University of Lorraine, Campus Artem, Nancy, France;
[3]Faculty of Medical Dentistry, Apollonia University of Iasi, Iasi, Romania;
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[5]Laboratoire de Chimie Appliquée, Faculty of Sciences of Sfax, University of Sfax, Sfax, Tunisia

P03. Mechanical characterization of a PVA/GO hydrogel loaded with Vitamin A palmitate for wound healing

Cristian Escobar[1], Toribio Figueroa[1], Katherina Fernández[2], Leonard I. Atanase[3,4]

[1]Biomaterials Laboratory, Department of Chemical Engineering, Faculty of Engineering, University of Concepción, Chile
[2]Department of Clinical Biochemistry and Immunology, Faculty of Pharmacy, University of Concepción, Chile
[3]Faculty of Medicine, "Apollonia" University of Iasi, Romania
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P04. An innovative strategy for wound healing: using collagen-based conductive hydrogels

Luisbel González[1], Claudio Aguayo[2], Leonard I. Atanase[3,4], Katherina Fernández[1]

[1]Biomaterials Laboratory, Department of Chemical Engineering, Faculty of Engineering, University of Concepción, Chile
[2]Department of Clinical Biochemistry and Immunology, Faculty of Pharmacy, University of Concepción, Chile
[3]Faculty of Medicine, "Apollonia" University of Iasi, Romania
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P05. Microwave-assisted chemical exfoliation of MoS2 with different solvents combinations: structural characterization and cytotoxicity evaluation

Daylenis Pérez[1], Luisbel González[1], Claudio Aguayo[2], Toribio Andrés Figueroa[1], Leonard I. Atanase[3,4], Katherina Fernández[1]

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[2]Department of Clinical Biochemistry and Immunology, Faculty of Pharmacy, University of Concepción, Chile
[3]Faculty of Medicine, "Apollonia" University of Iasi, Romania
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P06. Biological characterization of a PVA/GO hydrogel loaded with Vitamin A palmitate for wound healing

Cristian Escobar[1], Toribio Figueroa[1], Katherina Fernández[2], Leonard I. Atanase[3,4]

[1]Biomaterials Laboratory, Department of Chemical Engineering, Faculty of Engineering, University of Concepción, Chile

[2]Department of Clinical Biochemistry and Immunology, Faculty of Pharmacy, University of Concepción, Chile

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P07. Engineering Antimicrobial Fibrous Mats with Metal-Organic Frameworks

Gonzalo Lanfranconi[1], Miriam Iurlina[2], Leonard Atanase[3], Silvestre Bongiovanni Abel[1], Gustavo A. Abraham[1]

[1]INTEMA, UNMDP-CONICET, Argentina;

[2]FCEYN, UNMdP, Argentina;

[3]Faculty of Medicine, "Apollonia" University of Iasi, Romania

P08. Oral Self-Nanoemulsifying Systems for the Combined Delivery of Remdesivir and Baricitinib with Natural Bioactive Oils: A Novel Therapeutic Approach for COVID-19 and Cancer Treatment

Yousef Alanazi[1], Leonard Ionut Atanase[2], Mohsin Kazi[1]

[1]Department of Pharmaceutics, College of Pharmacy, King Saud University;

[2]Faculty of Medicine, "Apollonia" University of Iasi, Romania

P09. A nanosystem developed for targeted drug delivery based on functionalized human serum albumin cross-linked with oxidized gellan designed to treat brain tumors

Camelia Elena Tincu (Iurciuc)[1,2], Silvia Vasiliu[3], Ștefania Racoviță[3], Gabriela Vochița[4], Daniela Gherghel[4], Marcel Popa[1,5,6], Lăcrămioara Ochiuz[2]*

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[4]NIRDBS - Institute of Biological Research Iasi, Romania;

[5]Faculty of Medicine, ,,Apollonia" University of Iasi, Iasi, Romania;

[6]Academy of Romanian Scientists, Bucharest, Romania

P10. Chemical Valorization of PET: A Road Towards Innovative and Ecological Copolyesteramides

Makram El-Abed[1], Slim Salhi[1], Marcel Popa[2,3,4], Houcine Ammar[1]
[1]Applied Chemistry Laboratory, Faculty of Sciences, University of Sfax, Sfax, Tunisia
[2]"Apollonia" University of Iasi, Iasi, Romania;
[3]"Acad. Ioan Hăulică" Research Institute of the „Apollonia" University of Iași;
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P11. Innovation in Bio-based Polyesteramides: From the synthesis of materials to the design of nanoparticles for drug delivery systems

Y. Chatti[1], L. Kadri[1], S. Salhi[1], L.I. Atanase[2], C. Delaite[3], H. Ammar[1]
[1]Applied Chemistry Laboratory, Faculty of Sciences of Sfax, University of Sfax, Sfax, Tunisia;
[2]Faculty of Medicine, Apollonia University of Iasi, Iasi, Romania;
[3]Université de Haute-Alsace, Mulhouse, France

P12. Advanced hydrogels loaded with heparin for the treatment of varicose ulcers

Elena Farcaș[1], Patrascu Alexandru[2], Leonard Atanase[2,3]
[1]Gheorghe Asachi Technical University of Iași – Faculty of Chemical Engineering and Environmental Protection „Cristofor Simionescu";
[2]Faculty of Medicine, Apollonia University of Iasi, Romania;
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P13. Electrochemical characterization of reduced graphene oxide alginate hydrogels by electrochemical impedance spectroscopy technique

Josefa Silva[1], Katherina Fernández[1], Luis Felipe Montoya[2], Leonard I. Atanase[3,4]
[1]Biomaterials Laboratory, Department of Chemical Engineering, Faculty of Engineering, University of Concepción, Chile
[2]Department of Chemical Engineering, Faculty of Engineering, University of Concepción, Chile
[3]Faculty of Medicine, "Apollonia" University of Iasi, Romania
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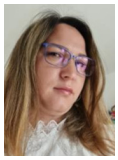
P14. Polymeric Micro/Nanofibers Based on Modified Chitosan/ PVA for wound healing applications

Corina-Lenuta Logigan[1], Marius Prodan[2], Cristian Peptu[2], Catalina-Anisoara Peptu[1]

[1]Faculty of Chemical Engineering and Environmental Protection "Cristofor Simionescu", Department of Natural and Synthetic Polymers, "Gheorghe Asachi" Technical University of Iasi, Iasi, Romania

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



Friday, February 28, 2025

P01. Characterization and performance of hydrogel based on gelatin cross-linked with oxidized alginate for biomedical applications

Chahrazed Mahmoudi[1,2], Naima Tahraoui Douma[1], Camelia Elena Iurciuc (Tincu)[2,3], Marcel Popa[2,4,5]*

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P02. Synthesis Control of P4VP-PCL Copolymers with Linear and Multi-Branch ABx Architectures: From Self-Assembly to Tailored Nano-Aggregate Formation for Advanced Applications

Ridouan El Yousfi[1], Gisela Trifas[2], Leonard Ionut Atanase[2,3,4]

[1]Laboratory of Applied Chemistry and Environment, Faculty of Sciences, Mohamed First University, Oujda, Morocco.

[2]Faculty of Chemical Engineering and Environmental Protection ,,Cristofor Simionescu", "Gheorghe Asachi" Technical University of Iaşi, Romania

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P03. Structural Design and Functional Applications of PEG-PCL Copolymers: From Toxic Substance Removal to Sol-Gel Transitions and Nanostructured Drug Delivery Systems

Ridouan El Yousfi[1], Leonard Ionut Atanase[2,3]
[1]Laboratory of Applied Chemistry and Environment, Faculty of Sciences, Mohamed First, Oujda, Morocco.
[2]Faculty of Medicine, Apollonia University of Iasi, Iasi, Romania.
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P04. Effect of the dispersing agent „BYK W-9010" on the Properties of Spent Coffee Grounds-Based Biocomposites

Lina Kadri[1], Slim Salhi[1], Anne-Sophie Schuller[2,3], Makki Abdelmouleh[4], Leonard Ionut Atanase[5,6], Christelle Delaite[2,3], Houcine Ammar[1]
[1]Applied Chemistry Laboratory, Faculty of Sciences, University of Sfax, Tunisia
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[5]Faculty of Medicine, Apollonia, University of Iasi, Iasi, Romania
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P05. Efficient Hydrothermal Synthesis of Carbon Dots from Green Precursors: A Comparative Study and Potential Applications

Noumane ELouakassi[1,2], Abdelmajid Almaggoussi[1,3], Corneliu S. Stan[2], Marcel Popa[2,4,5], Larbi Belachemi[1], Jaafar Ghanbaja[6,7], Hamid Kaddami[1,8]
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P06. Photocatalytic Ceramic Foams for the Removal of Emerging Contaminants in Water

Yhosmary L. Franco[1], Jimmy Castillo[2], Leonard Atanase[3], Juan C. Pereira[1]
[1]Petroleum, Hydrocarbons and Derivatives Laboratory (PDH) of the University of Carabobo, Valencia, Venezuela
[2]Laser Spectroscopy and Nanotechnology Laboratory of the Central University of Venezuela, Caracas, Venezuela
[3]"Apollonia" University of Iasi, Romania

P07. Synthesis and Characterization of Shape Memory Polymers Based on Isobornyl Acrylate

Djazia Bendeddouch[1], Ulrich Maschke[2], Marcel Popa[3,4], Lamia Bedjaoi-Alachaher[1]
[1]Laboratoire de Recherche sur les Macromolécules (LRM), Université de Tlemcen, Algérie
[2]Unité Matériaux Et Transformations (UMET), Université de Lille, Lille, France
[3]"Apollonia" University of Iași, Romania
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P08. Study of the physico-chemical and mechanical properties of acrylic polymers

Ghizlene Fatima Zohra Hakem[1], Christelle Delaite[2], Anne Sophie Schuller[2], Marcel Popa[3,4], Amina Bouriche[1], Lamia Bedjaoui-Alachaher[1]
[1]Laboratory of Research on Macromolecules (LRM), Faculty of Sciences, University of Abou Bekr Belkaid, Tlemcen, Algeria;
[2]Laboratory of Photochemistry and Macromolecular Engineering (LPIM), National School of Chemistry – University of Haute Alsace – France;
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[4]Academy of Romanian Scientists, Bucharest, Romania

P09. Investigation of Solvent Interaction Behavior of an Acrylic Hybrid Material in Ethanol and Toluene

Mohammed Aymen Zehouani[1], Marcel Popa[2,3], Lamia Bedjaoui-Alachaher[1]

[1]Laboratoire de Recherche sur les Macromolécules (LRM), Université de Tlemcen, Algérie; [2]"Apollonia" University of Iasi, Iasi, Romania

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P10. Cell morphology modulation after treatments with different peptide functionalized nanocapsules containing magnetic particles

Gherghel Daniela[1], Rață Delia-Mihaela[2], Cadinoiu Anca Niculina[2], Atanase Leonard Ionuț[2], Popa Marcel[2], Sande Sverre Arne[3], Vochița Gabriela[1]

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[2]"Apollonia" University of Iași, Romania

[3]University of Oslo, Oslo, Norway

P11. Cellular response to the action of some novel peptides-functionalized liposomes loaded with dexamethasone

Vochița Gabriela[1], Cadinoiu Anca Niculina[2], Rață Delia-Mihaela[2], Atanase Leonard Ionuț[2], Popa Marcel[2], Bo Nystrøm[3], Gherghel Daniela[1]

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[3]University of Oslo, Oslo, Norway

P12. Cytotoxicity assessment of some biocomposite hydrogels containing ZnO nanoparticles and ibuprofen for the treatment of burns wounds

Oana-Maria Darabă[1], Delia Mihaela Raţă[1], Anca Niculina Cadinoiu[1], Leonard Ionuț Atanase[1,2]

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P13. Tailoring antimicrobial properties of polyethersulfone membranes by silver-loaded zeolite dopping

Antonia-Ioana Iftimie[1], Diana Serbezeanu[1], Tăchiță Vlad-Bubulac[1], Cristina M. Rîmbu[2], Yuri Kalvachev[3]
[1] "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania
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[3] Institute of Catalysis, Bulgarian Academy of Sciences, Sofia, Bulgaria

P14. Preparation and Characterization of a biocompatible Hydrogel obtained by Crosslinking chitosan/lactalbumin with Oxidized carboxymethylcellulose for Potential Biomedical Applications

Mohammed Dellali[1], Kheira Zanoune Dellali[1], Camelia Elena Iurciuc (Tincu)[2], Marcel POPA[2,3]
[1]Hassiba Benbouali University of Chlef, Algeria,
[2]"Gheorghe Asachi" Technical University of Iasi, Romania,
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Saturday, March 1, 2025

P01. Development of modified drug delivery systems with metformin loaded in mesoporous silica matrices

Mousa Sha'at[1], Maria Ignat[2,3], Adrian Florin Șpac[4], Alexandra Bârsan (Bujor)[1], Fawzia Sha'at[5], Ramona-Daniela Păvăloiu[5], Monica-Iliuța Stamate Crețan[1], Lăcrămioara Ochiuz[1]*
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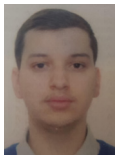

P02. Experimental and theoretical design on the development of matrix tablets with metformin and honokiol

Mousa Sha'at[1], Adrian Florin Șpac[2], Cristina Marcela Rusu[3], Maricel Agop[3,4], Alexandra Bârsan (Bujor)[1], Monica-Iliuța Stamate Crețan[1], Carmen Anatolia Gafițanu[1], Lăcrămioara Ochiuz[1]

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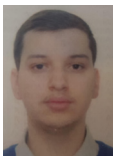

P03. Applications of artificial intelligence in neuro-oncology

Mihaela Gavrilă[1], Raluca Maria Munteanu[1], Maria Spiridon[1]

[1]Regional Institute of Oncology, Iasi, Romania

P04. Development and characterization of levofloxacin-loaded vitamin A-polymacrolactone nanoemulsions as potential ophthalmic drug delivery systems

Șerban Alexandru-Mihail[1]

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

P05. Design and characterization of microcapsules based on alginate and poly(methyl vinyl ether-alt-calcium maleat) for drug delivery applications

Sanda Bucătariu[1], Gheorghe Fundueanu[1], Marieta Constantin[1], Irina Popescu[1]

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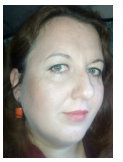

P06. Studying Biomedical Applications of $BaFe_{12}O_{19}$ (Ba-Ca) TiO_3 Magnetoelectric Nanoparticles For Anti-Cancer Drug delivery

Hend. H. Nada[1], Ahmed I. ALI[2], Leonard I. Atanase[3], Mohammed SALLAH[1]

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

[2]Basic Science Department, Faculty of Technology and Education, Helwan University, Cairo, Egypt

[3]Faculty of Medicine, Apollonia University of Iasi, Romania

P07. Eco-friendly synthesis of poly(ethylene brassylate) as potential hydrophobic drug carrier

Bianca-Elena-Beatrice Crețu[1]

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

P08. Evaluation of the synergistic benefits of a multifunctional system based on active substances with effects on anti-melanogenesis

Alexandra Vieru[1], Loredana E. Nita[1]

[1]Institutul de Chimie Macromoleculară "Petru Poni", Iași

P09. Design of fibrous membranes based on cellulose acetate/ polyvinylidene fluoride/silver nanoparticles with specific properties for application in medical field

Adina Maria-Dobos[1], Diana Serbezeanu[1], Daniela Rusu[1], Cristina Mihaela Rîmbu[2], Anca Filimon[1]

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

[2]Department of Public Health, University of Life Science Iasi, Romania

P10. Development of new nanocellulose-based materials for biomedical applications

Gabriela Biliuta[1], Raluca-Ioana Baron[1], Sergiu Coseri[1]

[1]Petru Poni" Institute of Macromolecular Chemistry of Romanian Academy, Iasi, Romania

P11. New 3D architectures with anti-freezing, electrical conductivity, and impressive mechanical properties for medical applications

Raluca-Ioana Baron[1], Biliuta Gabriela[1], Sergiu Coseri[1], Maria-Valentina Dinu[1]

[1] "Petru Poni" Institute of Macromolecular Chemistry of Romanian Academy, Iasi, Romania

P12. Evaluation of the conjunctival vascular network and microcirculation in individuals with type 1 diabetes

Aristia Şeremet[1], Pavel Leahu [1]

[1]Universitatea de Stat de Medicină şi Farmacie „Nicolae Testemiţanu"

P13. Development of biocompatible superparamagnetic nanoparticles based on chitosan for targeted delivery of 5-Fluorouracil

Kheira Zanoune [1,2], Mohammed Dellali [1,2], Corina-Lenuța Savin [3], Marcel Popa[3,4]

[1]Faculty of Technology, Hassiba Benbouali University of Chlef, Algeria

[2]Laboratory of Natural Bio-Resources, University Hassiba Benbouali of Chlef, Algeria

[3] "Gheorghe Asachi" Technical University of Iasi, Romania

[4]Academy of Romanian Scientists, Bucuresti, Romania

P14. Supramolecular Structures as Drug Delivery Systems. Oil – in – Water Microemulsions as carriers for anti-cancer agents

René D. Peralta-Rodríguez[1] and Leonard I. Atanase[2,3]

[1]Research Center for Applied Chemistry (Centro de Investigación en Química Aplicada), Saltillo, Coahuila, México.

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