

## Wednesday - 4 September 2019

Wednesday, 4 September 2019	Time	VIENA Room	
	12.00 - 17.00	Registration, collecting conference materials	
	17:00 – 17:30	Opening ceremony	
		PLENARY SESSION - 1	
		Chaired by: <b>Ileana Rau</b> and <b>Sorin Bildea</b>	
	17:30 – 18:05	<b>Tanase Dobre</b> ( <i>University Politehnica of Bucharest, Romania</i> ) <i>Stochastic Modelling in Chemical Engineering</i>	Poster Session - Section 6
	18:05 – 18:40	<b>Olivier Siri</b> ( <i>Centre Interdisciplinaire de Nanoscience de Marseille - (CNRS / Aix-Marseille Université), France</i> ) <i>Emerging conjugated zwitterions for photonics</i>	
	18:40 – 19:15	<b>Jean-Noel Jaubert</b> ( <i>Ecole Nationale Supérieure des Industries Chimiques, Nancy, France</i> ) <i>How to boost the performances of equations of state widely used in chemical engineering</i>	
19:15 – 19:50	<b>Luc Averous</b> ( <i>University of Strasbourg, France</i> ) <i>From biomass to innovative polyurethane materials: our overview</i>		
20:00	Welcome cocktail		

## Thursday - 5 September 2019

Time	VIENA Room	Poster Sessions - Section 6 and Section 3
<b>PLENARY SESSION - 2</b> <i>Chaired by: Alina Badanoiu and Catalin Zaharia</i>		
08:30 – 09:05	<b>Timothy Mason</b> ( <i>Centre for Research in the Built and Natural Environment, Coventry University, United Kingdom</i> ) <i>40 Years of Sonochemistry</i>	
09:05 – 09:40	<b>Luis Santos</b> ( <i>BASF HQ, Germany</i> ) <i>Sustainable paints: an important contribution for a healthier life</i>	
09:40 – 10:15	<b>Mihail Barboiu</b> ( <i>University of Montpellier, France</i> ) <i>Encapsulation versus self-aggregation toward highly selective artificial K<sup>+</sup>- Channels</i>	
10:15 - 10:50	<b>Sigurd Skogestad</b> ( <i>Norwegian University of Science and Technology (NTNU), Norway</i> ) <i>Distillation is part of the future: A fresh look with focus on Divided-wall (Petlyuk) distillation columns</i>	
10:50 – 11:10	<b>Coffee Break</b>	
<b>PLENARY SESSION - 3</b> <i>Chaired by: Cristina Orbeci and Cristian Pirvu</i>		
11:10 – 11:45	<b>Horia Iovu</b> ( <i>University Politehnica of Bucharest, Romania</i> ) <i>New concepts for design and synthesis of advanced nanocomposites</i>	
11:45 – 12:20	<b>Magdalena Ionita</b> ( <i>Head of Technical Development Petrobrazi Refinery OMV Petrom, Romania</i> ) <i>Challenges and opportunities for oil processing industry – Horizon 2030</i>	
12:20 – 12:55	<b>Gabriela Carja</b> , ( <i>Gheorghe Asachi Technical University of Iasi, Romania</i> ) <i>Engineering self-assemblies of nanoparticles of metals/metal oxides-layered double hydroxides catalysts for obtained clean energy</i>	
12:55 - 13:30	<b>Mihaela Stefan</b> ( <i>University of Texas, Dallas, USA</i> ) <i>Functional Polycaprolactones for Drug Delivery Applications</i>	
13:30 – 15:00	<b>Lunch Break</b>	

## ORAL PRESENTATIONS – Session 1

Time	VIENA Room	ROMA Room	BUCHAREST Room	CASINO Room	Poster Sessions – Sections 1 and Section 5
	Section 6 Chaired by: Diana Dragusin and Catalin Zaharia	Section 3 Chaired by: Natalia Yakovleva and Cristian Pirvu	Section 2 Chaired by: Daniela Istrati and Cristina Todasca	Section 4 Chaired by: Costin Sorin Bildea and Anton Alexandru Kiss	
Thursday, 5 September 2019	15:00 – 15:10	<b>Keynote</b> S6 - 62 <b>Gheorghe Fundueanu</b> <i>Self-regulated drug delivery systems</i>	<b>Keynote</b> S3 - 106 <b>Liana Anicai</b> <i>Electrodeposition of Sn based ternary alloys using deep eutectic solvents</i>	<b>Keynote</b> S2 - 187 <b>Stefan Theodor Tomas</b> <i>Anthocyanes from Various Violet Berries</i>	<b>Keynote</b> S4 - 403 <b>Valentin Plesu</b> <i>Perspectives in collaboration between OMV PETROM and University POLITEHNICA of Bucharest</i>
	15:10 – 15:20				
	15:20 – 15:30	S6 - 234 <b>Ionut-Cristian Radu</b> <i>Poly-N-isopropylacrylamide (PNIPAM)/magnetite smart nanoparticles loaded with complex doxorubicin-DNA fragments for breast cancer therapy</i>	S3 - 63 <b>Natalia Yakovleva</b> <i>Electrochemical anodizing of porous titanium sponge sintered powders</i>	<b>Keynote</b> S2 - 192 <b>Mircea Vinatoru</b> <i>Ultrasonically Assisted Extraction in Food Processing and the Challenges of Integrating Ultrasound into the Food Industry</i>	S4 - 29 <b>Calin-Cristian Cormos</b> <i>Chemical Looping Technology - An Energy Efficient Way for Reducing Carbon Footprint of Fossil-based Industrial Processes</i>
15:30 – 15:40	S6 - 39 <b>Irina Popescu</b> <i>Alginate-pluronic hydrogels obtained by thiol-ene photo-click reaction</i>	S3 - 309 <b>Ionut Enculescu</b> <i>Nanostructure based field effect transistors for sensing applications</i>		S4 - 314 <b>George Rizea</b> <i>Natural Gas Dehydration by Absorption and Membrane Separation: Process Simulation and Optimization</i>	

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Thursday, 5 September 2019	15:40 – 15:50	S6 - 96 <b>Elena Iuliana Biru</b> <i>Synthesis of Hyperbranched Benzoxazine – Graphene oxide structures</i>	S3 - 68 <b>Sergei Chernyak</b> <i>Stability and structure evolution of cobalt catalyst supported on carbon nanotubes in Fischer-Fropsch synthesis</i>	S2 - 6 <b>Ghassan F. Al-Samarrai</b> <i>Application nano-composite (titanium dioxide) as an antifungal coating for orange fruit storage</i>	S4 - 58 <b>Mihai Daniel Moraru</b> <i>Dynamics and control of heterogeneous reactive distillation</i>
	15:50 – 16:00	S6 - 53 <b>Sanda Bucatariu</b> <i>Design and development of sponge-type hydrogel composed of hyaluronic acid and poly(methylvinylether-alt-maleic acid) for biomedical applications</i>	S3 - 260 <b>Mihail Chira</b> <i>Tribological behavior of Zn-Ni layers electrodeposited on different substrate</i>	S2 - 9 <b>Gavrilas Simona</b> <i>Extraction and Electrochemical Determination of Organophosphorus Compounds Presented in Winery By-products</i>	S4 - 38 <b>Szabolcs Szima</b> <i>Techno-Economic Analysis of the new Gas Switching Combustion Technology in a Coal-Fired Power Plant</i>
	16:00 – 16:10	S6 - 376 <b>George Mihail Vlasceanu</b> <i>Synthesis and comprehensive characterization of composite biopolymer blend scaffold reinforced with graphene oxide and hydroxyapatite gradient density</i>	S3 - 80 <b>Kristina Stepanova</b> <i>Anodic oxidation of powder titanium aluminide</i>	S2 - 10 <b>Benahmed Djilali Adiba</b> <i>Extraction of Bioactive Substances of Vine Leaves and Their Functional Properties</i>	S4 - 277 <b>Elena Catalina Udrea</b> <i>Modelling and simulation of TAME industrial process using gPROMS<sup>®</sup> platform</i>
	16:10 – 16:20	S6 - 98 <b>Andra Mihaela Onas</b> <i>Synthesis of Albumin-Graphene oxide Complexes for Biomedical Applications</i>	S3 - 83 <b>Simona Popescu</b> <i>Silk fibroin hybrid coatings for implantable titanium surface modification</i>	S2 - 274 <b>Ana-Maria Brezoiu</b> <i>Enhanced radical scavenger properties of polyphenolic extract from grape marc through encapsulation into mesoporous silica-type matrices</i>	S4 - 136 <b>Andrei Maxim Andrei</b> <i>Plantwide control of the olefin metathesis process</i>
	16:20 – 16:30	S6 - 99 <b>Georgiana Dana Dumitrescu</b> <i>The Use of Cuttlefish Bone as Potential Mineralization Promotor in Polymers for Bone Reconstruction</i>	S3 - 78 <b>Evgeniya Suslova</b> <i>Nitrogen-doped carbon nanotubes 3D frameworks: synthesis by spark plasma sintering, structural and thermochemical features</i>	S2 - 218 <b>Pascal Bonnet</b> <i>An In silico Fragment-Based Design Tool for the Discovery of Novel Kinase Inhibitors</i>	S4 - 5 <b>Marina Mihalachi</b> <i>In-silico modulate glycolytic oscillator in modified E. coli to control bioprocesses of industrial interest</i>

Poster Sessions – Sections 1 and 5

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<b>Thursday, 5 September 2019</b>	16:30 – 16:40	S6 - 35 <b>Magdalena-Cristina Stanciu</b> <i>Size and morphology of nanoparticles obtained by self-assembly of dextran based block copolymers</i>	S3 - 113 <b>Sabrina Patricia Rosoiu</b> <i>Electrodeposition of Ni-Sn Alloy/rGO composite coatings involving choline chloride based deep eutectic solvents</i>	S2 - 150 <b>Bogdan Purcareanu</b> <i>Fast screening of antibiotics in consumer products by HRMS</i>	S4 - 26 <b>Aura Daniela Radu</b> <i>Study of heavy metals and radioactive contamination of food products</i>	<b>Poster Sessions – Sections 1 and 5</b>
	16:40 – 16:50	S6 - 104 <b>Filis Curti</b> <i>Development of 3D printed structures with controlled architecture for biomedical applications</i>		S2 - 258 <b>Nicoleta-Mirela Blebea</b> <i>Validation and Applications of a new HPLC Methods for determination of Captopril in Pharmaceutical Forms</i>	S4 - 92 <b>Iulian Patrascu</b> <i>Biobutanol purification by heat pump assisted azeotropic dividing-wall column: dynamics and control</i>	
	16:50 – 17:00	S6 - 12 <b>Khalid Saeed Lateef Al-Badri</b> <i>Design Double Layers Structure based Dual Band Metamaterial Absorbers</i>		S2 - 297 <b>Marin Gheorghe</b> <i>Characterization by Impedance Spectroscopy of the Supercritical Fluid Extraction Process of Peppermint Volatile Oil</i>	S4 - 142 <b>Mihaela Popescu</b> <i>Carotenoids recovery from tomato pomace: conventional vs. green extraction method</i>	
	17:00 – 17:15	<b>Coffee Break</b>				

## ORAL PRESENTATIONS – Session 2

	<b>VIENA Room</b> <b>Section 6</b> Chaired by: <i>Serguei Savilov and</i> <i>Ecaterina Andronescu</i>	<b>ROMA Room</b> <b>Section 3</b> Chaired by: <i>Daniela Ionita and</i> <i>Anca Cojocaru</i>	<b>BUCHAREST Room</b> <b>Section 2</b> Chaired by: <i>Ioan Calinescu and</i> <i>Adina Gavrila</i>	<b>CASINO Room</b> <b>Section 4</b> Chaired by: <i>Tanase Dobre and</i> <i>Vasile Lavric</i>
<b>Thursday, 5 September 2019</b>	17:15 – 17:25	<b>Keynote</b> S6 - 21 <b>Rodica-Mariana Ion</b> <i>Nanomaterials for the rescue of</i> <i>stone monuments</i>	S3 - 4 <b>Konstantinos Dermentzis</b> <i>Batch and continuously operated</i> <i>electrooxidation process for</i> <i>remediation of phenol</i>	S4 - 227 <b>Bogdan Trica</b> <i>Modelling of ultrafiltration for the</i> <i>purification of alginate extracted</i> <i>from a brown seaweed</i> <i>in the Black Sea (Cystoseira Barbata)</i>
	17:25 – 17:35		S3 - 230 <b>Matei Raicopol</b> <i>Dye sensitized solar cells based on</i> <i>ionic liquid crystal electrolytes</i>	S4 - 269 <b>Cristian Eugen Raducanu</b> <i>Modelling of batch biodiesel</i> <i>synthesis with external recirculation</i> <i>and simultaneous</i> <i>separation</i>
	17:35 – 17:45	S6 - 37 <b>Nicoleta Cioatera</b> <i>Assessment on Doping Possibilities</i> <i>in Pyrochlore Titanates</i>	S3 - 15 <b>Ileana Rau</b> <i>All-biomaterials with multiple</i> <i>applications</i>	S4 - 2 <b>Marian Iosif Frincu</b> <i>Electrochemical regeneration of the</i> <i>leaching solution for metals recovery</i> <i>from WPCBs</i>
	17:45 – 17:55	S6 - 55 <b>A.S. Viktorova</b> <i>Carbon and nitrogen-doped</i> <i>carbon foam for Lithium-ion</i> <i>batteries</i>	S3 - 161 <b>Eleonora-Mihaela Ungureanu</b> <i>Identification and detection of</i> <i>heavy metal ions by voltammetry</i> <i>on azulene based CMEs</i>	S4 - 288 <b>Ioan Alexandru Tutun</b> <i>Modeling the cargo switchover</i> <i>without the risk of contamination</i>
	17:55 – 18:05	S6 - 91 <b>Ekaterina A. Arkhipova</b> <i>Graphene nanoflakes: synthesis</i> <i>and application in supercapacitors</i>		S2 - 196 <b>Daniel Costinel Petre</b> <i>Inorganic ions as periodontitis</i> <i>vectors assessed with a new</i> <i>microsensor</i>

Poster Sessions - Section 1 and Section 5

18:05 – 18:15	<p>S6 - 108 <b>R.Y Novotortsev</b> <i>Synthesis and properties of Cu/CNT composite materials for powder metallurgy and electronics</i></p>	<p>S2 - 349 <b>Brindusa Alina Petre</b> <i>Clinical Diagnostics of Lysosomal Storage Disorders using MRM-MS and Fluorimetric Approaches</i></p>	<p>S4 - 191 <b>Daniela Ghimpeteanu</b> <i>Calorimetric determination of microwave energy absorption in - resonant or multimod applicators in a continuous-flow reactor</i></p>
18:15 – 18:25	<p>S6 - 267 <b>Alexandra I. Cernencu</b> <i>Biocompatible Carbohydrate-based Inks for 3D Printing</i></p>	<p>S2 - 168 <b>Aurel Diacon</b> <i>Conventional and Ultrasound Assisted Extraction (UAE) of Lycopene from Siriana F1 hybrid and Pontica 102 Tomatoes</i></p>	<p>S4 - 375 <b>Ramona Dusman (Radu)</b> <i>Automated production of <sup>64</sup>Cu medical radioisotope using a variable energy cyclotron (TR-19)</i></p>
18:25 – 18:35	<p>S6 - 94 <b>Elena Olaret</b> <i>Development of nanocomposite nerve guidance channel</i></p>	<p>S2 - 313 <b>Adrian Trifan</b> <i>Microwave Assisted Pretreatment of Lignocellulosic Biomass</i></p>	<p>S4 – 401 <b>Stefan-Ovidiu Dima</b> <i>Biochemical engineering aspects of hydrothermal carbonization of biomass</i></p>
18:35 – 18:45	<p>S6 - 97 <b>Elena Cojocar</b> <i>Carboxyl-modified graphene oxide incorporated chitosan scaffolds as promising materials for bone tissue engineering</i></p>	<p>S2 - 172 <b>Anamaria Vartolomei</b> <i>Lypozyme 435 esterification activity improvement using short term treatments with ultrasounds</i></p>	<p>S4 – 402 <b>Marius Ghiurea</b> <i>In-situ catalytic conversion of lignocellulosic waste biomass using an alumina-Cu/Pd/Ce catalyst</i></p>
18:45 – 18:55	<p>S6 - 304 <b>Mihaela Dascalu</b> <i>Attempts to increase the electromechanical performance of siloxane elastomers</i></p>	<p>S2 - 176 <b>Alexandru Vlaicu</b> <i>Optimization of ultrasound - assisted extraction (UAE) of biocomponents from microalgal biomass</i></p>	
18:55 – 19:05	<p>S6 – 406 <b>Eugen Gheorghiu</b> <i>Enhanced analytic performances of biosensors by modulating optical waveguides resonance with magnetic / electric alternating fields</i></p>	<p>S2 - 243 <b>Alin Vintila</b> <i>Effect of MW and US treatment on microalgae growth</i></p>	

## Friday - 6 September 2019

Time	VIENA Room	Poster Sessions – Section 1 and Section 4	
<b>PLENARY SESSION - 4</b>			
<i>Chaired by: Raluca Stan and Anton Ficai</i>			
08:30 – 09:05	<b>Serguei Savilov</b> ( <i>Lomonosov Moscow State University, Russian Federation</i> ) <i>Periodic Table of the Elements: The Developing Alphabet of Science</i>		
09:05 – 09:40	<b>Philip T. Jaeger</b> ( <i>Eurotechnica GmbH, Germany</i> ) <i>Recent developments and future potential of supercritical fluid technology</i>		
09:40 – 10:15	<b>Franck Suzenet</b> ( <i>University of Orleans, France</i> ) <i>Polynitrogen containing heterocycles: from energetic materials to original and promising organic fluorophores</i>		
10:15 – 10:50	<b>Adamantini Paraskevopolou</b> , ( <i>Aristotle University of Thessaloniki, Greece</i> ) <i>Food properties as influenced by the addition of non-conventional ingredients</i>		
10:50 - 11:15	<i>Coffee Break</i>		
<b>PLENARY SESSION - 5</b>			
<i>Chaired by: Daniela Istrati and Paul Stanescu</i>			
11:15 – 11:50	<b>Nicolay Tsarevsky</b> ( <i>Southern Methodist University, Dallas, USA</i> ) <i>Synthesis and Applications of Branched Functional Polymers</i>		
11:50 – 12:25	<b>Ai Kah Soh</b> ( <i>Monash University Malaysia</i> ) <i>Role of stress in electrochemical hysteresis for the applications in Lithium ion batteries</i>		
12:25 – 13:00	<b>Karol Chomicki</b> ( <i>ELSEVIER</i> ) <i>How direct access to extracted experimental data is facilitating and speeding up a scientific research in Academia?</i>		
13:00 – 15:00	<i>Lunch Break</i>		

Friday, 6 September 2019



## ORAL PRESENTATIONS – Session 3

Time	VIENA Room	ROMA Room	BUCHAREST Room	CASINO Room	
	Section 6 Chaired by: Ai Kah SOH and Anton Ficai	Section 3 Chaired by: Jean-Noël Jaubert and Catinca Secuianu	Section 5 Chaired by: Madalina Pandeale and Stefan Voicu	Section 1 Chaired by: Matei Raicopol and Florina Dumitru	
Friday, 6 September 2019	15:00 – 15:10	S6 - 117 <b>Stepan Kupreenko</b> <i>The influence of nitrogen doping on the adsorption of organic solvent vapors by carbon nanotubes and few-layer graphene nanoflakes</i>	<b>Keynote</b> S3 - 287 <b>Catinca Secuianu</b> <i>Alternative green solvents for CO<sub>2</sub> capture: experiments and modeling</i>	<b>Keynote</b> S5 - 240 <b>Stefan Ioan Voicu</b> <i>Functionalization of Cellulose Acetate Membranes with AminopropylTriethoxySilane. Synthesis, Characterization and Applications</i>	<b>Keynote</b> S1 - 11 <b>Raluca Stan</b> <i>Vegetable Oils as Valuable Feedstock for Performant Materials</i>
	15:10 – 15:20	S6 - 120 <b>N.I. Osipov</b> <i>Synthesis and intercalation of Ti<sub>3</sub>C<sub>2</sub> with Li and Na</i>			
	15:20 – 15:30	S6 - 124 <b>Mariya S Paslova</b> <i>Carbon-encapsulated iron particles fixed in a rigid CNT framework: synthesis by spark plasma sintering and catalytic properties in CO hydrogenation</i>	S3 - 148 <b>Andrés Pina-Martinez</b> <i>Methodologies of research for optimal working fluids for cycles of power generation and refrigeration machines</i>	<b>Keynote</b> S5 - 204 <b>Florin Miculescu</b> <i>Sustainable Technologies for Bone Reconstruction Ceramic Biomaterials Derived From Natural Sources and Porogen Agents</i>	<b>Keynote</b> S1 - 395 <b>Sylvain Routier</b> <i>Design of novel alpha7-nAChR ligands: from an idea to in rodent results for Alzheimer [<sup>18</sup>F] TEP imaging</i>
	15:30 – 15:40	S6 - 134 <b>Cristina Banciu</b> <i>3D Graphene and 3D Graphene/ZnO Composites Preparation and Characterization</i>	S3 - 279 <b>Sergiu Sima</b> <i>Phase equilibria in systems of CO<sub>2</sub> and esters</i>		

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Friday, 6 September 2019	S6 - 198 <b>Ioana Asofiei</b> <i>Self-cleaning waterborne paints based on TiO<sub>2</sub> sensitized with mixed chromophore dyes</i>	S3 - 286 <b>Mihaela Ionita</b> <i>Phase equilibria and densities of carbon dioxide + 1-hexanol</i>	S5 - 16 <b>Radu Mircea</b> <i>Compressor Oil Assessment by using FT-IR Spectroscopy</i>	S1 - 51 <b>Vasilichia Antoci</b> <i>New PyrroloBenzoQuinonePhthalazines and PyrroloBenzo-QuinonePyridazines: Synthesis, Structure and Anti-leishmaniasis Activity</i>
	S6 - 268 <b>Miruna-Silvia Stan</b> <i>Analyzing the interaction between different types of nanoparticles and serum albumin</i>	S3 - 281 <b>Radu Ciprian Racovita</b> <i>Experimental studies of several type 1 liquid-liquid ternary systems</i>	S5 - 241 <b>Oana Steluta Serbanescu</b> <i>Removal of Gd(II) onto functionalized Cellulose Acetate membranes with self indicator properties</i>	S1 - 162 <b>Karen Plé</b> <i>Gold catalyzed synthesis of spirocycles</i>
	S6 - 347 <b>Narcisa Vrânceanu</b> <i>Enhanced Elimination of a Lipid Lowering Drug over Titanium Nanosized Catalysts and UV Irradiation</i>	S3 - 395 <b>Alexandra Vasile</b> <i>Removal of nitrogen compounds from wastewater by microemulsion</i>	S5 - 244 <b>Andreea Catalina Iordache</b> <i>Hemodialysis composite membrane with functionalized graphene for retention of heavy metals in case of intoxications</i>	S1 - 180 <b>Frédéric Buron</b> <i>Efficient functionalization of Imidazo[2,1-b][1,3,4]thiadiazoles, access to new kinases inhibitors</i>
	S6 - 72 <b>Andreea L. Chibac</b> <i>Hybrid Polymer Composites with Ag, Au or Au-Ag NPs as Photocatalysts for the Degradation/Reduction of Nitroaromatics</i>	S3 - 396 <b>Daniela Catana</b> <i>Recovery of technological waste from the metalworking industry by microemulsion</i>	S5 - 239 <b>Alin Cristian Nicolae Vintila</b> <i>Integrate approach for liquid digestate treatment and valuable microalgae biomass production</i>	S1 - 202 <b>Robert-Andrei Tincu</b> <i>5-Hydroxymethylfurfural Synthesis in Biphasic Solvent Systems</i>
	S6 - 225 <b>Andreea Ion</b> <i>Nanohydrogels platforms for drug delivery systems by self-assembling of hydrophilic polymers</i>	S3 - 397 <b>Ana-Maria Manea-Saghin</b> <i>New biomaterials for application in photonics</i>	S5 - 368 <b>Silviu-Laurentiu Badea</b> <i>Reductive dechlorination of <math>\alpha</math>-hexachlorocyclohexane in batch experiments with iron sulfide nanoparticles</i>	<b>Keynote</b> S1 - 232 <b>Beatrice Braun Cula</b> <i>An unusual and rare case of isomerism: Allogon isomers in a series of Fe(II) complexes</i>

Poster Sessions - Section 2

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Friday, 6 September 2019	16:30 – 16:40	S6 - 183 <b>Cristina Stavarache</b> <i>Mesalamine-loaded mucoadhesive particles with potential application for the treatment of inflammatory bowel disease</i>	S5 - 102 <b>Strokova Natalia</b> <i>The influence of introduction of heteroatoms in carbon nanomaterial structure on organic pollutants adsorption</i>	Poster Sessions - Section 2	
	16:40 – 16:50	S6 - 197 <b>Diana-Ioana Buliga</b> <i>Coloured materials with controlled absorption and emission for military camouflage</i>	S5 - 22 <b>Maria Andreea Nistor</b> <i>Removal of dyes from aqueous solutions by photophosphate metal organic frameworks</i>		<b>Keynote</b> S1 - 122 <b>Delia-Laura Popescu</b> <i>New Organotin (IV) Coordination Compounds: Synthesis, Characterization, and Antimicrobial Activity</i>
	16:50 – 17:00	S6 - 115 <b>Serguei V. Savilov</b> <i>From 0D to 3D Carbon Nanostructures</i>			
	17:00 – 17:15	<b>Coffee Break</b>			

## ORAL PRESENTATIONS – Session 4

	VIENA Room Section 6 Chaired by: Mihaela Stefan and Mariana Ionita		ROMA Room	BUCHAREST Room	CASINO Room Section 1 Chaired by: Maria Alexandru and Florina Dumitru	
	Time					
Friday, 6 September 2019	17:15 – 17:25	S6 - 236 <b>Celina Maria Damian</b> <i>Synthesis of Hybrid Nanostructures Based on Graphene Oxide and the Evaluation of Their Influence in Epoxy Nanocomposites</i>			<b>Keynote</b> S1 - 290 <b>Catalin Maxim</b> <i>On the role played by the chirality of ligands on the aggregation of heterometallic Cu<sup>II</sup>-Hg<sup>II</sup> complexes</i>	
	17:25 – 17:35	S6 - 110 <b>Adnana Spinu Zaulet</b> <i>Glassy dynamics and charge transport of single-ion conductors in bulk and under two-dimensional geometrical constraint</i>				
	17:35 – 17:45	S6 - 257 <b>Adi Ghebaour</b> <i>Alginate superporous microparticle as drug delivery system</i>				S1 - 205 <b>Madalin Damoc</b> <i>Salen-Type Ligands Derived from a Highly Flexible Organic-Inorganic Diamine and Their Metal Complexes</i>
	17:45 – 17:55	S6 - 249 <b>Ludmila Otilia Cinteza</b> <i>Facile Synthesis of Robust Superamphiphobic Coatings for Multifunctional Textiles</i>				S1 - 217 <b>Alexandru-Constantin Stoica</b> <i>Tetranuclear Complex of 3-Formylsalicylic Acid Schiff Base Carrying Silanol Tails</i>

Poster Sessions - Section 2

Friday, 6 September 2019

17:55 – 18:05  
**S6 - 116**  
**Emilian Ghibu**  
*Poly(2-Isopropenyl-2-Oxazoline)  
 Hydrogels as Drug Delivery  
 Systems*

18:05 – 18:15  
**S6 - 101**  
**Jana Ghitman**  
*Hybrid PLGA-vegetable oils  
 nanoparticles for improving  
 stability and encapsulation  
 efficiency of lipophilic drugs*

18:15 – 18:25  
**S6 - 84**  
**Leu Rebeca**  
*Gelatin Methacryloyl with medical  
 application*

18:25 – 18:35  
**S6 - 220**  
**Elena-Alexandra Istratoiu**  
*Silk fibroin nanocarriers for the  
 targeted delivery of 5-FU in cancer  
 therapy*

18:35 – 18:45  
**S6 - 299**  
**Maria Cazacu**  
*Contributions to Recent  
 Developments in Silicone  
 Materials: Dielectric Elastomer  
 Transducers (DETs)*

18:45 – 18:55  
**S6 - 93**  
**Maria-Minodora Marin**  
*The effects of cross-linking agents  
 on the properties of type II  
 collagen biomaterials*

**Keynote**  
**S1 - 23**  
**Ioan-Cezar Marcu**  
*Transition-metal-promoted  
 CuCeMgAlO mixed oxide catalysts  
 obtained from multicationic LDH  
 precursors for methane total  
 oxidation*

**S1 - 200**  
**Andrei Slabu**  
*A Comparative Study on the  
 Catalytic Activity of Mixed Oxides  
 Derived from LDH in the Synthesis  
 of Methylpyrazine*

**S1 - 49**  
**Gheorghe Ionita**  
*Aspects Concerning the H<sub>2</sub>-H<sub>2</sub>O  
 Isotopic Exchange Catalyse*

**S1 - 73**  
**Raul-Augustin Mitran**  
*Nanocomposite phase change  
 materials using molten salts and  
 mesoporous silica matrices*

**S1-294**  
**Cezar Comanescu**  
*Correlation of hyperthermia and  
 magnetic measurements in  
 nanosized cobalt ferrite systems*

Poster Sessions - Section 1 and Section 4

Friday, 6 September 2019	18:55 – 19:05	S1 - 282 <b>Mihaela Deaconu</b> <i>Mesoporous silica as materials for medicine. Colloidal versus mesostructured particles</i>
	19:05 – 19:15	S1 - 284 <b>Simona Ionita</b> <i>Properties of resveratrol encapsulated into mesoporous silica</i>
	19:15 – 19:25	S1-295 <b>Daniel Lincu</b> <i>Tailoring the resveratrol release profile from mesoporous silica through carrier surface modification</i>
		Poster Sessions - Section 1 and Section 4

## POSTER PRESENTATIONS

## Section 1 - Advances in Organic and Inorganic Chemistry &amp; Catalysis

Thursday 5 September 2019

Time: 15:00 – 19:30

- S1 – 025**      **Ludmila Motelica** (University Politehnica of Bucharest, Romania), Ovidiu Oprea, Alina Holban, Anton Ficai, *Optical, Photocatalytic and Antibacterial Properties of Zinc Oxide Nanoparticles*
- S1 – 033**      **Elena Melnic** (Institute of Applied Physics, Chisinau, Republic of Moldova), V. Ch. Kravtsov, E. Lucenti, E. Cariati, A. Forni, M. S. Fonari, *Copper(II) Coordination Compounds with Isomers of Cyclic Triimidazole and their Derivatives*
- S1 – 041**      **Diana Chisca** (Institute of Applied Physics, Chisinau, R. Moldova), V. Bold, V. Ch. Kravtsov, E. Lucenti, E. Cariati, A. Forni, M. S. Fonari, *Co(II), Zn(II) and Cd(II) Mononuclear Complexes with Two Isomers of Cyclic Triimidazole*
- S1 – 048**      **Aliona Vitu** (Institute of Applied Physics, Chisinau, R. Moldova), D. Chisca, E. Gorincioi, E. Coropceanu, P. Bourosh, *Two New Zn(II) Coordination Compounds with Rhodanine-3-Acetic Acid: Synthesis and Biological Properties*
- S1 – 050**      **Dumitrelea Cucu** (Alexandru Ioan Cuza University of Iasi, Romania) Vasilichia Antoci, Dorina Amariuca-Mantu, Catalina-Ionica Ciobanu, Costel Moldoveanu, Violeta Mangalagiu, Ionel I. Mangalagiu, *Design, Synthesis, Structure and anti-TB Activity of some New Pyridine Derivatives Anchored with Benzimidazole Moieties*
- S1 – 052**      **Nicu-Cosmin Ostache** (University of Orléans, France), Marie-Aude Hiebel, Adriana-Luminita Finaru, Gérald Guillaumet, Franck Suzenet, *Synthesis and reactivity of original pyrazolo[3,4-c]pyrazoles*
- S1 – 077**      **Aurel Tabacaru** (“Dunarea de Jos” University of Galati, Romania), Rodica Mihaela Dinica, Mariana Busila, Claudio Pettinari, *Novel antibacterial silver(I) coordination polymers based on a flexible bis(pyrazolyl)-type ligand*
- S1 – 082**      **Dana-Maria Preda** (University of Bucharest, Romania) Mirela Calinescu, Daniela Bala, Ioana Stanculescu, Vasile Bercu, Ticuta Negreanu-Pirjol, *Synthesis, Spectral Characterization, Electrochemical Behavior and Biological Activity of Some Cu(II) Complexes with 4-Aminoantipyrine Derivatives*
- S1 – 088**      **Daniela Mariana Rosioru** (National Institute for Marine Research and Development “Grigore Antipa”, Constanta, Romania) Andra Oros, Valentina Coatu, Elena Stoica, Ticuta Negreanu Pirjol, *Estimation Of Rapana venosa (Valenciennes, 1846) Quality, A Marine Living Resource From The Romanian Black Sea With Economical Importance*
- S1 – 095**      Maria Marinescu, Ludmila-Otilia Cinteza, **Mecu Maria-Madalina** (University of Bucharest, Romania), Marcela Popa, Mariana-Carmen Chifiriuc, George Iuliu Marton, *Synthesis, Biological Screening and DFT Studies of Novel Pyrazolones*
- S1 – 111**      **Florea Dumitrascu** (Center for Organic Chemistry, Bucharest, Romania) Constantin Draghici, Oana G. Popa, Dan G. Dumitrescu, Carmen Limban, Denisa Dumitrescu, *The Nitration of the Non-steroidal Anti-inflammatory Drug: Carprofen*
- S1 – 138**      **Cristian Andrei Spinu** (University of Bucharest, Romania), Sergiu Calancea, Teodora Mocanu, Marius Andruh, *Nitronyl Nitroxide Ligand Derived from o-Vanillin*
- S1 – 166**      **Cleopatra Neagoie** (Guangzhou Institute of Biomedicine and Health Chinese Academy of Science, China), Sreenivas Avula, Micky Tortorella, *Synthesis of analogues of the marine alkaloids, Lamellarines*
- S1 – 178**      **Mihai Raduca** (University of Bucharest, Romania), Augustin M. Madalan, Marius Andruh, *3d and 4f Complexes with Symmetrical and Asymmetrical Mannich Base Derivatives*
- S1 – 207**      **Adrian Apostol** (University of Bucharest & National Institute for Research and Development in Microtechnologies, Bucharest, Romania), Teodora Mocanu, Catalin Maxim, Iuliana Mihalache, Oana Tutunaru, Cosmin Romanitan, Cristina Pachiu, Marius Andruh, *Novel [Zn<sup>II</sup>Ln<sup>III</sup>] luminescent coordination compounds deposited on graphene*

**S1 – 208**      **Madalin Damoc** ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania), Alexandru Stoica, Maria Cazacu, *Attempts to Recover the Platinum Group Metals from Spent Automotive Catalytic Converters by Physical Methods*

**S1 – 229**      **Georgiana Cornelia Ispas** (National Research and Development Institute for Chemistry and Petrochemistry –ICECHIM, Bucharest, Romania), Valentin Raditoiu, Alina Raditoiu, Florentina Monica Raduly, Violeta Purcar, Raluca Manea, Luminita Eugenia Wagner, *The Effect of Hybrid Pigments on Reflectance Profile of Printed Cellulose Fabrics in Visible-Near Infrared Spectral Regions*

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**Section 1 - Advances in Organic and Inorganic Chemistry & Catalysis**

**Friday 6 September 2019**

**Time: 8:30 – 13:00**

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**S1 – 248**      **Raluca Sanda Komartin** (University Politehnica of Bucharest, Romania), Brandusa Balanuca, Anamaria Hanganu, Raluca Stan, *Anti-corrosion coatings based on crosslinking epoxidized Lallelantia oil and lignin*

**S1 – 261**      Violeta Purcar, **Raluca Manea** (National Research and Development Institute for Chemistry and Petrochemistry –ICECHIM, Bucharest, Romania), Valentin Raditoiu, Alina Raditoiu, Florentina Monica Raduly, Georgiana Cornelia Ispas, Luminita Eugenia Wagner, Adriana Frone, *Synthesis and characterization of photocatalytic TiO<sub>2</sub> sol-gel thin films*

**S1 – 264**      **Dan Razvan Popoviciu** ("Ovidius" University, Constanta, Romania), Ticuta Negreanu-Pirjol, Bogdan-Stefan Negreanu-Pirjol, *Carotenoids, flavonoids, total phenolic content and antioxidant activity of Cotoneaster horizontalis Decne. and Cotoneaster microphyllus Wall. ex Lindl. fruits*

**S1 – 270**      Ticuta Negreanu-Pirjol, **Sanda Jurja** ("Ovidius" University, Constanta, Romania), Mihaela Hincu, Bogdan-Stefan Negreanu-Pirjol, *Antioxidant activity of artificial tears – A promising offer for dry eye patients?*

**S1 – 272**      Sanda Jurja, **Ticuta Negreanu-Pirjol** ("Ovidius" University, Constanta, Romania), Mihaela Hincu, **Bogdan-Stefan Negreanu-Pirjol**, *Correlation between antioxidant activity of various xanthophylls pigment nutritional supplements and retinal safety in an UV - exposure environment*

**S1 – 273**      Rodica Tatia, **Christina Zalaru** (University of Bucharest, Romania), Isabela Tarcomnicu, Lucia Moldovan, Oana Craciunescu, Ioan Calinescu, *Isolation and Characterization of Hederagenin from Hedera helix L. Extract with Anti-tumor Activity*

**S1 – 278**      Andra Tatulescu, **Victor Cojocar** (University of Bucharest, Romania), Bianca Patrascu, Christina Zalaru, Florea Dumitrascu, Constantin Draghici, Isabela Tarcomnicu, Maria Marinescu, Rodica Tatia, Lucia Moldovan, *Novel Substituted Pyrazole Hybrids With Anti-Tumor Activity*

**S1 – 285**      Anca G. Coman, Codruta C. Popescu, Marius C. Stoian, Antonio Radoi, Anca Paun, Petre Ionita, **Mihaela Matache** (University of Bucharest, Romania), *Synthesis of Novel Dia- and Para-Magnetic Multifunctional Organic Compounds*

**S1 – 289**      **Mioara Prundeanu** (University Politehnica of Bucharest, Romania), Ana-Maria Brezoiu, Mihaela Deaconu, C. Matei, O. Oprea, T. Negreanu-Pirjol, D. Berger, *Comparison between Salvia officinalis and Thymus serpyllum leaves extract properties embedded in titania matrices*

**S1 – 296**      Maria Marinescu, Alexandru Neculae, **Ludmila-Otilia Cinteza** (University of Bucharest, Romania), Maria-Madalina Mecu, Christina-Marie Zalaru, Cristina Stavarache, Marcela Popa, Mariana-Carmen Chifiriuc, *Synthesis, Antimicrobial Activity and DFT Studies of New Tetrahydropyrimidines*

**S1 – 307**      **Cristian D.Ene** ("Ilie Murgulescu" Institute of Physical Chemistry, Romanian Academy&University of Bucharest, Romania), **Dragos Negreanu** (University of Bucharest, Romania), Diana Trandafir, Catalin Maxim, *Constructing heterotrispin systems by employing Anderson polyoxoanions*



## 21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering

**S1 – 316**        **Victoria Artem** (Research Station for Viticulture and Oenology Murfatlar, Romania), Ticuta Negreanu –Pirjol, Aurora Ranca, D.R. Popoviciu, Cristina Ciobanu, Anil Abduraman, Bogdan-Stefan Negreanu-Pirjol, *Total phenolic content and antioxidant activity of some grape marc hydroalcoholic extracts - white and red varieties*

**S1 – 327**        **Andrei A. Patrascu** (University of Bucharest, Romania), Stéphane Soriano, Maria G. F. Vaz and Marius Andruh, *2p-3d-4f heterotrispin complexes with different metal ions bridged by one aminoxyl group*

**S1 – 328**        **Elena-Valentina Rosca** ("Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania), Ileana Cornelia Farcasanu, Lavinia Liliana Ruta, Theodora-Venera Apostol, Lucian Iscrulescu, Constantin Draghici, Florica Barbuceanu, Stelian Baraitareanu, Stefania-Felicia Barbuceanu, *Synthesis, characterization and toxicity assessment against Saccharomyces cerevisiae of some new compounds from oxazol-5-(4H)-ones and 1,2,4-triazin-6(5H)-ones classes*

**S1 – 334**        **Iacob Andreea-Teodora** (University of Medicine and Pharmacy "Grigore T. Popa", Iasi, Romania), Maria Dragan, Luminita Confederat, Frederic Buron, Sylvain Routier, Lenuta Profire, *Azetidin 2-ones derivatives of amino-acids – synthesis and anti-oxidant evaluation*

**S1 – 344**        **Florina Dumitru** (University Politehnica of Bucharest, Romania), Anca Razvan, *Functionalized mesoporous silicas (MCM-41, HMS) as heavy metal ions adsorbents*

**S1 – 358**        **Raluca Diana Stoica** (University of Bucharest & "Horia Hulubei" National Institute for Physics and Nuclear Engineering, Bucharest, Romania), Luiza-Izabela Jinga, Roberta Stoica, Daniela Bala, Simona Nica, *Antitumoral activity of novel redox active azulene-containing chalcones*

## POSTER PRESENTATIONS

## Section 2 - Food, Health &amp; Bioresources

Friday 6 September 2019

Time: 15:00 – 19:30

- S2 – 31**            **Hugo Goes** (Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, Portugal) Luís Pedro, Olívia R. Pereira, Jorge Sá Morais, M<sup>ª</sup> João Sousa, *Hop Bioactive Compounds: Spontaneous vs Commercial Varieties*
- S2 – 45**            Lucia Pirvu, Sultana Nita, Bujor Albu, Fawzia Sha'at, **Ramona-Daniela Pavaloiu** (National Institute for Chemical-Pharmaceutical Research and Development – ICCF Bucharest, Romania), Cristina Bazdoaca, Roxana Donciu, Ionica Bajenaru, Bianca Tihauan, Cristina Balas, Alina Perisoara, Adina Mara Mihai, Crina Maria Kameron, *Diffusion studies on the standardized propylene glycol extracts from Malva neglecta L. and Epilobium hirsutum L. extracts for cosmetic use*
- S2 – 86**            **Bianca-Maria Tihauan** (Concordia Holding SRL, Calugareni, Romania), Alina Perisoara, Cristina Balas, Crina Maria Kameron, Adina Mara Mihai, Lucia Pirvu<sup>2</sup>, Bujor Albu, Fawzia Sha'at, Ramona Pavaloiu, *Novel cosmetic formulation based on standardized propylene glycol extracts from Malva neglecta L. and Epilobium hirsutum L. with anti-acne and hydrating effect*
- S2 – 128**          **Mihaela Carmen Eremia** (National Institute for Chemical-Pharmaceutical Research and Development – ICCF Bucharest, Romania), Cristina Hlevca, Gabriela Savoiu, Ramona Daniela Pavaloiu, Fawzia Sha'at, Irina Lupescu, *Studies on lanolin purification for pharmaceutical and cosmetic applications*
- S2 – 144**          **Elena Danila** (Mercure Commerce International, Neos Cosmetics, Romania), Raluca Stan, Andrada Serafim, Zenovia Moldovan, Ciprian Chelaru, *Formulation and characterization of oleogels for cosmetic applications based on sun protection vegetable oils and lavender essential oil*
- S2 – 149**          **Lia-Mara Ditu** (University of Bucharest, Romania), Ana-Maria Bercea, Eliza Oprea, Mihaela Buleandra, Irinel Adriana Badea, Alina Ortan, *Origanum majorana essential oil: major constituents' characterization and antimicrobial properties evaluation*
- S2 – 151**          **Alina Morosan** (University Politehnica of Bucharest, Romania), Daniela Istrati, Dan Eduard Mihaescu, Mihai-Alexandru Florea, Bogdan Purcareanu, Gabriel Vasilevici, Bogdan Trica, Raluca Stan, *Release study of the biological active compounds from plant extracts loaded on MCM41 composites, using HRMS*
- S2 – 160**          **Mioara Negoita** (National Research & Development Institute for Food Bioresources, Romania), Adriana Laura Mihai, Gabriela-Andreea Hornet, *Application of Different Purification Techniques for the Determination of Acrylamide In Potato Crisps through GC-MS/MS*
- S2 – 163**          **Sylvain Routier** (University of Orléans, France), Agnieszka Zak, Johnny Vercouillie, Nicolas Arlicot, Sylvie Chalon, Patrick Emond, Frederic Buron, *Synthesis and Biological Evaluation of New Fluorinated Ligands Targeting P2X Receptors*
- S2 – 164**          **Adina Ionuta Gavrilă** (University Politehnica of Bucharest, Romania), Anamaria Vartolomei, Ioan Calinescu, Mircea Vinatoru, *Alkaline pretreatment of ligno-cellulosic biomass*
- S2 – 165**          **Lucia Pintilie** (National Institute for Chemical-Pharmaceutical Research and Development, Romania), Elena Mihai, Constantin Tanase, Amalia Stefaniu, *Molecular docking studies of some new quinolone compounds for developing new antimicrobial agents*
- S2 – 174**          **Vasile Staicu** (University Politehnica of Bucharest, Romania), Cristina Luntraru, Ioan Calinescu, Ciprian Chisega-Negrila, Mircea Vinatoru, *Treatment of biomass wastes with MW and US for additional recovery of active compounds*
- S2 – 175**          **Petre Chipurici** (University Politehnica of Bucharest, Romania), Aurel Diacon, Ioan Calinescu, Mircea Vinatoru, Adrian Trifan, Alexandru Vlaicu, *Optimization of Ultrasound - Assisted Extraction (UAE) of Lycopene from Tomato Skins*

**S2 – 177**        **Natalita (Ionescu) Bordei** (Hofigal Export-Import S.A., Romania), Viorica Carabela, Viorica Tamas, Ionela Daniela Belala, Mariana Popescu, *Utilizing mucilage of some vegetal species in the production of new cosmetic products*

**S2 – 185**        **Andreea Miruna Neagu** (Hofigal Export-Import S.A., Romania), Vasile Staicu, Cristina Luntraru, Adriana Popescu, Mihaela Neagu, *Natural Intermediates for Obtaining Phytotherapeutic Products Beneficial in Cardiovascular Diseases*

**S2 – 189**        **Stefan Tomas** (University Politehnica of Bucharest, Romania), Aurelian Cristian Boscornea, Ioana Asofiei, Ana-Maria Draghici-Popa, Florina Teodorescu, Cristina Viorica Pop, *Prunus spinosa, a forgotten berry?*

**S2 – 190**        **Elena-Daniela Anton** (National Institute of R&D for Biological Sciences, Romania), Lucia Moldovan, Alexandra Gaspar-Pintiliescu, Rodica Tatia, Daniela Ilie, Cristian Matei, Dana Berger, Ticuta Negreanu-Pirjol, *Isolation and characterisation of collagen from marine fish skin for use in biotechnological applications*

**S2 – 194**        **Daniela Ilie** (National Institute of R&D for Biological Sciences, Romania), Elena Daniela Anton, Rodica Tatia, Dana Maria Copolovici, Florentina Munteanu, Lucian Copolovici, Oana Craciunescu, *Antioxidant and radioprotective activity of polyphenolic extracts of vegetable peels*

**S2 – 214**        **Maria Madalina Nichitoi** (University Politehnica of Bucharest, Romania), Ana Maria Josceanu, Raluca Isopescu, Vasile Lavric, *Characterization of Ethanolic and Aqueous Propolis Extracts*

**S2 – 238**        **Denisa D. Duta** (National Research&Development institute for Food Bioresources, Romania), Alina Culetu, *Growing Trend on Plant-based proteins*

**S2 – 247**        **Diana Popescu** (National Research&Development institute for Food Bioresources, Romania) Corina Ciucure, Roxana Ionete, *Residues of polychlorinated biphenyls, organochlorine pesticides and heavy metals in environmental samples and bovine milk of several farms of south Romania*

**S2 – 251**        **Corina Ciucure** (National R&D Institute for Cryogenics and Isotopic Technologies, Romania), Elisabeta-Irina Geana, *Optimisation and validation of extraction method for the analysis of polycyclic aromatic hydrocarbons in fish*

**S2 – 302**        **Ibrahim Saleh** (Chemistry of Medicinal Plants Department, National Research Centre, Egypt) *Volatile Constituents and Antimicrobial Activity of Cotula cinerea Growing Wild in Egypt*

**S2 – 303**        **Anca-Daniela Raiciu** (S.C.Hofigal Export-Import S.A, Romania) *Gemmotherapy used in various disease*

**S2 – 318**        **Alexandru Suci** (Hofigal Export-Import S.A., Romania), Vasile Staicu, Adriana Florina Popescu, Georgeta Alexandru, *Valorization of By-Product from Cold-Pressed Flaxseed Oil Processing. Extraction, Hydrolysis and HPLC-DAD Analysis of Secoisolariciresinol Diglucoside Oligomers*

**S2 – 320**        **Adrian Volceanov** (University Politehnica of Bucharest, Romania), Razvan State, Cosmin Marculescu, Dorin Boldor, *Structural behaviour of zeolite ZSM-5 as catalyst for vegetal waste pyrolysis*

**S2 – 323**        **Lavinia Misaila** (“Vasile Alecsandri” University of Bacau, Romania), Oana-Irina Patriciu, Luminita Grosu, Lucian Gavrila, Adriana-Luminita Finaru, *Chemical characteristics and health effects of mineral waters from Slanic-Moldova*

**S2 – 324**        **Florin Iordache** (University of Agronomic Sciences and Veterinary Medicine, Romania), Dorin Alexandru, Horia Maniu, *Engineering of Blood Vessel Using 3D Bioprinting of Stem Cells and Collagen-Hyaluronic Acid Hydrogel*

**S2 – 332**        **Cristina Todasca** (University Politehnica of Bucharest, Romania), Teodora Manasia, Ioana Maior, Mihai Eftimie, Fulvia Manolache, Valentin Ionescu, *Metals Influence on Wine Fermentation and Stability*

**S2 – 333**        **Catalina-Ionica Ciobanu** (“Al. I. Cuza” University, Romania), Ancuta Veronica Lupaescu, Monica Jureschi, Brindusa-Alina Petre, Gabi Drochioiu, *Identification of Metal Binding Sites in Peptide Fragments*

**S2 – 338**        **Adrian Catalin Puitel** (“Gheorghe Asachi” Technical University of Iasi, Romania), Dan Gavrilesu, Gabriel Dan Suditu, Mircea Nechita Teodor, Georgiana Balulescu, *Corn stalks –raw material for fractionation to value added products*

**S2 – 339**        **Boris Brezan** (University Politehnica of Bucharest, Romania), Alexandru Woinaroschy, *Usage of ultrasounds treatment in case of experimental variants of cider, enriched in advance with antioxidant-rich extracts*

**S2 – 346**        **Roxana-Madalina Stoica** (National Institute for Chemical-Pharmaceutical Research and Development – ICCF, Romania), Misu Moscovici, Angela Casarica, Ana Despina Ionescu, *The influence of maceration time and solvent concentration on the capsaicinoids extraction from various Capsicum species*

## 21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering

**S2 – 353**        **Jamie Hinks** (Singapore Centre for Environmental Life Sciences Engineering, Singapore), Cheng Zhou, Geraldine Chia, James Ho, Thomas Seviour, Gui Bazan, Staffan Kjelleberg, *Additive approach to stabilizing chemical membranes*

**S2 – 354**        **Elena-Mirela Suceveanu** (“Vasile Alecsandri” University of Bacau, Romania), Irina-Claudia Alexa, Petronela Bran, Luminita Grosu, Irina Ifrim, Oana-Irina Patriciu, Adriana-Luminita Finaru, *Valorization of Grape Pomace for Obtaining Fortified Innovative Product with Honey*

**S2 – 360**        Lacramioara Oprica, Olga Molchan, **Claudia Chirila** (Alexandru Ioan Cuza University, Romania), Madalina Baetu, Marius-Nicusor Grigore, *Response of antioxidant enzymes to selenium nanoparticles and saline stress in milk thistle (*Silybum marianum* L.) seedling*

**S2 – 372**        **Diana-Maria Dragusin** (University Politehnica of Bucharest, Romania), Filis Curti, Elena Olaret, Horia Iovu, Izabela-Cristina Stancu, *Gelatin – Aloe Vera hydrogels reinforced with melt-electro-written PCL scaffolds for skin regeneration*

**S2 – 377**        **Oana Maria Ionescu** (“Grigore T. Popa” University of Medicine and Pharmacy of Iasi, Romania), Constanta Ibanescu, Maricel Danu, Lenuta Profire, *Novel Chitosan Loaded Nanofibers for Wound Healing Applications*

**S2 – 380**        **Mariana Nela Stefanut** (National Institute of Research and Development for Electrochemistry and Condensed Matter, Dr. A. P. Podeanu, Timisoara, Romania), Adina Cata, Ioana Maria Carmen Ienascu, *Different Methods for Extraction of Biological Active Compounds from some Brassicaceae Vegetables*

**S2 – 382**        **Ioana Maria Carmen Ienascu** (National Institute of Research and Development for Electrochemistry and Condensed Matter, Dr. A. P. Podeanu, Timisoara, Romania), Diana Obistioiu, Iuliana Popescu, Adina Cata, Mariana Nela Stefanut, *Antibacterial Activity Evaluation of Some New 5-Chloro-2-Hydroxy-Benzamide Derivatives*

**S2 – 383**        **Adina Cata** (National Institute of Research and Development for Electrochemistry and Condensed Matter, Dr. A. P. Podeanu, Timisoara, Romania), Mariana Nela Stefanut, Ioana Maria Carmen Ienascu, *Analysis of Salicin in Some Willow Bark Food Supplements*

**S2 – 394**        **Maria Lavinia Moroeanu** (University Politehnica of Bucharest, omania), Cristian Raducanu, Oana Parvulescu, Tanase Dobre, *Methods and procedures for mixing powders in the pharmaceutical area*

## POSTER PRESENTATIONS

## Section 3 - Physical Chemistry; Electrochemistry &amp; Corrosion

Thursday 5 September 2019

Time: 8:30 – 13:00

- S3 – 03**            **Camelia Ungureanu** (University Politehnica of Bucharest, Romania), Liliana Cristina Soare, Mirela Calinescu, Diana Vizitiu, Irina Fierascu, Radu Claudiu Fierascu, *Isolation of Podosphaera Leucotricha from golden delicious apple variety*
- S3 – 08**            **George-Octavian Buica** (University Politehnica of Bucharest, Romania), Matei D. Raicopol, Nicoleta A. Chira, *Thiosemicarbazone based click-modified electrodes for metal ions detection*
- S3 – 18**            **Mirela Anton** (University Politehnica of Bucharest, Romania), Ileana Rau, Alina Simion, Cristian Simion, *On the stability and degradation of DNA based materials doped with natural extracts*
- S3 – 19**            **Carla-Cezarina Paduretu** (University Politehnica of Bucharest, Romania), Ileana Rau, Manuela Rossemary Apetroaei, Verginica Schröder, *Study on the methods of acetylation degree evaluation used for chitin/chitosan extracted from romanian black sea crab shell waste*
- S3 – 20**            Manuela Rossemary Apetroaei, **Carla-Cezarina Paduretu** (University Politehnica of Bucharest, Romania), Ileana Rau, Dinu V. Atodiresei, Laura A. Bucur, Verginica Schröder, *Physical-Chemical comparative studies on chitosan extracted from different romanian marine waste*
- S3 – 27**            **Marcela Elisabeta Barbinta-Patrascu** (University of Bucharest, Romania), Nicoleta Badea, Camelia Ungureanu, Irina Zgura, Mihaela Bacalum, Andrada Lazea-Stoyanova, Angela Vlad, *Phyto-silver based nanomaterials with potential biomedical applications: physico-chemical and biological characterization*
- S3 – 36**            Madalina I. Duinea (University of Craiova, Romania), Geta Carac, Lucian M. Birsa, Paul Chirita, *Efficient oxidation of metal sulfides using TRIS-based Schiff to construct advanced electrode active materials*
- S3 – 42**            **Dumitra Lucan** (Institute for Nuclear Research Pitesti, Romania), Manuela Fulger, Maria Mihalache, Lucian Velciu, *The synergistic impurities effect on the candu steam generator tubing corrosion*
- S3 – 54**            **Victoria Bejenari** (“Gheorghe Asachi” Technical University of Iasi, Romania), Alina-Mirela Ipate, Daniela Rusu, Catalina Anisoara Peptu, Gabriela Lisa, *Evaluating the water and oil holding capacity of solid residues in the food industry*
- S3 – 59**            **Verginica Schröder** (Ovidius University of Constanta, Romania), Manuela Rossemary Apetroaei, Carla-Cezarina Paduretu, Ileana Rau, *Study of manganese uptake in crustaceans from romanian seaside waters*
- S3 – 60**            **Florentina Golgovici** (University Politehnica of Bucharest, Romania), Manuela Voicu, Ioana Demetrescu, *Electrochemical behavior of magnesium alloy with and without polymeric coatings electrodeposited from ionic liquids*
- S3 – 65**            **Yakovleva Natalia** (Petrozavodsk State University, Russia), Kokatev Aleksandr, Lukiyanchuk Irina, Rudnev Vladimir, Stepanova Kristina, Pettersson Håkan, *Catalytically active composite coatings with self-organized porous anodic alumina matrix modified by  $\gamma$ -MnO<sub>2</sub> nanoparticles*
- S3 – 67**            **Aurora Petica** (University Politehnica of Bucharest, Romania), Veronica Anastasoae, Oana Lazar, Marius Enachescu, Teodor Visan, Liana Anicai, *Electrochemical synthesis of 1D bismuth nanostructures using deep eutectic solvents*
- S3 – 87**            **Andrei Bogdan Stoian** (University Politehnica of Bucharest, Romania), Ioana Iftimi, Diana Cristea, Daniela Ionita, *Coating Characterization of ultrasmooth titanium covered with fibrinogen*
- S3 – 105**            **Mariana Prodana** (University Politehnica of Bucharest, Romania), Daniela Ionita, Calin Moise, Oana Lazar, Marius Enachescu, *Carbon nano-onions in biomedical applications*
- S3 – 109**            **Cristina Dumitriu** (University Politehnica of Bucharest, Romania), Cristian Pirvu, *TiO<sub>2</sub>-graphene oxides nanocomposites, as promising electrodes for gluten detection*

**S3 – 114** Amalia Stefaniu, **Mihaela Brinzei** (University Politehnica of Bucharest, Romania), Olga Iulian, Oana Istrate, *Prediction of reactivity parameters using density functional theory (dft) calculations for essential amino acids L-Valine and L-Serine*

**S3 – 118** **Anca Cojocaru** (University Politehnica of Bucharest, Romania), Sabrina Patricia Rosoiu, Oana Lazar, Geanina Mihai, Aida Ghiulnare Pantazi, Marius Enachescu, Liana Anicai, Teodor Visan, *Electrodeposition of nickel-cobalt alloy / MWCNT composite coatings involving deep eutectic solvents*

**S3 – 119** **Anca Cojocaru** (University Politehnica of Bucharest, Romania), Ioana Maior, Ioana-Alina Ciobotaru, Alexandra Cojocaru-Greblea, Danut-Ionel Vaireanu, *Eco-friendly corrosion inhibitors for steel in NaCl medium*

**S3 – 123** **Stefania Costovici** (University Politehnica of Bucharest, Romania), Geanina Mihai, Liana Anicai, Marius Enachescu, *Synthesis of 1D polypyrrole nanostructures with applications in electrochemical detection*

**S3 – 140** **Simona Rada** (National Institute for Research and Development of Isotopic and Molecular Technologies Cluj-Napoca, Romania), An Pengfei, Marius Rada, Jing Zhang, Adriana Popa, Eugen Culea, *recycled electrodes from spent lead acid battery and doped with copper (II) and manganese (IV) oxides*

**S3 – 141** **Marius Rada** (National Institute for Research and Development of Isotopic and Molecular Technologies Cluj-Napoca, Romania), An Pengfei, Mioara Zagrai, Jing Zhang, Simona Rada, *Manganese-lead-lead dioxide electrode vitroceramics*

**S3 – 152** Adriana Samide, **Bogdan Tutunaru** (University of Craiova, Romania), Claudia Merisanu, Cristian Tigae, Cezar Spinu, *Poly(vinyl acetate) performance on carbon steel corrosion control in acid environment*

**S3 – 158** **Veronica Anastasoae** (University Politehnica of Bucharest, Romania), Mariana Apostoiu (Popescu), Laura-Bianca Enache, Liviu Birzan, Eleonora-Mihaela Ungureanu, Marius Enachescu, *Azulene-Azothiadiazoles ligands for heavy metals detection using CME*

**S3 – 159** **Laura-Bianca Enache** (University Politehnica of Bucharest, Romania), Veronica Anastasoae, Liviu Birzan, Eleonora-Mihaela Ungureanu, Marius Enachescu, *Surface and electrochemical techniques for characterization of azulene azotetrazoles and heavy metal ions detection*

**S3 – 181** **Mariana Mincu** (University Politehnica of Bucharest, Romania), Raluca-Ioana Stefan-van Staden, Jacobus Frederick van Staden, *Molecular recognition of Aflatoxin M1 in water and milk samples*

**S3 – 221** **Alexandra Virginia Meresescu (Bounegru)** ("Dunarea de Jos" University of Galati, Romania), Constantin Apetrei, *Voltammetric determination of caffeic acid in pharmaceutical products*

**S3 – 275** **Cristian Pirvu** (University Politehnica of Bucharest, Romania), *Biomimetic surface functionalization of biomedical titanium alloys*

**S3 – 326** **Daniela Ionita** (University Politehnica of Bucharest, Romania), Mariana Prodana, Florentina Golgovici, *Magnesium alloy corrosion behavior by electrodeposition of bioactive calcium phosphate coating*

**S3 – 331** **Lavinia Gabriela Popescu** (Metallurgical Research Institute Bucharest, Romania), Emanuil Cristian Coman, Eniko Volceanov, *Assessment of hydrogen-induced cracking of pipelines steels*

**S3 – 367** **Cristian Omocea** (University Politehnica of Bucharest, Romania), Eleonora-Mihaela Ungureanu, Liviu Birzan, Veronica Anastasoae, Laura-Bianca Enache, Marius Enachescu, *Detection of lead ions by voltammetry on azulene based CMEs*

**S3 – 378** **Mihalj Poša** (Faculty of Medicine, University of Novi Sad, Serbia), Zita Farkaš Agatić, Kosta Popović, Dušan Škorić, János Csanádi, *Excess Gibbs Energy of the Binary Mixed Micelle Formation between Ionic and Non-ionic Surfactants in the Set of: Sodium-Cholate, Sodium-Deoxycholate, Brij S10 and Brij 58 at T = (283.15-323.15) K*

**S3 – 387** **Roberta Irodia** (University Politehnica of Bucharest, Romania), Cristina Orbeci, Cristina Dumitriu, Cristian Pirvu, *Comparison between antibiotics photocatalytic degradation performance of TiO<sub>2</sub> nanostructures*



## POSTER PRESENTATIONS

## Section 4 - New Concepts in Chemical and Biochemical Engineering

Friday 6 September 2019

Time: 8:30 – 13:00

- S4 – 001** Aurel Diacon, **Alexandra Mocanu** (University Politehnica of Bucharest, Romania), Cristian Eugen Raducanu, Edina Rusen, Cristina Busuioc, Raluca Somoghi, Bogdan Trica, Adrian Dinescu, *Synthesis and characterization of new carbon/ZnO/Li<sub>2</sub>O nanocomposites with enhanced photocatalytic activity*
- S4 – 032** **Diana Maria Banu** (Research & Development National Institute for Radioactive Metals and Resources, Bucharest, Romania), Aura Daniela Radu, Elena Viorica Ionita, *Contamination with heavy metals of soils from a city with industrial activity (study case- Craiova City, Romania)*
- S4 – 131** **Ilona Bezede**a (University Politehnica of Bucharest, Romania), Costin Sorin Bildea, *Production of Sodium Methoxide by Reactive Distillation*
- S4 – 132** **Marian Paul Bezede**a (University Politehnica of Bucharest, Romania), Ilona Bezede, Costin Sorin Bildea, *Industrial processes for alkylamines production: modelling, economic evaluation and process control*
- S4-170** Gabriela Isopencu, Cristina Enascuta, **Elena-Emilia Oprescu** (National Research & Development Institute for Chemistry and Petrochemistry-ICECHIM Bucharest, Romania), Vasile Lavric, *Study of P. purpureum and Nannochloropsis sp. growth conditions for increasing yields in Carbohydrates and Lipids Production*
- S4-171** **Gabriela Isopencu** (University Politehnica of Bucharest, Romania), Cristina Enascuta, Elena-Emilia Oprescu, Vasile Lavric, *Symbiotic growth of red microalgae, bacteria and fungi in a discontinuous bioreactor*
- S4-201** **Catalin Patrut** (University Politehnica of Bucharest, Romania), Costin Sorin Bildea, Anton Alexandru Kiss, *Modeling, design and control of (catalytic) cyclic distillation*
- S4-203** **Alina Georgiana Ciufu** (University Politehnica of Bucharest, Romania), Cristian Raducanu, Oana Parvulescu, Doinita Roxana Tirpan, Tanase Dobre, *Natural wool fibers: a viable substitute for the existing synthetic sorbents*
- S4 – 222** **Marius Ciprian Ilie** (Ovidius University of Constanta), Tanase Dobre, Chis Timur, *Numerical modeling of the corrosion process*
- S4 – 223** **Carmen Viorica Turcu** (University Politehnica of Bucharest, Romania), Oana Cristina Parvulescu, Tanase Dobre, *Filtration property of water-based bentonite drilling mud in presence of polymers*
- S4-224** **Claudia Patrichi** (University Politehnica of Bucharest, Romania), Claudia Koncsag, Oana Cristina Parvulescu, Anicuta Stoica, Tanase Dobre, *Coupled process for ABE synthesis and their optimization problems*
- S4-266** **Elena-Emilia Oprescu** (National Research & Development Institute for Chemistry and Petrochemistry-ICECHIM, Bucharest, Romania), Cristina-Emanuela Enascuta, Gabriel Vasilevici, Adrian Radu, Elena Radu, Grigore Psenovschi, Vasile Lavric, *Effect of temperature and composition on viscosity of different formulation of ethyl levulinate/diesel fuel/biodiesel*
- S4-276** **Mihail Checui** (University Politehnica of Bucharest, Romania), Elena Catalina Udrea, Jordi Bonet-Ruiz, Valentin Plesu, Petrica Iancu, Alexandra Elena Bonet-Ruiz, *Modeling of (Non)Reactive Residue Curve Maps for TAME Synthesis System using MATLAB® assisted by SIMULIS Thermodynamics®*
- S4-280** **Romuald György** (University Politehnica of Bucharest, Romania), *Modeling, Simulation and Optimization of a Stem Cell Bioprocess*
- S4 – 306** **Florica Imre-Lucaci** (Babes-Bolyai University, Cluj Napoca, Romania), Marian Iosif Francu, Kovaci Eniko, Sorin Aurel Dorneanu, Marius Ioan Purcar, Petru Ilea, *Metals selective electrodeposition from leaching solutions resulting in the WPCBs recycling process*
- S4 – 312** **Cristina Ionela Gogoasa** (University Politehnica of Bucharest, Romania), Oana Cristina Parvulescu, Anicuta Stoica, Tanase Dobre, *Influence of cellulose addition in tableted drugs on release rate of active drug species*

## 21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering

**S4 – 315**        **Paula Postelnicescu** (University Politehnica of Bucharest, Romania), Anca Madalina Dumitrescu, *Study of the Rheological Behaviour of LustreClear™ Coating System*

**S4 – 317**        **Greg Josef Duru** (University Politehnica of Bucharest, Romania), Oana Cristina Parvulescu, Tiberiu Dinu Danciu, Tanase Dobre, *Stochastic modelling of cellulose hydrolysis with breaking probabilities Weibull distributed*

**S4 – 321**        **Ariana Ivanciu** (University Politehnica of Bucharest, Romania), Cristiana Luminita Gijiu, Raluca Isopescu, *Multi-objective optimization of ammonia synthesis reactor in two cooling methods*

**S4 – 322**        **Andreea Lascu** (University Politehnica of Bucharest, Romania), Cristiana Luminita Gijiu, Daniel Dinculescu, Raluca Isopescu, *HNO<sub>3</sub> synthesis in mono- and dual-pressure operating plants. Technical and cost comparative analysis*

**S4 – 336**        **Marilena Nicolae** (Petroleum-Gas University of Ploiesti, Romania), Costin Sorin Bildea, *Vapor-liquid equilibrium determination in ethanol + mesitylene, butanol + mesitylene binary systems and data correlation*

**S4 – 337**        Mircea Teodor Nechita, Elena Niculina Dragoi, **Gabriel Dan Suditu** (“Gheorghe Asachi” Technical University, Iasi, Romania), Adrian Catalin Puitel, *Analysis of the Residence Time Distribution of a Fotochemical Reactor*

**S4 – 359**        **Elena Niculina Dragoi** (“Gheorghe Asachi” Technical University, Iasi, Romania), Gabriel Dan Suditu, Mircea Teodor Nechita, Vlad Dafinescu, *Optimization of bromocresol green adsorption from aqueous solutions using Bacterial Foraging Optimization algorithm*

**S4 – 361**        **Ramona-Elena Tataru-Farmus** (“Gheorghe Asachi” Technical University, Iasi, Romania), Elisabeta Hultuana, Corina Cernatescu, Claudia Cobzaru, Gabriela Antoaneta Apostolescu, Nicolae Apostolescu, Maria Harja, *Physical properties of aqueous solutions of potassium carbonate promoted by ethylenediamine*

**S4 – 385**        **Andra Bucse** (National Institute for Research and Development on Marine Geology and Geoecology – GeoEcoMar, Bucharest, Romania and University Politehnica of Bucharest, Romania), Dan Vasiliu, Sorin Balan, Oana Cristina Parvulescu, Tanase Dobre, *Heavy Metals Spatial Distribution and Pollution Assessment in the Surface Sediments of the North-Western Black Sea Shelf*

**S4 – 389**        **Iuliana Dumitru** (University Politehnica of Bucharest, Romania), Cristian Eugen Raducanu, Oana Cristina Parvulescu, Tanase Dobre, *Modeling of moisture and volatile compound content dynamics during the storage of dried medicinal plants*

**S4 – 391**        **Sergiu Adrian Aciu** (University Politehnica of Bucharest, Romania), Dobre Tanase, *Heat Transfer Analysis at Pyrolysis in Device with Direct Flame*

**S4- 392**        **Andreea Daniela Dima** (National Institute for Research and Development in Electrical Engineering ICPE-CA, Bucharest, Romania and University Politehnica of Bucharest, Romania), Oana Cristina Parvulescu, Carmen Mateescu, *Optimization of Biomethane Recovery from Agro-industrial Waste for Energy Supply and Environmental Protection*

**S4-404**        **Nicoleta-Gabriela Ștefan** (University POLITEHNICA of Bucharest), Valentin Pleșu, Petrica Iancu, Ioan Călinescu, *Strategies to concentrate ω-PUFA methyl esters through molecular distillation*



POSTER PRESENTATIONS

Section 5 - Monitoring & Environmental Protection

Thursday 5 September 2019

Time: 15:00 – 19:30

**S5 – 44**      **Ana Despina Ionescu** (National Chemical-Pharmaceutical for Research and Development Institute-ICCF-Bucharest, Romania), Angela Casarica, Mariana Gratiela Vladu, Roxana Madalina Stoica, *Biotechnological studies concerning the vegetable wastes hydrolyzed production and their use for yeasts biomass development*

**S5 – 56**      **Paul Chirita** (University of Craiova, Romania), Madalina I. Duinea, *Troilite oxidative dissolution*

**S5 – 57**      **Mihai Tudor Olaru** (National R&D Institute for Nonferrous and Rare Metals, Romania), Daniela, Violeta Dumitrescu, Mariana Burada, Laura Barbulescu, Sabina Andreea Munteanu, Beatrice Adriana Carlan, Florin Marius Dragoscu, Felicia Cosmulescu, Ciprian Schiopu, Tiberiu Cimpean, *Non-ferrous alloys chips melting in microwave field*

**S5 – 121**      **Vasilica Vasile** (INCD URBAN-INCERC, INCERC Bucharest Branch, Romania) Mihaela Ion, Alina Dima, *Analysis of the VOCs monitoring in educational spaces*

**S5 – 125**      **Cristina Coromelci** (Laboratory of Materials Chemistry, "Alexandru Ioan Cuza University, Iasi, Romania), Petrisor Samoila, Corneliu Cojocar, Maria Ignat, *Effect of the Titanium source used during synthesis on the properties of mesoporoustitania*

**S5 – 145**      **Mahu Elvira** (Laboratory of Materials Chemistry, "Alexandru Ioan Cuza University, Iasi, Romania), Ignat Maria, Cojocar Corneliu, Coromelci Cristina, Samoila Petrisor, Asaftei Iuliean, Harabagiu Valeri, *Comparative study of Congo Red dye and 2,4-diclorophenoxyacetic acid herbicide photodegradation over mesoporoustitania*

**S5 – 146**      **Laura Bulgariu** (Gheorghe Asachi Technical Univeristy of Iasi, Romania), Iulia Simona Badescu, Teodora Arsenie, Dumitru Bulgariu, Alina Roxana Lucaci, *Effect of removal of Cd(II) ions from aqueous effluents on different types of waste biomas*

**S5 – 147**      **Laura Bulgariu** (Gheorghe Asachi Technical Univeristy of Iasi, Romania), Lacramioara Nemes, Alina Mihaela Matcaboja, Dumitru Bulgariu, Anca Mihaela Mocanu, *The use of functionalized biochar as biosorbent for quantitative removal of Cu(II) and Co(II) ions from aqueous media*

**S5 – 153**      **Alexandru Woinaroschy** (Univeristy Politehnica of Bucharest, Romania), Alice Iordache, *Analysis of the effectiveness of the water treatment process within the Palas Constanta storage and water treatment plant and the identification of risk factors*

**S5 – 154**      **Cristina Modrogan** (Univeristy Politehnica of Bucharest, Romania), Oanamari Daniela Orbulet, Liliana Bobirica, Madelene Annette Dancila, Constantin Bobirica, Cristina Orbeci, *Nitrates removal from aqueous solutions using magnetite nanoparticles functionalized with EDTA*

**S5 – 179**      **Arpad Imre-Lucaci**, Melinda Fogarasi, Florica Imre-Lucaci, Szabolcs Fogarasi (Babes-Bolyai University, ClujNapoca, Romania), *Technical and environmental assessment of copper recovery plant developed for the processing of waste printed circuit base boards*

**S5 – 188**      **Alina Pauna** (University Politehnica of Bucharest, Romania), Elena Diacu, *The response of some plants to the oxidative stress caused by heavy metal soil pollution in the industrial area of Slatina*

**S5 – 193**      **Oanamari Daniela Orbulet** (University Politehnica of Bucharest, Romania), Cristina Orbeci, Constantin Bobirica, Cristina Modrogan, Madelene Dancila, Liliana Bobirica, *Phosphate Removal from Aqueous Solution using Nanosized Zerovalent Iron Supported by Anionic Exchange Resin*

**S5 – 231 Daniela Simina Stefan** (University Politehnica of Bucharest, Romania), Ana Maria Manea, Aurelia Meghea, Mircea Stefan, *Study of the Biodegradability and the Leachability of Composite Fertilizers Obtaining from Pelt skin waste*

**S5 – 234 Ionul Alexandru Savu Radu** (Univeristy Politehnica of Bucharest), Daniela Simina Stefan, Vasile Lavric, Mircea Stefan, *Comparative study of the performance of adsorbents used in water and wastewater treatment*

**S5 – 237 Andrei Giurgea** (National Institute for Research & Development in Chemistry and Petrochemistry – ICECHIM, Romania), Ana-Maria Galan, Catalin Bogdan Matei, Alexandru Vlaicu, Anca Paulenco, Sanda Velea, *Chitosan based bioflocculants for microalgae harvesting*

**S5 – 242 Cristina Tuncel** (Univeristy Politehnica of Bucharest, Romania), Andreea Madalina Pandeale, Stefan Ioan Voicu, *Modified carbon nanotubes for gas sensors*

**S5 – 250 Daniel Ighigeanu** (National Institute for Laser, Plasma and Radiation Physics, Electron Accelerators Laboratory, Magurele, Romania), Elena Manaila, Gabriela Craciun, *Efficiency of Hydrogels Obtained by Electron Beam Irradiation in Cu<sup>2+</sup> and Cr<sup>6+</sup> removal from aqueous solutions*

**S5 – 255 Elisabeta-Irina Geana** (National R&D Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania), Corina Ciucure, *Assessment of PAHs levels in sediments of artificial lacks on the middle and lower course of Oltriver, Romania: optimisation and validation of extraction method*

**S5 – 256 Idiko Butal** (Coriolan Dragulescu” Institute of Chemistry, Timisoara, Romania), Maria Andreea Nistor, Simona Gabriela Muntean, Otilia Costisor, *The Study of Photodegradation of Anionic Dyes by Visible Light Using Cadmium(II) Coordination Polymers*

**S5 – 265 Adina Pacala** (Aquatim SA Timisoara, Romania), Ilie Vlaicu, Florica Manea, *Flexible and Modular-Pilot Plant for Drinking Water Treatment*

**S5 – 291 Dorin Bombos** (Petroleum-Gas University of Ploiesti, Romania), Sanda Velea, Catalina Calin, Mihaela Bombos, Rami Doukeh, Gabriel Vasiliievici, Elena-Emilia Oprescu, *Component for diesel fuel and solvent for bitumen road based on pyrolysis bio-oil*

**S5 – 310 Nicoleta Vasilache** (National Research and Development Institute for Industrial Ecology ECOIND, Bucharest, Romania), Iuliana Claudia Paun, *Validation of modified version the sodium salicylate method for analysis of water nitrate*

**S5 – 311 Cecilia Lete** (Institute of Physical Chemistry "Ilie Murgulescu" of the Romanian Academy, Bucharest, Romania), Vassilena Karabozhikova, Vessela Tsakova, Raul Mitran, Mariana Marin, Stelian Lupu, *Electrochemical Sensing of Antioxidants and Drugs at PEDOT-Composite Electrode*

**S5 – 319 Juan José García-Guzmán** (Institute of Research on Electron Microscopy and Materials (IMEYMAT), Cadiz, Spain), David López-Iglesias, José Maria Palacios-Santander, Laura Cubillana-Aguilera, Cecilia Lete, Stelian Lupu, *Application of sinusoidal methods to the development of new nanostructured sensors based on conducting polymers*

**S5 – 362 Sorin Vizireanu** (National Institute for Lasers, Plasma and Radiation Physics), S. A. Yehia, M. Zarif, L. G. Carpen, B. Bitu, N. Petrea, N. Grigoriu, G. Dinescu, *Submerged plasma in liquid for wastewater decontamination*

**S5 – 374 R. D. Stoica** (“Horia Hulubei” National Institute for Physics and Nuclear Engineering (IFIN-HH) Magurele-Bucharest, Romania), L. Neagu, I. Dorobantu, C. C. Mustăciosu, C. Coman and D. Ancuta, *Kinetics Of Antidicamba Antibody-3,6-Dichloro-2-methoxybenzoyl-Amido-Benzene System In ELISA Technique*

**S5 – 381 Irina-Elena Ciobotaru** (National Institute for Research and Development in Environmental Protection, Bucharest, Romania), Cristina Maria, Ecaterina Marcu, Alexandru-Anton Ivanov, Carmen Tociu, *The Current State of the Presence of Micropollutants in the Aquatic Environment*

**S5 – 384 Violeta Alexandra Ion** (Research Center for Studies of Food and Agricultural Products Quality, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania), Liliana Badulescu, Vlad Popa, Mihaela Zugravu, Oana Cristina Parvulescu, *Separation and Analysis of Microplastic in Agricultural Soil*

**S5 – 390 Cristina Orbeci** (University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Material Science, Bucharest, Romania), Oana Cristina Parvulescu, Diana Egri, Madalina Pandeale, Cristina Tuncel, *Removal of Pharmaceutical Compounds from Wastewater using Composite Membranes*

## POSTER PRESENTATIONS

## Section 6 - New Materials and Nanomaterials

Wednesday 4 September 2019

Time: 17:30 – 19:30

**S6 – 228**      **Bogdan Catalin Marin** (University Politehnica of Bucharest, Romania), **Bogdan Negut**, Georgeta Voicu, Stefania Stoleriu, *Ye'elimate based cements – an ecological alternative to Portland cements*

**S6 – 363**      **Lucian Valentin Albu** (University Politehnica of Bucharest, Romania), Ana Maria Anghel, **Radu Serban**, Stefania Stoleriu, *Influence of Dopants on Apatite-Wollastonite Glass-Ceramics Properties*

**S6 – 364**      **Florian Gabriel Enache** (University Politehnica of Bucharest, Romania), Ruxandra Schitea, Stefania Stoleriu, *Properties of Si<sub>3</sub>N<sub>4</sub> – 4555 Bioglass Biocomposites Obtained by Vacuum Sintering*

**S6 – 365**      **Andrei Gheorghe** (University Politehnica of Bucharest, Romania), Stefania Stoleriu, *Influence Alumina Grains Size Distribution on SiC-Al<sub>2</sub>O<sub>3</sub> Ceramic Composites Properties*

**S6 – 330**      **Martins Rucins** (Latvian Institute of Organic Synthesis, Riga, Latvia), Pavels Dimitrijevs, Krisjanis Smits, Karlis Pajuste, Arkadij Sobolev, Ilona Domracheva, Aiva Plotniece, *4-(N-Alkylpyridinium)-1,4-Dihydropyridines as Bifunctional Lipid-Like Compounds for Self-Assembling and Biological Studies*

**S6 – 040**      **Lenuta Stroea** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Violeta Melinte, Tinca Buruiana, *Synthesis, Morphology and Properties of Novel Aliphatic Biodegradable Polyurethanes*

**S6 – 043**      **Dana M. Suflet** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Irina M. Pelin, Irina Popescu, *Phosphorylated curdlan based hydrogels for medical applications*

**S6 – 046**      **Maria Rapa** (University Politehnica of Bucharest, Romania), Ecaterina Matei, Andra Mihaela Predescu, Andreea Turcanu, Cristian Predescu, Daniela Ignat,

Grigore Vlad, *Electrospun Biomembranes for Removal of Micropollutants in Water Environment*

**S6 – 061**      **Marieta Constantin** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Gheorghe Fundueanu, *Chitosan/Polyvinyl alcohol cryogels as scaffolds for tissue engineering*

**S6 – 064**      Radu Claudiu Fierascu, **Irina Fierascu** (Emerging Nanotechnologies Group, The National Institute for Research & Development in Chemistry and Petrochemistry – ICECHIM, Romania), Anda Maria Baroi, Roxana Ioana Brazdis, Lia Mara Ditu, Anca Nicoleta Sutan, Liliana Cristina Soare, *Development of phytosynthesized nanoparticles and their potential applications*

**S6 – 066**      **Razvan Lisnic** (University Politehnica of Bucharest, Romania), Ana Maria Spataru, Sorin Ion Jinga, *Seaweed addition in Portland cement mortars*

**S6 – 069**      **Marius Miricioiu** (National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania), Violeta-Carolina Niculescu, Irina Petreanu, Gheorghe Nechifor, *Fly ash waste as source for mesoporous silica used in natural gas purification*

**S6 – 070**      **Viorica-Elena Podasca** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Mariana-Dana Damaceanu, Tinca Buruiana, *Preparation and photocatalytic properties of polymer hybrid composites containing ZnO doped Ag particles*

**S6 – 071**      **Violeta Melinte** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Andreea-Laura Chibac, Viorica Podasca, Tinca Buruiana, Emil C. Buruiana, *UV-Cured Polymeric Hybrid Coatings Containing ZnO Nanoparticles with Photocatalytic Properties*

**S6 – 074** **Mioara Murariu** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Lenuta Stroea, *Synthesis, characterization and self-association of random copolymers bearing D/L-Phenylglycine pendant groups*

**S6 – 075** **Elena Anghel** (National Institute for Research and Development in Microtechnologies, Romania), Andrei Avram, Octavian Simionescu, Oana Tutunaru, Cristina Pachiu, Ioana Demetrescu, *Synthesis and characterization of vertical graphene (VG) on SiO<sub>2</sub> substrate*

**S6 – 076** **Luminita- Georgeta Confederat** ("Grigore T. Popa" University of Medicine and Pharmacy, Iasi, Romania), Iustina Avram, Maria Dragan, Andreea-Teodora Iacob, Lenuta Profire, *New Polymeric Systems Containing Glibenclamide – Development, Characterization and Evaluation of some Metabolic Parameters*

**S6 – 081** **Irina Petreanu** (National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania), Violeta Niculescu, Mirela Dragan, Adnana Spinu Zaulet, Radu Ene, Ciprian Iacob, Mircea Teodorescu, *Design and testing of a Composite Proton Exchange Membrane based on Sulfonated Polyphenylene Oxide and Mesoporous Silica*

**S6 – 085** **Traian-Dinu Pasatoiu** (University of Bucharest, Romania), Catalin Maxim, Marius Andruh, *New Homometallic Systems Obtained Using 3d and 5f Metal Ion Nodes and Carboxylato Spacers*

**S6 – 089** **Bianca Tincu** (National Institute for Research and Development in Microtechnologies IMT-Bucharest, Romania), Marioara Avram, Andrei Avram, Vasilica Tucureanu, Alina Matei, Tiberiu Burinaru, Oana Tutunaru, Ioana Demetrescu, *Influence of polymethyl-methacrylate in graphene functionalization*

**S6 – 090** **Dana-Maria Miu** (University Politehnica of Bucharest, Romania), Sorin Ion Jinga, Cristina Busuioc, Georgeta Voicu, *Zinc oxide thin films obtained by the spin-coating method*

**S6 – 100** **Gabriela Carja** (Technical University of Iasi, Romania), Corina Eugenia Ignat, Iuliana Biru, Horia Iovu, *On the tunability of micro/nanoparticulates of ibuprofen/layered double hydroxides dry-powders for targeting pulmonary delivery*

**S6 – 103** **Angela Casarica** (National Institute for Chemical-Pharmaceutical Research and Development – ICCF, Bucharest, Romania), Ana Despina Ionescu, Iuksel Rasit, Minerva Panteli, *Test of cutaneous local tolerance of the native bacterial cellulose*

**S6 – 112** **Ramona-Daniela Pavaloiu** (University Politehnica of Bucharest, Romania), Sha'at Fawzia, Hlevca Cristina, Sha'at Mousa, Berger Daniela, Nechifor Gheorghe, *Cardiovascular APIs encapsulated into biodegradable matrix: in vitro evaluation on drug release kinetics*

**S6 – 126** **Ramona-Daniela Pavaloiu** (University Politehnica of Bucharest, Romania), Sha'at Fawzia, Mihaela Deaconu, Ana-Maria Brezoiu, Cristina Hlevca, Sha'at Mousa, Cristian Matei, Daniela Berger, Gheorghe Nechifor, *Core shell lipid-polymer nanoparticles loaded with amlodipine-valsartan for cardiovascular therapy*

**S6 – 127** **Andra-Cristina Humelnicu** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Petrisor Samoila, Corneliu Cojocaru, Valeria Harabagiu, *Chitosan-based ionic conductive hybrid membranes with improved mechanical and thermal properties*

**S6 – 129** **Ramona - Crina Suci** (National Institute for Research and Development of Isotopic and Molecular Technologies, Romania), C. Marutoiu, I. Bratu, D. Nemes, M. Suci and M. Cotetiu, *Preliminary Results on the Calcium Hydroxide Nanoparticles for the Heritage Conservation*

**S6 – 130** **George Pelin** (National Institute for Aerospace Research and Development “Elie Carafoli”, Bucharest, Romania), Cristina- Elisabeta Pelin, Adriana Stefan, Alina Dragomirescu, George- Catalin Cristea, *Multifunctional Composite Structures with Extreme Temperatures Resistance*

**S6 – 137** **Alina Dragomirescu** (National Institute for Aerospace Research and Development “Elie Carafoli”, Bucharest, Romania), Stefan Adriana, Pelin Cristina Elisabeta, Pelin George, Smorygo Oleg, Cristea George-Catalin, Mihail Botan, *Lightweight sandwich structure with cellular core*

**S6 – 143** **Mariana Bobeica** (Extreme Light Infrastructure - Nuclear Physics/ IFIN-HH, Romania), Viorel Nastasa, Theodor Asavei, Paul Vasos, *Nanoparticles and liposomes for measurements and imaging of high dose rate irradiation effects*

**S6 – 155** **Angela Spoiala** (University Politehnica of Bucharest, Romania), Cornelia-Ioana Ilie, Denisa Ficai, Anton Ficai, Laura Moise, Violeta Trusca, Roxana Doina Trusca, Bogdan Stefan Vasile, Ovidiu Oprea, Anca Gafencu, Ecaterina Andronescu, *Alginate beads loaded with cells and biologic active agents*

**S6 – 156** **Cornelia-Ioana Ilie** (University Politehnica of Bucharest, Romania), Angela Spoiala, Denisa Ficai, Anton Ficai, Adrian Ionut Nicoara, Bogdan Stefan Vasile,

Vasile-Adrian Surdu, Maria Anghelache, Manuela Calin, Ecaterina Andronesco, *Synthesis and characterization of a new polysaccharide-coated magnetic nanoparticles*

**S6 – 167**        **Adrian Ionut Nicoara** (University Politehnica of Bucharest, Romania), Alina Badanoiu, Nicoleta Cirstea, Cristian Dinu, *The effect of inorganic additions on gypsum behaviour at high temperatures*

**S6 – 139**        **Alina Elena Coman** (National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania), Monica Duldner, Anita Radu, Emeric Bartha, Robert Tincu, Tanta-Verona Iordache, Andrei Sarbu, Adi Ghebur, Celina Damian, *Nanocomposite polyurethane foams from pet wastes and renewable raw materials*

**S6 – 169**        **Madalina Ioana Necolau** (University Politehnica of Bucharest, Romania), Ana Maria Paraschiv, Celina Maria Damian, Brîndusa Balanuca, Horia Iovu, *Advanced Studies on Biobased Epoxy Network Curing Reactions and Thermal Properties*

**S6 – 184**        **Leu Rebeca** (University Politehnica of Bucharest, Romania), Ionut Radu, Paul Octavian Stanescu, Bianca Galateanu, Ariana Hudita, Eugenia Tanasa, Horia Iovu, Catalin Zaharia, *Wound dressing based on bacterial cellulose*

**S6 – 186**        **Elena Irina Popescu** („Ilie Murgulescu“ Institute of Physical Chemistry, Romanian Academy, Bucharest, Romania), Zamfirica Minea, Sorin Mocanu, Iulia Matei, Gabriela Ionita, Spin Probes – Tools to Investigate Loading Capacity and Inhomogeneity of Hydrogels

**S6 – 206**        **Daniela C. Culita** (“Ilie Murgulescu” Institute of Physical Chemistry, Romania), Madalina Tudose, Daniela C. Culita, Petre Ionita, Simona Somacescu, Elena M. Anghel, Jose Calderon-Moreno, Olguta Dracea, Marcela Popa, Luminita Marutescu, Carmen Curutiu, Mariana C. Chifiriuc, Coralia Bleotu, *Tuberculostatic agents linked on graphene oxide – multitarget hybrid systems with extended antimicrobial spectrum*

**S6 – 209**        **Andreea Alexandra Mainea** (National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania), Nicoleta Levinta, George-Mihail Teodorescu, Zina Vuluga, Cristian Andi Nicolae, Raluca-Augusta Gabor, Dorel Florea, Sergiu-Alexandru Stoian, Mihai Cosmin Corobea, 2D Graphene Nanostructures-New Challenges for PA6/Glass Fibres Composites

**S6 – 210**        **Rodica D. Carpen Baratoiu** (“Ilie Murgulescu” Institute of Physical Chemistry, Romania), Rodica D. Carpen Baratoiu, Elena N. Hristea, Madalina Tudose, Mariana Voicescu, Antonio Radoi, Daniela C. Culita, Simona Somacescu, Elena M.

Anghel, Petre Ionita, *Synthesis and Characterization of a New Graphene Oxide Nanocomposite Containing a Pyrene Thiazole Conjugate: Fluorescence and Electrochemical Studies*

**S6 – 211**        **Adriana Dehelean** (National Institute for Research and Development of Isotopic and Molecular Technologies, Romania), Simona Rada, Mioara Zagrai, C. Grosan, Adriana Popa, *Influence of samarium ions on structural properties of lead-borate glasses and vitroceramics*

**S6 – 212**        **Lauretiu Baltag** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Petrisor Samoila, Corneliu Cojocaru, Maria Ignat, Valeria Harabagiu, Sulfonated poly(ether ether ketone)-based hybrid membranes with potential applications in fuel cells

**S6 – 213**        **Ionela Grecu** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Petrisor Samoila, Corneliu Cojocaru, Maria Ignat, Valeria Harabagiu, Alginate - Poly(vinyl sulfonic acid) membranes for fuel-cell potential applications

**S6 – 215**        **George Mihail Teodorescu** (National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania), Zina Vuluga, Mihai-Cosmin Corobea, Cristi Andy Nicolae, Raluca Augusta Gabor, Nicoleta Levinta, Andreea-Alexandra Mainea, Reinforcing Effect of Polypropylene Composites with Glass Fiber

**S6 – 216**        **Adriana Dehelean** (National Institute for Research and Development of Isotopic and Molecular Technologies, Romania), Simona Rada, Ramona Suci, Mioara Zagrai, Sergiu Macavei, *XRD, UV-Vis and Photoluminescence studies of terbium ions doped 4PbO-B<sub>2</sub>O<sub>3</sub> glasses and vitroceramics.*

**S6 – 219**        **Nicoleta Levinta** (National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania), Zina Vuluga, Florin Miculescu, Mihai Cosmin Corobea, Cristian-Andi Nicolae, Raluca Gabor, Andreea-Alexandra Mainea, George-Mihail Teodorescu, Nanocomposites Based on Polyamide 6/Halloysite Versus Polyamide 6/Hydroxycitric Acid

**S6 – 253**        **Enikő Volceanov** (Metallurgical Research Institute - ICEM SA of Bucharest, Romania), Lavinia Gabriela Popescu, Victor Fruth, Adrian Volceanov, Zoran Popović, Branko Matović, *Development of inorganic polymeric materials from silicate industrial waste*

**S6 – 245**        **Madalina Oprea** (National Institute for Research & Development in Chemistry and Petrochemistry – ICECHIM, Polymer Department, Romania), Adriana Nicoleta Frone, Denis Mihaela Panaitescu, Raluca Augusta Gabor, Ioana Chiulan, Cristian Andi Nicolae, Sergiu Alexandru Stoian, *The influence of silica based nanofillers on thermal and dynamic mechanical properties of polylactic acid*

**S6 – 246**        **Mihaela Carnuta** (Institute of Cellular Biology and Pathology “Nicolae Simionescu” of the Romanian Academy, Bucharest, Romania), Andrei Patrascu, Catalin Maxim, Maria Anghelache, Manuela Calin, Delia-Laura Popescu, *Synthesis and characterization of a new vanadium (V) complex based on D/L-valine Schiff base with anti-cancer properties*

**S6 – 249**        **Adriana Marinoiu** (RD Institute for Cryogenics and Isotopic Technologies - ICSI, Romania), Andreea Dogaru, Elena Carcadea, Stanica Enache, Simona Nica, *Facile synthesis of covalent functionalized reduced graphene oxide with azulenes for ORR reaction*

**S6 – 301**        **Mariana Chelu** (Institute of Physical Chemistry “Ilie Murgulescu”, Romanian Academy, Romania), Hermine Stroescu, Jose Calderon Moreno, Silviu Preda, Madalina Nicolescu, Mariuca Gartner, Carmen Moldovan, Marin Gheorghe, *Development and characterization of PMMA/ZnO nanowires based piezoelectric nanogenerators*

**S6 – 305**        **Monica Enculescu** (National Institute of Materials Physics, Magurele, Romania), Alexandru Evanghelidis, Ionut Enculescu, *Dye Concentration Dependence of Dye-Doped Polymer Nanofibers’ Properties*

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**Section 6 - New Materials and Nanomaterials**

**Thursday 5 September 2019**

**Time: 8:30 – 13:00**

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**S6 – 351**        **Ariana Hudita** (University of Bucharest, Romania), Bianca Galateanu, Ionut-Cristian Radu, Catalin Zaharia, Marieta Costache, *Pro-inflammatory potential of doxorubicin loaded Poly-N-isopropylacrylamide (PNIPAM)/magnetite smart nanoparticles for breast cancer therapy*

**S6 – 352**        **Ariana Hudita** (University of Bucharest, Romania), Bianca Galateanu, Ionut-Cristian Radu, Paul Stanescu, Catalin Zaharia, Eugenia Tanasa, Marieta Costache, *Evaluation of the biological performance of original chitosan and bacterial cellulose – based materials tuned with polymeric nanoparticles loaded silver sulfadiazine designed for wound healing management*

**S6 – 355**        **Luiza-Izabela Jinga** (National Institute for Lasers, Plasma and Radiation Physics, Magurele, Romania), Gianina Popescu-Pelin, Cristian Mihailescu, Livia Sima, Gabriel Socol, *Antitumoral activity and hyperthermia tests of iron based magnetic nanoparticles*

**S6 – 356**        **Mariana Ionita** (University Politehnica of Bucharest, Romania), Sebastian Muraru, Sorin Muraru, *Computational studies of separation membrane prototypes for small gas molecules*

**S6 – 357**        **Sorin Muraru** (University Politehnica of Bucharest, Romania), Sebastian Muraru, Mariana Ionita, *Molecular Dynamics simulations of separation membrane prototypes for small gas molecules*

**S6 – 366**        **Mariana Ionita** (University Politehnica of Bucharest, Romania), George Mihail Vlasceanu, Horia Iovu, *Graphene based biomaterials for bone regeneration*

**S6 – 013**        **Cristina Andreia Vijan** (University Politehnica of Bucharest, Romania), Alina Badanoiu, Iulia Barcan, *Calcium magnesium phosphate cements for toxic waste immobilization*



**S6 – 014**        **Madalina Nicolescu** (Institute of Physical Chemistry “Ilie Murgulescu”, Romanian Academy), M. Anastasescu, J. M. Calderon Moreno, S. Preda, I. Stanculescu, M. Moderanu, V. Kampylafka, E. Aperathitis, M. Gartner, *The Structural, Optical, Piezoelectric and Luminescence Properties of N-doped ZnO Thin Films Deposited by RF Magnetron Sputtering*

**S6 – 024**        **Andreea Dogaru** (C. D. Nenitzescu” Institute of Organic Chemistry, Romanian Academy, Romania), Gabriela Marinescu, Catalin Maxim, Sergiu Shova, Rodolphe Clérac, Marius Andruh, *3d-5d-4f heterometallic octanuclear complexes and 1D coordination polymers assembled from the same lego pieces*

**S6 – 030**        **Violeta-Carolina Niculescu** (National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania), Marius Miricioiu, Amalia Soare, Adriana Marinoiu, Elena David, *Mesoporous Materials based Catalysts for the Oxidation of Rhodamine in Wastewater*

**S6 – 369**        **Sebastian Muraru** (University Politehnica of Bucharest, Romania), Mariana Ionita, *Molecular Dynamics Simulations of drug-delivery super carbonaceous structures*

**S6 – 370**        **Sebastian Muraru** (University Politehnica of Bucharest, Romania), Emil Ioan Slusanschi, Jorge S. Burns, Mariana Ionita, *Molecular Dynamics Simulations*

*regarding ssDNA and dsDNA Adsorption on Graphene Oxide and Reduced Graphene Oxide-PEG-NH<sub>2</sub> in the presence of ions (Mg<sup>2+</sup>; Cl<sup>-</sup>)*

**S6 – 371**        **George Mihail Vlasceanu** (University Politehnica of Bucharest, Romania), Sorin Muraru, Sebastia Muraru, Mariana Ionita, *Fabrication of polysulfone membranes reinforced with supercarbonic nano-architectures with selective permeability strength*

**S6 – 348**        **Maria Cazacu** (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania), Georgiana-Oana Turcan-Trofin, Mirela-Fernanda Zaltariov, Mihaela Dascalu, Nicoleta Vornicu, Sergiu Shova, *Bis-Triazoles Spaced by a Dimethylsilane or Tetramethyldisiloxane Motif as New Ligands and Biologically Active Agents*

**S6 – 379**        **C. Herman** (Horia Hulubei National Institute for Physics and Nuclear Engineering, Romania), C. Gaidau, M. Constantin, M. Stanca, O. Capraru, D. Timpu, I. Stanculescu, *Investigation of leather materials functionalized by chemical and gamma radiation treatments*

**S6 – 388**        **Cristina Coromelci** (Laboratory of Materials Chemistry, Department of Chemistry, "Alexandru Ioan Cuza" University, Romania), Elvira Mahu, Mircea Palamaru, Maria Ignat, *Organic Dyes Degradation using Microwave Synthesized Titania*

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## Section 6 - New Materials and Nanomaterials

Friday 6 September 2019

Time: 8:30 – 13:00

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**S6 – 226**        **Ionut-Cristian Radu** (University Politehnica of Bucharest, Romania), Catalin Zaharia, Elena-Alexandra Istratoiu, Sorina Dinescu, Eugeniu Vasile, Horia Iovu, *Nanocomposite hydrogels for tissue engineering applications*

**S6 – 343**        **Elena Iuliana Biru** (University Politehnica of Bucharest, Romania), Daniela Zaharioiu Brinzoii, Gabriela Perca, Gabriela Ariton, Sorina Alexandra Garea, Horia Iovu, *Preparation and thermal properties of graphene oxide-reinforced polybenzoxazine*

**S6 – 254**        **Adriana Lungu** (University Politehnica of Bucharest, Romania), Alexandra I. Cernencu, Andreea Vadureanu, Adi Ghebaur, Sorina Dinescu, Marieta Costache, Horia Iovu, *Porous Nanocellulosic Materials as Platforms for Drug Delivery*

**S6 – 259**        **Catalin Zaharia** (University Politehnica of Bucharest, Romania), Alina Ionita, Andra Sirmon, Beatrice Girbaciuc, Ionut-Cristian Radu, Doina Dimonie, *The melt flow properties of new renewable compounds designed for 3D printing*

**S6 – 283**      **Paul Octavian Stanescu** (University Politehnica of Bucharest, Romania), Denis Mihaela Panaitescu, Adriana Nicoleta Frone, Ionut-Cristian Radu, Ioana Chiulan, Augusta Raluca Gabor, Cristian Andi Nicolae, *Surface Modified Bacterial Cellulose for Packaging Application*

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**Section 6 - New Materials and Nanomaterials**

**Friday 6 September 2019**

**Time: 15:00 – 19:30**

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**S6 – 252**      **C.E. Iurciuc (Tincu)** („Grigore T. Popa” University of Medicine and Pharmacy, Iasi Romania), L.I. Atanase, R. Riva, C. Jérôme, L. Ochiuz, M. Popa, *Immobilization of Curcumin in Hydrogel Films Based on Albumin and Oxidized Gellan*

**S6 – 262**      **Sergiu Alexandru Stoian** (National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania), Iuliana Biru, George Mihai Vlasceanu, Adriana Nicoleta Frone, Augusta Raluca Gabor, Cristian Andi Nicolae, Denis Mihaela Panaitescu, *Micro-computed tomography analysis of bacterial cellulose cryogels*

**S6 – 263**      **Sergiu Alexandru Stoian** (National Institute for Research & Development in Chemistry and Petrochemistry - ICECHIM, Bucharest, Romania), Florin Ciuprina, Laura Andrei, Denis Mihaela Panaitescu, George Mihail Teodorescu, Cristian Andi Nicolae, Valentin Raditoiu, Raluca Augusta Gabor, *Structural, mechanical and dielectric properties of polyhydroxyalkanoate biocomposites*

**S6 – 293**      **Irina Zarafu** (University of Bucharest, Romania), Ioana Nicolau, Carmen Chifiriuc, Marcela Popa, Carmen Limban, Diana Camelia Nuta, Cristiana Radulescu, Ioana-Daniela Dulama, Petre Ion Ionita, *Biological Studies of Organic Functionalized Graphene-Oxide with Amines Derivatives of Pyrimidine*

**S6 – 300**      **Maria Ignat** (“Alexandru Ioan Cuza” University/”Petru Poni” institute of Macromolecular Chemistry, Romania), Cristina Coromelci, Elvira Mahu, Petrisor Samoila, Corneliu Cojocar, Liviu Sacarescu, *One-pot synthesis of porous carbon using surfactant micelles as carbon source in the soft-templated silica synthesis procedure.*

**S6 – 308**      **Mirela Maria Codescu** (R&D National Institute for Electrical Engineering ICPE-CA Bucharest, Romania), Elena Chitanu, Wilhelm Kappel, Delia Patroi, Eugen Manta, *Crystalline and Magnetic Structures in Oxide Systems, Hardened by Exchange Interactions*

**S6 – 335**      **Lenuta Profire** („Grigore T. Popa” University of Medicine and Pharmacy, Iasi Romania), Andreea Teodora Iacob, Luminita Confederat, Iustina Avram, Claudia Andries, Mihaela Mosnegutu, Simona Giusca, Irina Draga Caruntu, *Formulation of new hybrid hydrogels based on chitosan - hyaluronic acid and bentonite as potential chronic wound dressings*

**S6 – 345**      **Ramona Oana Gunache (Rosca)** („Dunarea de Jos” University of Galati, Galati Romania), Constantin Apetrei, *Voltammetric sensors for the analysis of three types of statins in pharmaceuticals*