

NeXT-Chem

WORKSHOP EXPLORATORIU



Exploratory workshop

NeXT-Chem

INNOVATIVE CROSS-SECTORAL TECHNOLOGIES, IIIrd Edition

May 27-28, 2021

Bucharest

Programme

Thursday, May 27th, 2021

09 ¹⁵ -09 ³⁰		Official opening, welcome speeches
09 ³⁰ -10 ³⁰	Plenary session	Prof. Arben Merkoçi , Institut Català de Nanociència i Nanotecnologia, Barcelona, Spain <i>Nanomaterials-based sensors for diagnostics applications</i>
10 ³⁰ -10 ⁴⁵		Iulia Elena Neblea , Ana-Mihaela Gavrilă, Tanta-Verona Iordache, Anita-Laura Radu, Andreea Miron, Ana-Lorena Ciurlică, Marinela Dumitru, Andrei Sarbu <i>Controlled release systems based on bacterial cellulose and poly (ethylene glycol) diacrylate for biomedical applications</i>
10 ⁴⁵ -11 ⁰⁰		Andreea Afilipoaei , Zina Vuluga, Augusta-Raluca Gabor, George-Mihail Teodorescu, Monica Cărbăuleșu, Rodica Zavoianu, Octavian Pavel, Alexandra Elisabeta Stamate, Marian Miculescu, Mihai Cosmin Corobea <i>Mechanical properties of polyamide with 2D hybrid reinforcing agents</i>
11 ⁰⁰ -11 ¹⁵		Monica Cărbăuleșu , Zina Vuluga, Cristian-Andi Nicolae, George-Mihail Teodorescu, Andreea Afilipoaei, Rodica Zavoianu, Octavian Pavel, Alexandra Elisabeta Stamate, Mihai Cosmin Corobea <i>On the biobased polyamide with flame retardant properties</i>
11 ¹⁵ -11 ³⁰	Session 1 - Multifunctional materials and nanocomposites	George-Mihail Teodorescu , Zina Vuluga, Florin Oancea, Mihai Cosmin Corobea, Andreea Afilipoaei, Monica Caraulas, Cristi Andi Nicolae, Raluca Augusta Gabor <i>The properties of recovered polypropylene from face mask wastes</i>
11 ³⁰ -11 ⁴⁵		Liviu Olteanu , Rodica Mariana Ion, Sofia Teodorescu, Raluca Maria Stirbescu <i>Spectral characterization of macro-heterocyclic compound NiTMPyP / ZnTSPc / MC</i>
11 ⁴⁵ -12 ⁰⁰		Maria-Eliza Pușcașu , Ștefania Chiriac, Raluca Elena Irimescu, Anca Elena Slobozeanu, Alexandru-Cristian Matei <i>Additive manufacturing of ZnO-CNT based structures for wastewater treatment</i>
12 ⁰⁰ -12 ¹⁵		Mircea Filipescu , Mihail Dragne, Nicoleta Dragomir, Doina Dimonie <i>Studies on parameters influencing the mechanical recycling of some renewable polyesters</i>
12 ¹⁵ -12 ³⁰		Laura-Nicoleta Dragomir , Alina Mustatea, Sorina Iftimie, Mircea Filipescu, Doina Dimonie <i>Study of the interface in new practical interest compounds based on renewable polymers</i>
12 ³⁰ -12 ⁴⁵		Elena Cojocaru , Jana Ghitman, Gratiela Gradisteanu Pircalabioru, Eugeniu Vasile, Horia Iovu

Design of carboxylated graphene oxide-containing chitosan composite electrospun bio-scaffolds

12 ⁴⁵ -13 ⁰⁰		Ancuța Dinu (Iacob) , Constantin Apetrei, Dorin Dăscălescu, Irina-Georgiana Munteanu (Bulgaru), Ramona-Oana Roșca (Gunache) <i>Detection of amino acids l-phenylalanine, l-tyrosine and l-tryptophan with biosensors based on polypyrrole</i>
13 ⁰⁰ -14 ⁰⁰		Break
14 ⁰⁰ -15 ⁰⁰	Plenary session	Prof. Silvana Andreescu , Clarkson University, Potsdam, USA <i>Advancing environmental sustainability through custom-designed materials and sensors</i>
15 ⁰⁰ -15 ¹⁵		Alexandra Virginia Bounegru (Mereșescu) , Constantin Apetrei, Irina-Georgiana (Bulgaru) Munteanu, Ramona-Oana (Gunache) Roșca <i>Development of biosensors for the hydroxycinnamic acids analysis</i>
15 ¹⁵ -15 ³⁰	Session 1 - Multifunctional materials and nanocomposites	Rebeca Leu Alexa , Horia Iovu, George Vlasceanu, Andrada Serafim, Elvira Alexandrescu, Silviu Preda, Raluca Ianchis <i>3D printable ink based on alginate and layered silicates</i>
15 ³⁰ -15 ⁴⁵		Alexandra Sandulescu , Crina Anastasescu, Florica Papa, Monica Raciulete, Anca Vasile, Nicu Doinel Scarisoreanu, Tanta Spataru, Monica Scarisoreanu, Nicolae Spataru, Maria Zaharescu, Ioan Balint <i>Photo oxidative degradation of organic substrates over noble metal-modified TiO₂</i>
15 ⁴⁵ -16 ⁰⁰		Andreea-Gabriela Oporan , Irina Atkinson, Luminita Predoana, Anca Irina Gheboianu, Rodica-Mariana Ion <i>Solid state synthesis, characterization and color properties of Co, Mn-doped karrooite MgTi₂O₅ ceramic pigments</i>
16 ⁰⁰ -16 ¹⁵		Georgiana Iulia Paraschiv , Rodica-Mariana Ion, Raluca-Maria Stirbescu, Anca-Irina Gheboianu <i>Compositional investigations of a medieval stone cross – 1656</i>
16 ¹⁵ -16 ³⁰	Session 3 - Innovative technologies and cultural heritage protection	Dan-Adrian Vasile , Ionuț-Octavian Zăuleț, Rodica-Mariana Ion <i>Evaluation of new and old banknotes using hyperspectral imaging</i>
16 ³⁰ -16 ⁴⁵		Claudiu Eduard Rizescu , Diana Alexandra Mine, Irina Atkinson, Adriana Rusu, Luminita Predoana, Raluca-Maria Stirbescu, Anca Irina Gheboianu, Rodica Mariana Ion <i>CaAl - layered double hydroxides for heritage conservation - preparation, characterization and kinetic stability of their dispersion in solvent</i>
16 ⁴⁵ -17 ⁰⁰		Carla-Cezarina Pădurețu , Mihaela-Luminița Udrea, Rodica-Mariana Ion <i>Characterization of mortars prepared with different biopolymers and yellow iron oxide</i>

Friday, May 28th, 2021

09 ³⁰ -10 ³⁰	Plenary session	Prof. Luc Picton , Université de Rouen, France <i>Smart water soluble polysaccharides for adaptative properties</i>
10 ³⁰ -10 ⁴⁰		Diana-Ioana Buliga , Aurelian Cristian Boscornea, Ioana Popa, Ana-Maria Draghici-Popa, Ioan Calinescu <i>Phycocyanin – a possible solution for natural blue pigments</i>
10 ⁴⁰ -10 ⁵⁰		Maria Cristina Ghetu , Madalina Tudorache <i>Cascade biotransformation of monoterpenes using co-immobilized enzyme</i>
10 ⁵⁰ -11 ⁰⁰		Grigore Psenovschi , Constantin Neamtu, Alexandru Vlaicu, Ana-Maria Galan, Sanda Velea <i>Treatment of liquid digestate from anaerobic digestion by electrocoagulation-flocculation in batch mode</i>
11 ⁰⁰ -11 ¹⁰	Session 2 - Bioresources, biotechnologies and biorefinery	Alexandru Vlaicu , Alin Cristian Nicolae Vintilă, Ioan Călinescu, Petre Chipurici <i>Process intensification techniques for biodiesel production in continuous flow systems</i>
11 ¹⁰ -11 ²⁰		Luiza Mirt , Simona Ghimis, Sanda Velea, Gabriel Vasilievi <i>Bifunctional Al₂O₃ based catalyst for the hydrotreating/hydrocracking reaction of bio-oil</i>
11 ²⁰ -11 ³⁰		Sabina Ion , Anamaria Hanganu, Madalina Tudorache, Vasile Parvulescu <i>Grafting natural lignin with aniline using biocatalytic approach</i>
11 ³⁰ -11 ⁴⁰		Ioana Popa-Tudor , Victor Alexandru Faraon, Diana Constantinescu-Aruxandei, Florin Oancea <i>New approaches for obtaining lignin from lignocellulosic biomass</i>
11 ⁴⁰ -11 ⁵⁰		Denisa-Ioana Gheorghe , Victoria Bînzari, Carmen Lupu, Diana Constantinescu-Aruxandei, Florin Oancea <i>Activity of thyme essential oil on plant pathogens and plant seed germination</i>
11 ⁵⁰ -12 ³⁰		Break
12 ³⁰ -12 ⁴⁰	Session 2 - Bioresources, biotechnologies and biorefinery	Otilia-Gabriela Barbieru , Naomi Tritean, Diana Constantinescu-Aruxandei, Florin Oancea <i>Biostimulant activity of yeast protein hydrolysates on Vigna radiata shoots</i>
12 ⁴⁰ -12 ⁵⁰		Daniel Preda , Mălina Deșliu-Avram, Diana Constantinescu-Aruxandei, Florin Oancea <i>The activity of the lignolytic enzymes from the SPS obtained by enriching the solid state fermentation process</i>

12 ⁵⁰ -13 ⁰⁰	<u>Ioana-Alexandra Bala</u> , Bogdan Trică, Florentina Georgescu, Emilian Georgescu, Diana Constantinescu-Aruxandei, Florin Oancea <i>The effect of a strigolactone mimic in phytopathogenic fungi development</i>
13 ⁰⁰ -13 ¹⁰	<u>Grigore-Mihăiță Stan</u> , Diana-Constantinescu Aruxandei, Florin Oancea <i>In silico evaluation of the ability of soy proteins (<i>Glycine hispida</i>) to release antioxidant and antihypertensive peptides.</i>
13 ¹⁰ -13 ²⁰	<u>Luminița Dimitriu</u> , Daniel Preda, Diana Constantinescu-Aruxandei, Florin Oancea <i>Ultrasound-assisted extraction of phenolic compounds from quince leaves using Box Behnken design</i>
13 ²⁰ -13 ³⁰	<u>Eliza-Gabriela Mihăilă</u> , Ioana Popa-Tudor, Diana Constantinescu-Aruxandei, Cristian Florian Dincă, Florin Oancea <i>Green solvents based on choline chloride for CO₂ capture</i>
13 ³⁰ -13 ⁴⁰	<u>Naomi Tritean</u> , Valentina Mitran, Anisoara Cimpean, Ștefan-Ovidiu Dima, Florin Oancea, Diana Constantinescu-Aruxandei <i>Morphological characterization of Vero cells treated with biogenic silica nanoparticles</i>
13 ⁴⁰ -13 ⁵⁰	<u>Daria-Gabriela Popa</u> , Elena-Emilia Oprescu, Eliza-Gabriela Mihailă, Florin Oancea, Diana Constantinescu-Aruxandei <i>Bioremediation of hydrocarbons polluted waters using microalgae</i>
13 ⁵⁰ -14 ⁰⁰	<u>Andreea Constantin</u> , Luminița Dimitriu, Andra Nichițean, Diana Constantinescu-Aruxandei, Florin Oancea <i>The antioxidant activity of honey with propolis extract</i>
14 ⁰⁰ -14 ¹⁰	<u>Yidong Li</u> , Bogdan Trică, Naomi Tritean, Victor Faraon, Diana Constantinescu-Aruxandei, Florin Oancea <i>Response surface methodology for maximizing the biostimulant effect of sodium alginate coating on mung bean seeds</i>
14 ¹⁰ -14 ²⁰	<u>Ioana Silvia Hosu</u> , Marius Ghiurea, Florin Oancea <i>Optimization of 3D bio-inks composition for biodegradable fish baits from industrial byproducts</i>
14 ²⁰ -14 ⁵⁰	<u>Steve Czapko</u> , Metler-Toledo, Columbus, USA <i>Safety by design: reaction calorimetry in chemical development</i>
14 ⁵⁰ -15 ⁰⁰	Workshop closing and award ceremony

Plenary session