

RICCCE 21

21st Romanian International
Conference on Chemistry
and Chemical Engineering

Constanta - Mamaia
ROMANIA

September 4-7

2019

PROGRAM



IAKI Hotel Conference Center, Mamaia, ROMANIA



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Wednesday 4 September 2019 – Opening Sessions

Registration

Time: 12:00 – 17:00

Opening Ceremony

Time: 17:00 – 17:30

Plenary Session

Time: 17:30 – 19:50

Chaired by: Ileana Rau and Sorin Bildea

17:30 – 18:05

Tanase Dobre (*University Politehnica of Bucharest, Romania*)

Stochastic Modelling in Chemical Engineering

18:05 – 18:40

Olivier Siri (*Centre Interdisciplinaire de Nanoscience de Marseille - (CNRS / Aix-Marseille Université), France*)

Emerging conjugated zwitterions for photonics

18:40 – 19:15

Jean-Noel Jaubert (*Ecole Nationale Supérieure des Industries Chimiques, Nancy, France*)

How to boost the performances of equations of state widely used in chemical engineering

19:15 – 19:50

Luc Averous (*University of Strasbourg, France*)

From biomass to innovative polyuretanematerials: our overview

Welcome Cocktail

Time: 20:00

Thursday 5 September 2019 – Morning sessions

Plenary Session

Time: 08:30 – 10:50

Chaired by: Alina Badanoiu and Catalin Zaharia

08:30 – 09:05

Timothy Mason (*Centre for Research in the Built and Natural Environment, Coventry University, United Kingdom*)

40 Years of Sonochemistry

09:05 – 09:40

Luis Santos (*BASF HQ, Germany*)

Sustainable paints: an important contribution for a healthier life

09:40-10:15

Mihail Barboiu (*University of Montpellier, France*)

Encapsulation versus self-aggregation toward highly selective artificial K⁺- Channels

10:15-10:50

Sigurd Skogestad (*Norwegian University of Science and Technology (NTNU), Norway*)

Distillation is part of the future: A fresh look with focus on Divided-wall (Petlyuk) distillation columns

Coffee Break

Time: 10:50 – 11:10

Plenary Session

Time: 11:10 – 13:30

Chaired by: Cristina Orbeci and Cristian Pirvu

11:10 – 11:45

Horia Iovu (*University Politehnica of Bucharest, Romania*)

New concepts for design and synthesis of advanced nanocomposites

11:45 – 12:20

Magdalena Ionita (*Head of Technical Development Petrobrazi Refinery OMV Petrom, ROMANIA*)

Challenges and opportunities for oil processing industry – Horizon 2030

12:20 – 12:55

Gabriela Carja, (Gheorghe Asachi Technical University of Iasi, Romania)

Engineering self-assemblies of nanoparticles of metals/metal oxides-layered double hydroxides catalysts for obtained clean energy

12:55-13:30

Mihaela Stefan (University of Texas at Dallas, USA)

Functional Polycaprolactones for Drug Delivery Applications

Lunch Break

Time: 13:30 – 15:00

Thursday 5 September 2019 – Afternoon parallel sessions

Food, Health & Bioresources

Section 2

Time: 15:00 – 17:00

Chaired by: **Daniela Istrati** and **Cristina Todasca**

15:00 to 15:20 Keynote

Stefan Theodor Tomas (University Politehnica of Bucharest, Romania), Aurelian Cristian Boscornea, Ioana Asofiei, Florina Teodorescu

Anthocyanes from Various Violet Berries

15:20 to 15:40 Keynote

Mircea Vinatoru (University Politehnica of Bucharest, Romania), T.J. Mason

Ultrasonically Assisted Extraction in Food Processing and the Challenges of Integrating Ultrasound into the Food Industry

15:40 to 15:50

Ghassan F. Al-Samarrai (University of Samarra, Iraq), Fouad A. Abdullah, Wael. M. Mahdi

Application nano-composite (titanium dioxide) as an antifungal coating for orange fruit storage

15:50 to 16:00

Simona Gavrilas ("Aurel Vlaicu" University of Arad, Romania), Munteanu Florentina-Daniela

Extraction and Electrochemical Determination of Organophosphorus Compounds Presented in Winery By-products

16:00 to 16:10

Benahmed Djilali Adiba (University of La Rochelle, France), Allaf Karim, Nabiev Mohamed, Bosembes Colette

Extraction of Bioactive Substances of Vine Leaves and Their Functional Properties

16:10 to 16:20

Ana-Maria Brezoiu (University Politehnica of Bucharest, Romania), Cristian Matei, Mihaela Deaconu, Raul-Augustin Mitran, Adrian Trifan, Ana Maria Stanciuc, Daniela Berger

Enhanced radical scavenger properties of polyphenolic extract from grape marc through encapsulation into mesoporous silica-type matrices

16:20 to 16:30

Pascal Bonnet (Université d'Orléans, France), Colin Bournez, Gautier Peyrat, Pascal Krezel, Samia Aci-Sèche

An In silico Fragment-Based Design Tool for the Discovery of Novel Kinase Inhibitors

16:30 to 16:40

Bogdan Purcareaanu (University Politehnica of Bucharest, Romania), Daniela Istrati, Dan Eduard Mihaescu, Alina Morosan, Mihai Radu, Mihai-Alexandru Florea, Gabriel Vasilievici, Bogdan Trica, Raluca Stan

Fast screening of antibiotics in consumer products by HRMS

16:40 to 16:50

Georgeta Pavalache, **Nicoleta-Mirela Blebea** ("Ovidius" University of Constanta, Romania)

Validation and Applications of a new HPLC Methods for determination of Captopril in Pharmaceutical Forms

16:50 to 17:00

Marin Gheorghe (NANOM MEMS, Romania), Simona Gheorghe, Ioan Gainar

Characterization by Impedance Spectroscopy of the Supercritical Fluid Extraction Process of Peppermint Volatile Oil

Coffee Break

Time: 17:00 – 17:15

Food, Health & Bioresources

Section 2

Time: 17:15 – 19:05

Chaired by: Ioan Calinescu and Adina Gavrila

17:15 to 17:35 Keynote

Ioan Calinescu (University Politehnica of Bucharest, Romania), Mircea Vinatoru

Microwaves and ultrasound - a stunning combination - applications in the food industry

17:35 to 17:55 Keynote

Olívia Pereira (Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, Portugal), Rocio Macias, Maria Domingues, Jose Marin, Susana Cardoso

Antioxidant and hepatoprotection of Mentha aquatica L. and Lavandula dentata L. extracts

17:55 to 18:05

Eugenia Eftimie Totu, **Daniel Costinel Petre** (University Politehnica of Bucharest, Romania), Ibrahim Isildak, Corina Marilena Cristache, Aurelia Cristina Nechifor, Ismail Agir, Mustafa Nidge, Gheorghe Nechifor

Inorganic ions as periodontitis vectors assessed with a new microsensor

18:05 to 18:15

Laura Ion, Cristina Dimitriu, Michael Przybylski, **Brindusa Alina Petre** (TRANSCEND Center at Regional Institute for Oncology, Iasi, Romania)

Clinical Diagnostics of Lysosomal Storage Disorders using MRM-MS and Fluorimetric Approaches

18:15 to 18:25

Aurel Diacon (University Politehnica of Bucharest, Romania), Alexandru Vlaicu, Cristian Aurelian Boscornea, Ioan Calinescu, Mircea Vinatoru, Petre Chipurici

Conventional and Ultrasound Assisted Extraction (UAE) of Lycopene from Siriana F1 hybrid and Pontica 102 Tomatoes

18:25 to 18:35

Adrian Trifan (University Politehnica of Bucharest, Romania), Ioan Calinescu, Mircea Vinatoru, Adina Ionuta Gavrila

Microwave Assisted Pretreatment of Lignocellulosic Biomass

18:35 to 18:45

Anamaria Vartolomei (University Politehnica of Bucharest, Romania), Ioan Calinescu, Mircea Vinatoru, Adina Ionuta Gavrila

Lipozyme 435 esterification activity improvement using short term treatments with ultrasounds

18:45 to 18:55

Alexandru Vlaicu (University Politehnica of Bucharest, Romania), Petre Chipurici, Adrian Trifan, Ioan Calinescu, Mircea Vinatoru, Alin Vintila, Aurel Diacon

Optimization of ultrasound - assisted extraction (UAE) of biocomponents from microalgal biomass

18:55 to 19:05

Alin Vintila (University Politehnica of Bucharest, Romania), Ioan Calinescu, Ana Maria Galan, Anca Paulenco, Sanda Velea

Effect of MW and US treatment on microalgae growth

Thursday 5 September 2019 – Afternoon parallel sessions

Physical Chemistry; Electrochemistry & Corrosion

Section 3

Time: 15:00 – 17:00

Chaired by: **Natalia Yakovleva** and **Cristian Pirvu**

15:00 to 15:20 Keynote

Liana Anicai (Center of Surface Science and Nanotechnology, University Politehnica of Bucharest, Romania), Stefania Costovici, Sabrina Rosoiu, Calin Moise, Teodor Visan

Electrodeposition of Sn based ternary alloys using deep eutectic solvents

15:20 to 15:30

Natalia Yakovleva (Petrozavodsk State University, Petrozavodsk, Republic of Karelia, Russia), Kristina Stepanova, Aleksandr Kokatev, Irina Lukiyanchuk, Vladimir Rudnev, Alisa Shulga

Electrochemical anodizing of porous titanium sponge sintered powders

15:30 to 15:40

Ionut Enculescu (National Institute of Materials Physics), Elena Matei, Andreea Costas, Melania Onea, Mariana Apostol, Camelia Florica, Nicoleta Preda, Victor Diculescu, Adrian Enache

Nanostructure based field effect transistors for sensing applications

15:40 to 15:50

Sergei Chernyak (Lomonosov Moscow State University, Moscow, Russia), Alexander Burtsev, Roman Novotortsev, Konstantin Maslakov, Alexander Egorov, Serguei Savilov, Valery Lunin

Stability and structure evolution of cobalt catalyst supported on carbon nanotubes in Fischer-Fropsch synthesis

15:50 to 16:00

Mihail Chira (NIRD URBAN-INCERC, Cluj-Napoca, Romania), Andreea Hegyi, Henriette Szilagyi, Horatiu Vermesan

Tribological behavior of Zn-Ni layeres electrodeposited on different substrate

16:00 to 16:10

Kristina Stepanova (Petrozavodsk State University, Petrozavodsk, Republic of Karelia, Russia), Natalia Yakovleva, Aleksandr Kokatev, Håkan Pettersson

Anodic oxidation of powder titanium aluminide

16:10 to 16:20

Simona Popescu (University Politehnica of Bucharest, Romania), Cristian Pirvu, Camelia Ungureanu, Maria Zarif

Silk fibroin hybrid coatings for implantable titanium surface modification

16:20 to 16:30

Evgeniya Suslova (Lomonosov Moscow State University, Russian Federation), Serguei Savilov, Valeriy Lunin

Nitrogen-doped carbon nanotubes 3D frameworks: synthesis by spark plasma sintering, structural and thermochemical features

16:40 to 16:50

Sabrina Patricia Rosoiu (Center of Surface Science and Nanotechnology, University Politehnica of Bucharest, Romania), Aida Ghiulnare Pantazi, Aurora Petica, Anca Cojocaru, Stefania Costovici, Teodor Visan, Liana Anicai, Marius Enachescu

Electrodeposition of Ni-Sn Alloy/rGO composite coatings involving choline chloride based deep eutectic solvents

Coffee Break

Time: 16:50 – 17:15

Thursday 5 September 2019 – Afternoon parallel sessions

Physical Chemistry; Electrochemistry & Corrosion

Section 3

Time: 17:15 – 17:55

Chaired by: Daniela Ionita and Anca Cojocaru

17:15 to 17:25

Konstantinos Dermentzis (Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece), Dimitrios Stergiopoulos, Kokkoni Karakosta, Dimitrios Marmanis, Panagiotis Giannakoudakis

Batch and continuously operated electrooxidation process for remediation of phenol bearing wastewater

17:25 to 17:35

Matei Raicopol (University Politehnica of Bucharest, Romania), Cristian Devan, Madalina Pandelescu, Constanta Dascalu, Anca-Luiza Alexe-Ionescu

Dye sensitized solar cells based on ionic liquid crystal electrolytes

17:35 to 17:45

Ileana Rau (University Politehnica of Bucharest, Romania), Mirela Anton, Francois Kajzar, Jaroslaw Mysliwicz, Cristian Pirvu, Carla Paduretu, Alina Simion, Cristian Simion

All-Bio materials with multiple applications

17:45 to 17:55

Eleonora-Mihaela Ungureanu (University Politehnica of Bucharest, Romania), Liviu Birzan, Elena Diacu, Marius Enachescu

Identification and detection of heavy metal ions by voltammetry on azulene based CMEs

Thursday 5 September 2019 – Afternoon parallel sessions

New Concepts in Chemical and Biochemical Engineering

Section 4

Time: 15:00 – 17:00

Chaired by: ***Costin Sorin Bildea and Anton Alexandru Kiss***

15:00 to 15:20 Keynote

Valentin Pleșu (University Politehnica of Bucharest, Romania)

Perspectives in collaboration between OMV PETROM and University POLITEHNICA of Bucharest

15:20 to 15:30

Calin-Cristian Cormos (Babes-Bolyai University, Cluj Napoca, Romania), Petrescu Letitia, Cormos Ana-Maria, Chisalita Dora-Andreea

Chemical Looping Technology - An Energy Efficient Way for Reducing Carbon Footprint of Fossil-based Industrial Processes

15:30 to 15:40

George Rizea (University Politehnica of Bucharest, Romania and OMV-Petrom, Bucharest, Romania), Cristiana Luminita Gijiu, Raluca Isopescu

Natural Gas Dehydration by Absorption and Membrane Separation: Process Simulation and Optimization

15:40 – 15:50

Mihai Daniel Moraru (Hexion, Department of Process Technology and Development, Pernis, The Netherlands), Iulian Patrascu, Elena Zaharia, Costin Sorin Bildea

Dynamics and control of heterogeneous reactive distillation

15:50 – 16:00

Szabolcs Szima (Babes-Bolyai University, Cluj Napoca, Romania), Carlos Arnaiz del Pozo, Schalk Cloete, Ángel Jiménez Álvaro, Ana-Maria Cormos, Shahriar Amini, Calin-Cristian Cormos

Techno-Economic Analysis of the new Gas Switching Combustion Technology in a Coal-Fired Power Plant

16:00 – 16:10

Elena Catalina Udrea (University Politehnica of Bucharest, Romania), Stefan Toader, Valentin Plesu, Alexandra-Elena Bonet-Ruiz, Petrica Iancu, Jordi Bonet-Ruiz

Modelling and simulation of TAME industrial process using gPROMS® platform

16:10 – 16:20

Andrei Maxim Andrei (University Politehnica of Bucharest, Romania), Costin Sorin Bildea

Plantwide control of the olefin metathesis process

16:20 – 16:30

Marina Mihalachi (University Politehnica of Bucharest, Romania), Gheorghe Maria, Cristiana Luminita Gijiu

In-silico modulate glycolytic oscillator in modified E. coli to control bioprocesses of industrial interest

16:30 – 16:40

Aura Daniela Radu (Research & Development National Institute for Radioactive Metals and Resources, Bucharest, Romania), Banu Diana Maria

Study of heavy metals and radioactive contamination of food products

16:40 – 16:50

Iulian Patraşcu (University Politehnica of Bucharest, Romania), Costin Sorin Bildea, Anton Alexandru Kiss

Biobutanol purification by heat pump assisted azeotropic dividing-wall column: dynamics and control

16:50 – 17:00

Mihaela Popescu (University Politehnica of Bucharest, Romania), Petrica Iancu, Valentin Pleşu, Maria Cristina Todaşca, Costin Sorin Bildea

Carotenoids recovery from tomato pomace: conventional vs. green extraction method

Coffee Break

Time: 17:00 – 17:15

Thursday 5 September 2019 – Afternoon parallel sessions

New Concepts in Chemical and Biochemical Engineering

Section 4

Time: 17:15 – 18:25

Chaired by: Vasile Lavric and Tanase Dobre

17:15 – 17:25

Bogdan Trica (University Politehnica of Bucharest, Romania and National Research & Development Institute for Chemistry and Petrochemistry ICECHIM, Bucharest, Romania), Cédric Delattre, Alina-Violeta Ursu, Guillaume Pierre, Christine Gardarin, Philippe Michaud, Gholamreza Djelveh, Tanase Dobre

Modelling of ultrafiltration for the purification of alginate extracted from a brown seaweed in the Black Sea (Cystoseira Barbata)

17:25 to 17:35

Cristian Eugen Raducanu (University Politehnica of Bucharest, Romania), Adina Gavrila, Oana Cristina Parvulescu, Petre Chipurici, Tanase Dobre

Modelling of batch biodiesel synthesis with external recirculation and simultaneous separation

17:35 to 17:45

Marian Iosif Frincu (Babes-Bolyai University, Cluj Napoca, Romania), Florica Imre-Lucaci, Sorin Aurel Dorneanu, Petru Ilea

Electrochemical regeneration of the leaching solution for metals recovery from WPCBs

17:45 to 17:55

Ioan Alexandru Tutun (University Politehnica of Bucharest, Romania), Claudia Koncsag, Petre Chipurici, Tanase Dobre

Modeling the cargo switchover without the risk of contamination

17:55 – 18:05

Elena Catalina Udrea (University Politehnica of Bucharest, Romania), Romuald György, Costin Sorin Bildea

Modelling and Optimization of Middle Vessel Batch Distillation

18:05 – 18:15

Daniela Ghimpeteanu (University Politehnica of Bucharest, Romania), Vasile Lavric, Ioan Calinescu, Mariana Patrascu

Calorimetric determination of microwave energy absorption in - resonant or multimod applicators in a continuous-flow reactor

18:15 – 18:25

Ramona Dusman (Radu) (Horia Hulubei National Institute of R&D in Physics and Nuclear Engineering - IFIN-HH, Magurele, Romania and University Politehnica of Bucharest, Romania), Diana Cocioaba, Radu Leonte, Livia Chilug, Dana Niculae, Ioana Demetrescu

Automated production of ^{64}Cu medical radioisotope using a variable energy cyclotron (TR-19)

18:25 – 18:35

Ştefan-Ovidiu Dima (National Institute for Research & Development in Chemistry and Petrochemistry ICECHIM Bucharest, Romania), Anca-Andreea Turcanu, Sanda-Maria Doncea, Maria Rapa, Radu-Claudiu Fierascu, Virgil Badescu, Cristian-Andi Nicolae, Florin Oancea

Biochemical engineering aspects of hydrothermal carbonization of biomass

18:35 – 18:45

Ştefan-Ovidiu Dima, **Marius Ghiurea** (National Institute for Research & Development in Chemistry and Petrochemistry ICECHIM Bucharest, Romania), Anca-Andreea Turcanu, Irina Fierascu, Fanica Bacalum, Florin Oancea

In-situ catalytic conversion of lignocellulosic waste biomass using an alumina-Cu/Pd/Ce catalyst

Thursday 5 September 2019 – Afternoon parallel sessions

New Materials and Nanomaterials

Section 6

Time: 15:00 – 17:00

Chaired by: **Diana Dragusin** and **Catalin Zaharia**

15:00 to 15:20 keynote

Gheorghe Fundueanu (“Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania)

Self-regulated drug delivery systems

15:20 to 15:30

Ionut-Cristian Radu (University Politehnica of Bucharest, Romania), Bianca Galateanu, Ariana Hudita, Elena-Alexandra Istratou, Eugeniu Vasile, Catalin Zaharia, Horia Iovu, Marieta Costache

Poly-N-isopropylacrylamide (PNIPAM)/magnetite smart nanoparticles loaded with complex doxorubicin-DNA fragments for breast cancer therapy

15:30 to 15:40

Irina Popescu ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania), Marieta Constantin

Alginate-pluronic hydrogels obtained by thiol-ene photo-click reaction

15:40 to 15:50

Elena Iuliana Biru (University Politehnica of Bucharest, Romania), Sorina Alexandra Garea, Horia Iovu

Synthesis of Hyperbranched Benzoxazine – Graphene oxide structures

15:50 to 16:00

Sanda Bucatariu ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania), Marieta Constantin, Gheorghe Fundueanu

Design and development of sponge-type hydrogel composed of hyaluronic acid and poly(methylvinylether-alt-maleic acid) for biomedical applications

16:00 to 16:10

George Mihail Vlasceanu (University Politehnica of Bucharest, Romania), Horia Iovu, Eugeniu Vasile, Mariana Ionita

Synthesis and comprehensive characterization of composite biopolymer blend scaffold reinforced with graphene oxide and hydroxyapatite gradient density

16:10 to 16:20

Andra Mihaela Onas (University Politehnica of Bucharest, Romania), Elena Iuliana Biru, Horia Iovu

Synthesis of Albumin-Graphene oxide Complexes for Biomedical Applications

16:20 to 16:30

Georgiana Dana Dumitrescu (University Politehnica of Bucharest, Romania), Andrada Serafim, Horia Iovu, Izabela Cristina Stancu

The Use of Cuttlefish Bone as Potential Mineralization Promotor in Polymers for Bone Reconstruction

16:30 to 16:40

Magdalena-Cristina Stanciu ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania), Marieta Nichifor, Florica Doroftei

Size and morphology of nanoparticles obtained by self-assembly of dextran based block copolymers

16:40 to 16:50

Filis Curti (University Politehnica of Bucharest, Romania), Diana-Maria Dragusin-Zakman, Izabela-Cristina Stancu, Horia Iovu,

Development of 3D printed structures with controlled architecture for biomedical applications

16:50 to 17:00

Khalid Saeed Lateef Al-badri (Iraq)

Design Double Layers Structure based Dual Band Metamaterial Absorbers

Coffee Break

Time: 17:00 – 17:15

Thursday 5 September 2019 – Afternoon parallel sessions

New Materials and Nanomaterials

Section 6

Time: 17:15 – 18:55

Chaired by: Serguei Savilov and Ecaterina Andronescu

17:15 to 17:35 keynote

Rodica-Mariana Ion (Valahia University, Targoviste, Romania)

Nanomaterials for the rescue of stone monuments

17:35 to 17:45

Nicoleta Cioatera (University of Craiova, Romania)

Assessment on Doping Possibilities in Pyrochlore Titanates

17:45 to 17:55

A.S. Viktorova (The department of chemistry, Lomonosov Moscow State University, Russia),
Suslova E.V., Savilov S.V., Lunin V.V.

Carbon and nitrogen-doped carbon foam for Lithium-ion batteries

17:55: to 18:05

Ekaterina A. Arkhipova (Lomonosov Moscow State University, Russia), Anton S. Ivanov, Konstantin I. Maslakov, Serguei V. Savilov

Graphene nanoflakes: synthesis and application in supercapacitors

18:05 to 18:15

R.Y Novotortsev (Department of Chemistry, M.V. Lomonosov Moscow State University, Russia),
Paslova M.S., Chernyak S.A., Dvorayk S. V., Savilov S.V.

Synthesis and properties of Cu/CNT composite materials for powder metallurgy and electronics

18:15 to 18:25

Alexandra I. Cernencu (University Politehnica of Bucharest, Romania), Adriana Lungu, Izabela-Cristina Stancu, Andrada Serafim, Sorina Dinescu, Marieta Costache, Horia Iovu

Biocompatible Carbohydrate-based Inks for 3D Printing

18:25 to 18:35

Elena Olaret (University Politehnica of Bucharest, Romania), Diana-Maria Dragusin-Zakman, Horia Iovu, Izabela-Cristina Stancu

Development of nanocomposite nerve guidance channel

18:35 to 18:45

Elena Cojocaru (University Politehnica of Bucharest, Romania), Elena Iuliana Biru, Jana Ghitman, Horia Iovu

Carboxyl-modified graphene oxide incorporated chitosan scaffolds as promising materials for bone tissue engineering

18:45 to 18:55

Mihaela Dascalu ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania)

Attempts to increase the electromechanical performance of siloxane elastomers

18:55 to 19:05

Eugen Gheorghiu (International Centre of Biodynamics, Bucharest, Romania), Cristina Polonschii, Sorin David, Mihaela Gheorghiu, Dumitru Bratu

Enhanced analytic performances of biosensors by modulating optical waveguides resonance with magnetic / electric alternating fields

Friday 6 September 2019 – Morning Sessions

Plenary Session

Time: 08:30 – 11:15

Chaired by: Raluca Stan and Anton Fikai

08:30-09:05

Serguei Saviolov (*Lomonosov Moscow State University, Russian Federation*)

Periodic Table of the Elements: The Developing Alphabet of Science

09:05 – 09:40

Philip T. Jaeger (*Eurotechnica GmbH, Germany*)

Recent developments and future potential of supercritical fluid technology

09:40 – 10.15

Franck Suzenet (*University of Orleans, France*)

Polynitrogen containing heterocycles: from energetic materials to original and promising organic fluorophores

10:15-10:50

Adamantini Paraskevopolou, (*Aristotle University of Thessaloniki, Greece*)

Food properties as influenced by the addition of non-conventional ingredients

Coffee Break

Time: 10:50 – 11:15

Plenary Session

Time: 11:15 – 13:15

Chaired by: Daniela Istrati and Paul Stanescu

11:15 – 11:50

Nicolay Tsarevsky (*Southern Methodist University, Dallas, USA*)

Synthesis and Applications of Branched Functional Polymers

11:50 – 12:25

Ai Kah Soh (*Monash University Malaysia*)

Role of stress in electrochemical hysteresis for the applications in Lithium ion batteries

12:25 – 13:00

Karol Chomicki (*ELSEVIER*)

How direct access to extracted experimental data is facilitating and speeding up a scientific research in Academia?

Friday 6 September 2019 – Afternoon parallel sessions

Advances in Organic and Inorganic Chemistry & Catalysis

Section 1

Time: 15:00 – 17:00

Chaired by: **Matei Raicopol** and **Florina Dumitru**

15:00 to 15:20 keynote

Raluca Stan (University Politehnica of Bucharest, Romania), Brindusa Balanuca

Vegetable Oils as Valuable Feedstock for Performant Materials

15:20 to 15:40 keynote

Sylvain Routier (University of Orleans, France), Johnny Vercouillie, Franck Suzenet, Frédéric Buron, Sylvie Chalon

Design of novel $\alpha 7$ -nAChR ligands: from an idea to in rodent results for Alzheimer [^{18}F] TEP imaging

15:40 to 15:50

Vasilichia Antoci ("Al. I. Cuza" University, Faculty of Chemistry, Iasi, Romania), Dorina Amariuca-Mantu, Dumitrelea Cucu, Violeta Mangalagiu, Phillipe M. Loiseau, Sandrine Cojean, Catalina Ciobanu, Gheorghita Zbancioc, Ionel I. Mangalagiu

New PyrroloBenzoQuinonePhthalazines and PyrroloBenzoQuinonePyridazines: Synthesis, Structure and Anti-leishmaniasis Activity

15:50 to 16:00

Karen Plé (Institute of Organic and Analytical Chemistry, University of Orléans, France), Kossi Efoouako Soklou, Hamid Marzag, Sylvain Routier

Gold catalyzed synthesis of spirocycles

16:00 to 16:10

Frédéric Buron (Institute of Organic and Analytical Chemistry, University of Orléans, France), Matthieu Place, Chloé Copin, Stéphane Bourg, Pascal Bonnet, Sylvain Routier

Efficient functionalization of Imidazo[2,1-b][1,3,4]thiadiazoles, access to new kinases inhibitors.

16:10 to 16:20

Robert-Andrei Tincu (Organic Chemistry Center "C. D. Nenitescu", Bucharest, Romania), Constantin Draghici, Andrei Slabu, Monica Duldner, Alina Elena Coman, Emeric Bartha

5-Hydroxymethylfurfural Synthesis in Biphasic Solvent Systems

16:20 to 16:40 keynote

Beatrice Braun Cula (Humboldt University of Berlin, Germany)

An unusual and rare case of isomerism: Allogon isomers in a series of Fe(II) complexes.

16:40 to 17:00 keynote

Delia-Laura Popescu (University of Bucharest, Romania)

New Organotin (IV) Coordination Compounds: Synthesis, Characterization, and Antimicrobial Activity

Coffee Break

Time: 17:00 – 17:15

Friday 6 September 2019 – Afternoon parallel sessions

Advances in Organic and Inorganic Chemistry & Catalysis

Section 1

Time: 17:15 – 19:25

Chaired by: **Maria Alexandru** and **Florina Dumitru**

17:15 to 17:35 keynote

Catalin Maxim (University of Bucharest, Romania), Alexandru Topor, Marius Andruh

On the role played by the chirality of ligands on the aggregation of heterometallic Cu^{II}-Hg^{II} complexes

17:35 to 17:45

Madalin Damoc ("Petru Poni" Institute of Macromolecular Chemistry Iasi, Romania), Alexandru Stoica, Mihaela Dascalu, Ana-Maria Iurascu, Maria Cazacu

Salen-Type Ligands Derived from a Highly Flexible Organic-Inorganic Diamine and Their Metal Complexes

17:45 to 17:55

Alexandru-Constantin Stoica ("Petru Poni" Institute of Macromolecular Chemistry Iasi, Romania), Madalin Damoc, Mihaela Dascalu, Maria Cazacu

Tetranuclear Complex of 3-Formylsalicylic Acid Schiff Base Carrying Silanol Tails

17:55 to 18:15 keynote

Hussein Mahdi S. Al-Aani, Mihaela M. Trandafir, Ioana Fechete, Lucia N. Leonat, Ionel Popescu, Mihaela Florea, **Ioan-Cezar Marcu** (University of Bucharest, Romania)

Transition-metal-promoted CuCeMgAlO mixed oxide catalysts obtained from multicationic LDH precursors for methane total oxidation

18:15 to 18:25

Andrei Slabu (Organic Chemistry Center “C. D. Nenitescu”, Bucharest, Romania), Octavian Dumitru Pavel, Florina Teodorescu

A Comparative Study on the Catalytic Activity of Mixed Oxides Derived from LDH in the Synthesis of Methylpyrazine

18:25 to 18:35

Gheorghe Ionita (National Institute for Research and Development for Cryogenics and Isotopic Technology, Ramnicu Valcea, Romania), Ciprian Bucur, Ionut Spiridon

Aspects Concerning the H₂-H₂O Isotopic Exchange Catalyze

18:35 to 18:45

Raul-Augustin Mitran (“Ilie Murgulescu” Institute of Physical Chemistry, Romanian Academy), Daniel Lincu, Simona Ionitã, Daniela Berger, Cristian Matei

Nanocomposite phase change materials using molten salts and mesoporous silica matrices

18:45 to 18:55

Cezar Comanescu (National Institute of Materials Physics & University Politehnica of Bucharest, Romania), Nicusor Iacob, Petru Palade, Victor Kuncser

Correlation of Hyperthermia and Magnetic Measurements in Nanosized Cobalt Ferrite Systems

18:55 to 19:05

Mihaela Deaconu (University Politehnica of Bucharest, Romania), D. Constantin, A.-M. Stanciuc, E. Vasile, I. Nicu, C. Matei, D. Berger

Mesoporous silica as materials for medicine. Colloidal versus mesostructured particles

19:05 to 19:15

Simona Ionita (University Politehnica of Bucharest, Romania), Daniel Lincu, Raul-Augustin Mitran, Ana-Maria Brezoiu, Mihaela Deaconu, Cristian Matei, Daniela Berger

Properties of resveratrol encapsulated into mesoporous silica

19:15 to 19:25

Daniel Lincu (“Ilie Murgulescu” Institute of Physical Chemistry, Romanian Academy & University Politehnica of Bucharest, Romania), Simona Ionita, Raul-Augustin Mitran, Mihaela Deaconu, Ana-Maria Brezoiu, Cristian Matei, Daniela Berger

Tailoring the resveratrol release profile from mesoporous silica through carrier surface modification

Friday 6 September 2019 – Afternoon parallel sessions

Physical Chemistry; Electrochemistry & Corrosion

Section 3

Time: 15:00 – 17:00

Chaired by: **Jean-Noël Jaubert** and **Catinca Secuianu**

15:00 to 15:20 keynote

Sergiu Sima, Radu Ciprian Racovita, Cristian Dinca, Viorel Feroiu, **Catinca Secuianu** (University Politehnica of Bucharest, Romania)

Alternative Green Solvents for CO₂ Capture: Experiments and Modeling

15:20 to 15:30

Andrés Pina-Martinez (Université de Lorraine, France), Romain Privat, Jean-Noël Jaubert

Methodologies of research for optimal working fluids for cycles of power generation and refrigeration machines

15:30 to 15:40

Sergiu Sima (University Politehnica of Bucharest, Romania), Andreea C. Varzaru, Radu C. Racovita, Viorel Feroiu, Catinca Secuianu

Phase equilibria in systems of CO₂ and esters

15:40 to 15:50

Sergiu Sima, **Mihaela Ionita** (University Politehnica of Bucharest, Romania), Radu C. Racovita, Viorel Feroiu, Catinca Secuianu

Phase equilibria and densities of carbon dioxide + 1-hexanol

15:50 to 16:00

Radu Ciprian Racovita (University Politehnica of Bucharest, Romania), Adrian Victor Crisciu, Maria Daniela Ciuca, Ionut Alexandru Popa, Andreea Camelia Varzaru, Sergiu Sima, Catinca Secuianu

Experimental studies of several type 1 liquid-liquid ternary systems

16:00 to 16:10

Alexandra Vasile (University Politehnica of Bucharest, Romania), Adina Roxana Milasan, Cosmina Andreea Marin, Elena Adina Andrei, Andreea Gabriela Olaru, Dan Cosasu, Cristina Maria Marioara, Maria Mihaly

Removal of Nitrogen compounds from wastewater by microemulsion

16:10 to 16:20

Daniela Catana (University Politehnica of Bucharest, Romania), Andreea Irina Udrescu, Alexandra Vasile, Adina Roxana Milasan, Maria Andreea Sandru, Ionut Forcos, Maria Mihaly

Recovery of technological waste from the metalworking industry by microemulsion

16:20 to 16:30

Ana-Maria Manea-Saghin (University Politehnica of Bucharest, Romania), Carla-Cezarina Paduretu, Francois Kajzar

New biomaterials for application in photonics

Friday 6 September 2019 – Afternoon parallel sessions

Monitoring & Environmental Protection

Section 5

Time: 15:00 – 16:50

Chaired by: **Madalina Pandele** and **Stefan Voicu**

15:00 to 15:20 keynote

Stefan Ioan Voicu, Andreea Madalina Pandele (University Polytechnica of Bucharest, Romania)

Functionalization of Cellulose Acetate Membranes with AminopropylTriethoxySilane. Synthesis, Characterization and Applications

15:20 to 15:40 keynote

Florin Miculescu (University Politehnica of Bucharest, Romania)

Sustainable Technologies for Bone Reconstruction Ceramic Biomaterials Derived from Natural Sources and Porogen Agents

15:40 to 15:50

Radu Mirea, Mihaela Crestu (Romanian Research and Development Institute for Gas Turbines COMOTI, Romania)

Compressor Oil Assessment by using FT-IR Spectroscopy

15:50-16:00

Oana Steluta Serbanescu, Andreea Madalina Pandele, Stefan Ioan Voicu (University Politehnica of Bucharest, Romania),

Removal of Gd(II) onto Functionalized Cellulose Acetate Membranes with Self Indicator Properties

16:00-16:10

Andreea Catalina Iordache, Andreea Madalina Pandele, Stefan Ioan Voicu (University Politehnica of Bucharest, Romania),

Hemodialysis composite membranes with functionalized grapheme for retention of heavy metals in case of intoxications

16:10-16:20

Alin Cristian Nicolae Vintila, Catalin Bogdan Matei, Anca Paulenco, Ana-Maria Galan, Luiza Capra, Alexandru Vlaicu, Sanda Velea (National Institute for Research & Development in Chemistry and Petrochemistry – ICECHIM Bucharest, Romania)

Integrate approach for liquid digestate treatment and valuable microalgae biomass production

16:20-16:30

Silviu-Laurentiu Badea, Diana Popescu, Violeta-Carolina-Niculescu, Stanica Enache, Amalia Soare, Roxana-Elena Ionete (National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania)

Reductive dechlorination of α -hexachlorocyclohexane in batch experiments with iron sulfide nanoparticles

16:30-16:40

Natalia Strokova, Stepan Kupreenko, Serguei Savilov (Chemistry Department, M.V. Lomonosov Moscow State University, Russia)

The Influence of Introduction of Heteroatoms in Carbon Nanomaterial Structure on Organic Pollutants Adsorption

16:40-16:50

Maria Andreea Nistor, Simona Gabriela Muntean, Bianca Maranescu, Aurelia Visa (“Coriolan Dragulescu” Institute of Chemistry, Timisoara, Romania)

Removal of Dyes from Aqueous Solutions by Phosphonate Metal Organic Frameworks

Friday 6 September 2019 – Afternoon parallel sessions

New Materials and Nanomaterials

Section 6

Time: 15:00 – 17:00

Chaired by: **Ai Kah Soh** and **Anton Ficai**

15:00 to 15:10

Stepan Kupreenko (M.V. Lomonosov Moscow State University, Russia), Natalia Strokova

The influence of nitrogen doping on the adsorption of organic solvent vapors by carbon nanotubes and few-layer graphene nanoflakes

15:10 to 15:20

N.I. Osipov (Lomonosov Moscow State University, Russia), E.V. Suslova, S.V. Savilov, V.V. Lunin

Synthesis and intercalation of Ti_3C_2 with Li and Na

15:20 to 15:30

Mariya S. Paslova (Moscow State University, Russia), Sergei A. Chernyak, Anton S. Ivanov, Serguei V. Savilov, Valery V. Lunin

Carbon-encapsulated iron particles fixed in a rigid CNT framework: synthesis by spark plasma sintering and catalytic properties in CO hydrogenation

15:30 to 15:40

Cristina Banciu (National Institute for R&D in Electrical Engineering ICPE-CA), Elena Chitanu, Marius Lungulescu, Adela Bara, Gabriela Sbarcea, Virgil Marinescu, Delia Patroi, Ioana Ion

3D Graphene and 3D Graphene/ZnO Composites Preparation and Characterization

15:40 to 15:50

Ioana Asofiei (University Politehnica of Bucharest, Romania), Aurelian Cristian Boscornea, Diana-Ioana Buliga, Stefan Tomas, Cristina Pop

Self-cleaning waterborne paints based on TiO_2 sensitized with mixed chromophore dyes

15:50 to 16:00

Miruna-Silvia Stan (University of Bucharest, Romania), Roxana Cristian, Israa J. Mohammad, Maria Mernea, Beatrice G. Sbarcea, Bogdan Trica, Anca Dinischiotu

Analyzing the interaction between different types of nanoparticles and serum albumin

16:00 to 16:10

Lidia Favier (Univ Rennes, Ecole Nationale Supérieure de Chimie de Rennes, Rennes, France), Andrei Ionut Simion, Mariana Liliana Pacala, Diana Coman, **Narcisa Vrinceanu**

Enhanced Elimination of a Lipid Lowering Drug over Titanium Nanosized Catalysts and UV Irradiation

16:10 to 16:20

Andreea L. Chibac ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania), Lenuta Stroea, Violeta Melinte

Hybrid Polymer Composites with Ag, Au or Au-Ag NPs as Photocatalysts for the Degradation/Reduction of Nitroaromatics

16:20 to 16:30

Andreea Ion (University Politehnica of Bucharest, Romania), Ionut-Cristian Radu, Catalin Zaharia, Ariana Hudita, Bianca Galateanu, Eugenia Tanasa, Horia Iovu

Nanohydrogels platforms for drug delivery systems by self-assembling of hydrophilic polymers

16:30 to 16:40

Cristina Stavarache (University Politehnica of Bucharest, Romania), Adi Ghebur, Sorina Garea, Horia Iovu

Mesalamine-loaded mucoadhesive particles with potential application for the treatment of inflammatory bowel disease

16:40 to 16:50

Diana-Ioana Buliga (University Politehnica of Bucharest, Romania), Aurelian Cristian Boscornea, Ioana Asofiei, Stefan Tomas, Cristina Pop

Coloured materials with controlled absorption and emission for military camouflage

16:50 to 17:00

Serguei V. Savilov (Moscow State University, Chemistry Department, Russia), Ivanov Anton S., Arkhipova Ekaterina A., Chernyak Sergey A., Lunin Valery V

From 0D to 3D Carbon Nanostructures

Coffee Break

Time: 17:00 – 17:15

Friday 6 September 2019 – Afternoon parallel sessions

New Materials and Nanomaterials

Section 6

Time: 17:15 – 18:55

Chaired by: Mihaela Stefan and Mariana Ionita

17:15 to 17:25

Celina Maria Damian (University Politehnica of Bucharest, Romania), Madalina Ioana Necolau, Iulia Elena Neblea, Eugeniu Vasile, Horia Iovu

Synthesis of Hybrid Nanostructures Based on Graphene Oxide and the Evaluation of Their Influence in Epoxy Nanocomposites

17:25 to 17:35

Adnana Spinu Zaulet (National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania), Irina Petreanu, Violeta Niculescu, Simona Maria Raboaca, Radu Ene, Alexandru Ciocan, Elena Carcadea, Ciprian Iacob

Glassy dynamics and charge transport of single-ion conductors in bulk and under two-dimensional geometrical constraint

17:35 to 17:45

Adi Ghebaur (University Politehnica of Bucharest, Romania), Sorina Alexandra Garea, Horia Iovu

Alginate superporous microparticle as drug delivery system

17:45 to 17:55

Ludmila Otilia Cinteza (University of Bucharest, Romania), Maria Marinescu, Marin Micut, Cristina Lavinia Nistor, Laura Chirila, Elvira Alexandrescu, Cristian Petcu

Facile Synthesis of Robust Superamphiphobic Coatings for Multifunctional Textiles

17:55 to 18:05

Emilian Ghibu (Centre of Organic Chemistry "Costin D. Nenitescu", Romanian Academy, Bucharest, Romania), Nicoleta Doriana Banu, Verona Tanta Iordache, Dumitru Mircea Vuluga, Raluca Stan, Valentin Victor Jerca, Florica Adriana Jerca

Poly(2-Isopropenyl-2-Oxazoline) Hydrogels as Drug Delivery Systems

18:05 to 18:15

Jana Ghitman (University Politehnica of Bucharest, Romania), Raluca Stan, Horia Iovu

Hybrid PLGA-vegetable oils nanoparticles for improving stability and encapsulation efficiency of lipophilic drugs

18:15 to 18:25

Rebeca Leu (University Politehnica of Bucharest, Romania), Ghitman Jana, Biru Iuliana, Horia Iovu

Gelatin Methacryloyl with medical application

18:25 to 18:35

Elena-Alexandra Istratoiu (University Politehnica of Bucharest, Romania), Ionut-Cristian Radu, Catalin Zaharia, Ariana Hudita, Bianca Galateanu, Eugenia Tanasa, Anca Hermenean, Horia Iovu

Silk fibroin nanocarriers for the targeted delivery of 5-FU in cancer therapy

18:35 to 18:45

Maria Cazacu ("Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania), Codrin Tugui, Adrian Bele, George Stiubianu, Mihaela Dascalu, Carmen Racles

Contributions to Recent Developments in Silicone Materials: Dielectric Elastomer Transducers (DETs)

18:45 to 18:55

Maria-Minodora Marin (University Politehnica of Bucharest, Romania), Madalina Georgiana Albu Kaya, Jana Ghitman, Iuliana Biru, Horia Iovu

The effects of cross-linking agents on the properties of type II collagen biomaterials

Friday 6 September 2019

Closing Ceremony

Time: 19:30 – 19:45

POSTER PRESENTATIONS

Advances in Organic and Inorganic Chemistry & Catalysis

POSTER PRESENTATIONS

Section 1

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^{II}Ln^{III}] 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

Friday 6 September 2019

Time: 8:30 – 13:00

S1 – 248

Raluca Sanda Komartin (University Politehnica of Bucharest, Romania), Brandusa Balanuca, Anamaria Hanganu, Raluca Stan

Anti-corrosion coatings based on crosslinking epoxidized Lallemania 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 TiO₂ sol–gel thin films

S1 – 264

Dan Razvan Popoviciu, **Ticuta Negreanu-Pirjol** ("Ovidius" University, Constanta, Romania), 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 Activitiy

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 heterotriscin systems by employing Anderson polyoxoanions

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 residual biomass 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 heterotriscin complexes with different metal ions bridged by one aminoxy 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

Food, Health & Bioresources

POSTER PRESENTATIONS

Section 2

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^ª 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 Kamerzan

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 Kamerzan, Adina Mara Mihai, Lucia Pirvu, 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 Gavrila (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 Gavrilă, 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 Gavrilescu, Gabriel Dan Suditu, Mircea Nechita Teodor, Georgiana Balusescu

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

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, Romania), Cristian Raducanu, Oana Parvulescu, Tanase Dobre

Methods and procedures for mixing powders in the pharmaceutical area

Physical Chemistry; Electrochemistry & Corrosion

POSTER PRESENTATIONS

Section 3

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 – 8

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 γ -MnO₂ 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

TiO₂-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 Cojocar (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 Cojocar (University Politehnica of Bucharest, Romania), Ioana Maior, Ioana-Alina Ciobotaru, Alexandra Cojocar-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 vitroc ceramics

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 azotetrazaoles 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 TiO₂ nanostructures

New Concepts in Chemical and Biochemical Engineering

POSTER PRESENTATIONS

Section 4

Friday 6 September

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/Li₂O 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 Bezedea (University Politehnica of Bucharest, Romania), Costin Sorin Bildea

Production of Sodium Methoxide by Reactive Distillation

S4 – 132

Marian Paul Bezedea (University Politehnica of Bucharest, Romania), Ilona Bezedea, 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-Emanuela Enascuta, 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 Veronica 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 - 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

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

HNO₃ synthesis in mono- and dual-pressure operating plants. Technical and cost comparative analysis

S4 – 336

Nicolae Marilena (Petroleum-Gas University of Ploiesti, 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

Monitoring & Environmental Protection

POSTER PRESENTATIONS

Section 5

Thursday 5 September 2019

Time: 15:00 – 19:30

S5 – 044

Ana Despinalonescu (National Chemical-Pharmaceutical for Research and Development Institute-ICCF-Bucharest, Romania), Angela Casarica, Mariana GratielaVladu, Roxana Madalina Stoica

Biotechnological studies concerning the vegetable wastes hydrolyzed production and their use for yeasts biomass development

S5 – 056

Paul Chirita (University of Craiova, Romania), Madalina I. Duinea

Troilite oxidative dissolution

S5 – 079

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, CiprianSchiopu, TiberiuCimpean

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 Cojocaru, Maria Ignat

Effect of the Titanium source used during synthesis on the properties of mesoporoustitania

S5– 145

Mahu Elvira (Laboratory of Materials Chemistry, "AlexandruIoanCuza University, Iasi, Romania), Ignat Maria, Cojocaru Corneliu, Coromelci Cristina, Samoila Petrisor, Asaftei Iuliean, Harabagiu Valeria

Comparative study of Congo Red dye and 2,4-diclorophenoxyacetic acid herbicide photodegradation over mesoporoustitania

S5 – 146

Laura Bulgariu (Gheorghe Asachi Technical University 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 biomass

S5- 147

Laura Bulgariu (Gheorghe Asachi Technical University 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 (University 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 Modrojan (University 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 – 157

Cristina Singureanu (University Politehnica of Bucharest, Romania), Alexandru Woinaroschy

Utilization of Solids Obtained from Eforie Sud Wastewater Treatment Plant

S5- 179

Arpad Imre-Lucaci, Melinda Fogarasi, Florica Imre-Lucaci, **Szabolcs Fogarasi** (Babes-Bolyai University, Cluj Napoca, 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 Modrojan, Dancila Madelene, Liliana Bobirica

Phosphate Removal from Aqueous Solution using Nanosized Zerovalent Iron Supported by Anionic Exchange Resin

S5-231

Daniela Simina Stefan (Univeristy 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

S5-235

Andrei Giurgea (National Institute for Research & development in Chemistry and Petrochimstry – ICECHIM), Ana-Maria Galan, Catalin Bogdan Matei, Alexandru Vlaicu, Anca Paulenco, Sanda Velea

Chitosan based bioflocculants for microalgae harvesting

S5-237

Catalin Bogdan Matei (National Institute for Research & development in Chemistry and Petrochimstry –ICECHIM), Grigore Psenovschi, Anca Paulenco, Ana-Maria Galan, Alin Cristian Nicolae Vintila, Luiza Capra, Sanda Velea

New Perspectives for Crop Irrigation

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^{2+} and Cr^{6+} 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 laces on the middle and lower course of Oltriver, Romania: optimisation and validation of extraction method

S5 – 256

Buta Ildiko ("Coriolan Dragulescu" Institute of Chemistry, Timisoara, Romania), Nistor Maria Andreea, Muntean Simona Gabriela, Costisor Otilia

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 – 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

Irina Gheorghe (Research Institute of the University of Bucharest –ICUB, Romania), Ionela Avram, Lia-Mara Ditu, Irina Balotescu, Ion Blajan, Venus Mateescu, Petronela Fotea, Violeta Corina Cristea, Ionut Pecete, Veronica Lazar, Carmen Chifiriuc

Biodiversity and enzymatic activity of wood degrading fungi on heritage churches in Transylvania

S5 -341

Andreea Camelia Varzaru (University Politehnica of Bucharest, Romania), Ana Maria Josceanu, Radu Ciprian Racovita, Raluca Daniela Isopescu

Validation of ICP-MS Method for the determination of metals in soil samples

S5 – 350

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

Raluca Diana Stoica (“Horia Hulubei” National Institute for Physics and Nuclear Engineering (IFIN-HH) Magurele-Bucharest, Romania), L. Neagu, I. Dorobantu, C. C. Mustaciosu, 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

New Materials and Nanomaterials

POSTER PRESENTATIONS

Section 6

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'elimite 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_3N_4 – 45S5 Bioglass Biocomposites Obtained by Vacuum Sintering

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 – 034

Nikolai I. Mukhurov (State Research and Production Association "Optic, Optoelectronic and Laser techniques", Belarus), I.V. Gasenkova, H. Zhang, G. Yu

Self-organizing nanostructures anodic alumina and their applications

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 SiO₂ 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, Hlevca Cristina, 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 Suciu (National Institute for Research and Development of Isotopic and Molecular Technologies, Romania), C. Marutoiu, I. Bratu, D. Nemes, M. Suciu 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), Adriana Stefan, Cristina Elisabeta Pelin, George Pelin, Oleg Smorygo, George-Catalin Cristea, Mihail Botan

Lightweight sandwich structure with cellular core

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 – 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 Andronescu.

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 – 169

Madalina Ioana Necolau (University Politehnica of Bucharest, Romania), Ana Maria Paraschiv, Celina Maria Damian, Brindusa Balanuca, Horia Iovu

Advanced Studies on Biobased Epoxy Network Curing Reactions and Thermal Properties

S6 – 184

Rebeca Leu (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 Cojocar, 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-B₂O₃ 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 Evangelidis, Ionut Enculescu

Dye Concentration Dependence of Dye-Doped Polymer Nanofibers' Properties

Thursday 5 September 2019

Time: 8:30 – 13:00

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 – 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 – 366

Mariana Ionita (University Politehnica of Bucharest, Romania), George Mihail Vlasceanu, Horia Iovu

Graphene based biomaterials for bone regeneration

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-NH₂ in the presence of ions (Mg²⁺; Cl⁻)

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

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

Friday 6 September 2019

Time: 08:30 – 11:00

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 Girbaciui, 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

Friday 6 September 2019

Time: 15:00 – 19:30

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 Cojocaru, 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