



# SICHEM 2020

---

CONFERENCE PROGRAMME

**17 – 18 September 2020**

**Romanian Chemical Engineering Society**

**Romanian Chemical Society**

**Academy of Technical Sciences – Chemical Engineering Section**

**University Politehnica of Bucharest,  
Faculty of Applied Chemistry and Materials Science**

***This event is dedicated to anniversaries:  
25 years since the foundation of Romanian Chemical  
Engineering Society***

## **Table of Contents**

PROGRAMME OVERVIEW .....	<b>4</b>
CONFERENCE PROGRAMME.....	<b>6-16</b>

**SICHEM – 2020**  
 PROGRAMME OVERVIEW

<b>Time</b>	<b>Details of the Program</b>			
<b>Thursday, September 17</b>				
<b>10:00-12:30</b>	<b>General Session, Microsoft Teams/ SICHEM'20</b>			
10:00-10:05	<b>OPENING WORDS OF ORGANIZERS</b>			
10:05-10:15	WORDS IN HONOR OF PROF. LIVIU LITERAT AT 92 YEARS: PROF. A.OZUNU			
10:15-10:25	WELLCOME FOR ORGANIZERS: PROF. THEODOR PRISECARU, UPB SENATE			
10:25-10:35	WELLCOME FOR ORGANIZERS: PROF. CRISTINA ORBECI, CASM DEAN			
10:35-10:45	WELLCOME FOR ORGANIZERS: PROF ECATERINA ANDRONESCU, SICR FOUNDER			
10:45- 10:55	WELLCOME FOR ORGANIZERS: PROF VALERIU JINESCU, ASTR GENERAL SECRETARY			
10:55-11:05	WELLCOME FOR ORGANIZERS: S.L. CRISTINA TODASCA, PRESIDENT OF SCHR FOOD CHEMISTRY DIVISION, CASM VICE DEAN			
11:05-11:10	SICR AT 25 YEARS			
11:10-11:20	SICR/SICHEM EXCELLENCE DIPLOMA: STEFAN VUZA, CHIMCOMPLEX			
11:20-11:30	SICR/SICHEM EXCELLENCE DIPLOMA: GEORGESCU MARIA, UPB			
11:30-11:40	SICR/SICHEM EXCELLENCE DIPLOMA DAN DONESCU, ICECHIM			
11:40-11:50	SICR/SICHEM EXCELLENCE DIPLOMA MISU MOSCOVICI, ICCF			
11:50-12:00	SICR/SICHEM EXCELLENCE DIPLOMA IOSIF SCHIKETANZ, UPB			
12:00-12:10	SICR/SICHEM EXCELLENCE DIPLOMA LAURENTIU FILIPESCU, UPB			
12:10-12:20	SICR/SICHEM EXCELLENCE DIPLOMA VALERIU JINESCU, UPB			
12:20-12:30	SICR/SICHEM EXCELLENCE DIPLOMA SERBAN AGACHI, UBBC			
<b>12:30 – 14:25</b>	<b>General Session, Microsoft Teams/ SICHEM'20</b> <i>Plenary Lectures and Companies Presentations</i>			
<b>15:00 – 19:00</b>	<b>Parallel Sessions</b> <i>Keynote Lectures and Oral Presentations</i>			
	Microsoft Teams/ SICHEM'20	Microsoft Teams/ SICHEM'20	Microsoft Teams/ SICHEM'20	Microsoft Teams/ SICHEM'20

SICHEM 2020 PROGRAMME – PROGRAMME OVERVIEW  
University Politehnica of Bucharest, Romania, 17– 18 September

---

	Session A	Session B	Session C	Session D
<b>Friday, September 18</b>				
09:00 – 12:40	<b>General Session, Microsoft</b> <i>Teams/ SICHEM'20/Plenary Lectures and Companies Presentations</i>			
13:00 – 14:30	<b>Parallel Sessions</b> <i>Poster Session</i>			
	Section A	Section B	Section C	Section D
	Microsoft Teams/ SICHEM'20	Microsoft Teams/ SICHEM'20	Microsoft Teams/ SICHEM'20	Microsoft Teams/ SICHEM'20
15:00–15:15	CLOSING ANALYSIS			

## CONFERENCE PROGRAMME

**17 September, 2020**

**10:00-11:10**

**GENERAL SESSION, Microsoft Teams/ SICHEM'20**

**Chairpersons: Prof. Tanase Dobre, Prof Anton Ficai**

Prof. A. Ozunu/ Words in honor of Prof. Liviu Literat at 92 years

Prof. Theodor Prisecaru, UPB Senate/ Greetings for organizers

Prof. Cristina Orbeci, CASM Dean/ Greetings for organizers

Prof. Ecaterina Andronescu, SICR founder/ Greetings for organizers

Prof Valeriu Jinescu, ASTR General Secretary/ Greetings for organizers

S.L. Cristina Todasca, President of SChR Food Chemistry Division/ Greetings for organizers

Prof. Tanase Dobre, President of SICR/ SICR at 25 years

**11:10-12:20**

**SICR/SICHEM Excellence Diploma to:**

Stefan Vuza, CHIMCOMPLEX; Maria Georgescu, UPB; Dan Donescu, ICECHIM; Misu Moscovici, ICCF; Iosif Schiketanz, UPB; Laurentiu Filipescu, UPB; Valeriu Jinescu, UPB; Serban Agachi, UBBC

**PLENARY LECTURES AND COMPANIES PRESENTATIONS**

**MICROSOFT TEAMS/ SICHEM'20**

**Chairpersons: Prof. Tanase Dobre, Prof. Anton Ficai, Prof. Anicuta Stoica**

**12:20-14:25**

12:20 – 13:05 **Plenary Lecture**

**Lombardo DOMENICO, *SOFT INTERACTION AND COLLOIDAL STABILITY IN NANOCARRIERS DRUG DELIVERY***

13:05 – 13:25 **Company Presentation**

**Mihaela DONI, Radu CLAUDIU FIERASCU, *ICECHIM – 70 YEARS OF CONTINUOUS RESEARCH IN CHEMISTRY AND CHEMICAL ENGINEERING***

13:25– 14:10 **Plenary Lecture**

**Sorin Costin BILDEA, *INTEGRATED PROCESS DESIGN***

14:10–14:25 **Company Presentation**

**Anca Daniela RAICIU, *HOFIGAL IS ONE OF THE FAMOUS BRAND NAMES FOR NATURAL PRODUCT***

**Session A Chemical and Biochemical Engineering**

**Chairpersons: Prof. Vasile Lavric, Asoc. Prof. Petrica Iancu/15:00-16:20**

**Prof. Danciu Tiberiu, Asoc. Prof. Oana Parvulescu/16:20-17:05**

**MICROSOFT TEAMS/ SICHEM'20**

15:00 – 15:25 **Keynote Lecture**

**Tanase DOBRE, *Fermentation bio combustibles***

15:25 – 15:40 **Oral Presentation**

**17 September, 2020**

**1. Niki Reza-Zadeh, Amaury Danican, Zaineb Trad, Jean-Pierre Fontaine, Christophe Vial,** *Mixing hydrodynamics in an anaerobic digester*

15:40 – 15:55 **Oral Presentation**

**2. Cristian E. Radu, Vasile Lavric,** *Energy saving in a crude distillation system by using preflash column – A case study*

15:55 – 16:05 **Oral Presentation**

**3. Voicu-Teodor Muica; Alexandru Ozunu; Zoltàn Török,** *Comparative life cycle impact assessment between the production of zinc from conventional concentrates versus Waelz oxides obtained from slags*

16:05 – 16:20 **Oral Presentation**

**4. Mustafa Şengör,** *Effect of frequency change in the horizontal movement of the collector electrode in electrospinning*

16:20 – 16:35 **Oral Presentation**

**5. Mihaela Popescu, Petrica Iancu, Valentin Pleşu, Sorin C. Bîldea, Cristina M. Todaşcă,** *Improving the efficiency of the supercritical CO<sub>2</sub> extraction process of cannabis sativa l. seed oil*

16:35–16:50 **Oral Presentation**

**6. Alina G. Ciufu, Cristian E. Raducanu, Oana Parvulescu, Tanase Dobre, Doinita R.,** *Sorption process in the static and dynamic system when retaining petroleum products on wool fibers*

16:50 – 17:05 **Oral Presentation**

**7. Ilie Ciprian, Oana Parvulescu, Cristian Raducanu, Dobre Tanase,** *Modeling of some cases of metal pickling*

**Session B Applied organic, inorganic and supramolecular chemistry**

**Chairpersons: Assoc. Prof. Daniela Istrati, Prof. Danut Vaireanu**

**MICROSOFT TEAMS/ SICHEM'20**

15:00 – 15:25 **Keynote Lecture**

**Vladimir-Lucian Ene,** *Searching For A New Positron Moderator: Rf-Magnetron Sputtered Nanostructured Thin Films*

15:25 – 15:40 **Oral Presentation**

**1. Ioana-Alina Ciobotaru, Florin-Mihai Benga, Dănuţ-Ionel Văireanu,** *Advantages And Disadvantages Of Rechargeable Batteries Reconditioning Versus Recycling*

15:40– 15:55 **Oral Presentation**

**2. Georgiana Cornelia Ispas, Valentin Rădiţoiu, Alina Rădiţoiu, Monica Florentina Raduly, Violeta Purcar, Raluca Manea, Luminiţa Eugenia Wagner,** *Influence Of The Sensitizer In TiO<sub>2</sub>-GO Composites On The Kinetics Of The Catalytic Photodecomposition Of Methylene Blue*

**17 September, 2020**

15:55 – 16:05 **Oral Presentation**

**3. Maria-Cristina Micu, Elena Badea, Marian Crudu, Cristina Carșote, Claudiu Șendrea, Novel Biotanning Agents And Nanoblends For Recyclable Automotive Leather**

16:05 – 16:20 **Oral Presentation**

**4. Bianca Pătrașcu, Codruța Popescu, Mihaela Matache, Anca Păun, Augustin Mădălan, Irina Zarafu, Petre Ioniță, Synthesis and Comparative Study of Some Aminyl and Hydrazyl Free Radicals and Their Congeners**

16:20 – 16:35 **Oral Presentation**

**5. Irina Petreanu, Violeta Niculescu, Amalia Soare, Mirela Drăgan, Stanica Enache, Ciprian Iacob, Mircea Teodorescu, Microwaves Assisted Synthesis Of Mesoporous Silica Nanoparticles**

16:35– 16:50 **Oral Presentation**

**6. Ana-Alexandra Sorescu, Alexandrina Nuta, Rodica-Mariana Ion, Valentin Rădițoiu, Ioana-Raluca Suica-Bunghez, Catalytic Degradation Of Direct Black 38 By Phytosynthesized Silver Nanoparticles**

16:50– 17:05 **Oral Presentation**

**7. Valeriana Pantea, Ala Fulga, Veaceslav Popa, Roman Rusnac, Ala Rusnac, Coordinating Compound Of Copper Chloride - {2 - [(2 - [(Methylsulfanyl) (Prop-2-En-1-Yl) Carboximidoyl] -Hydrazinylidene) Methyl] Phenolato} Di (Aqua) As Inhibitor Of Superoxide Radical**

17:05– 17:20 **Oral Presentation**

**8. Madalina E. Culica, Andreea L. Chibac-Scutaru, Violeta Melinte, Sergiu Coseri, Novel Support Based On Renewable Resources Doped With Cerium Oxide Nanoparticles With Technical Applications**

17:20– 17:35 **Oral Presentation**

**9. Andreea L. Chibac-Scutaru, Violeta Melinte, Madalina Culica, Sergiu Coseri, Synthesis, Organic Functionalization and Immobilization of CeO<sub>2</sub> Nanoparticles in Cellulose Matrix. Evaluation of their Photocatalytic Efficiency**

**Session C Biomaterials and composites in chemical and biochemical applications**

**Chairpersons: Prof. Ecaterina Andronescu, Prof. S. Savilov/15:00-15:25/15:55-16:40**

**Prof. Stefania Stoleriu, Prof. Alina Badanoiu/15:25-15.55/16:40-17:25**

**Prof. Nermin Demirkol, Prof. Catalin Zaharia /17:25-18.40**

**MICROSOFT TEAMS/ SICHEM'20**

15:00 – 15:25 **Keynote Lecture**

**Anca E. Slobozeanu, Ana M. Mocioiu, Dumitru V. Dragut, Bogdan St. Vasile, Adrian V. Surdu, Mythili Prakasam, Roxana M. Piticescu, Madalina L. Cursaru and Radu R. Piticescu, Rare earths doped zirconia nanomaterials: synthesis, processing and applications**



**17 September, 2020**

**15:25 – 15:40 Oral Presentation**

**1. Alexander N. Ulyanov, Hyun-Joon Shin, Dong-Seok Yang, Ki-jeong Kim, Natalia E. Pismenova, Konstantin I. Maslakov, Serguei V. Savilov, *Self-doped  $Pr_{1-x}MnO_{3+\delta}$  perovskites: electron structure and magnetic properties***

**15:40– 15:55 Oral Presentation**

**2. Sumeyye Cesur, Muhammet Emin Cam, Oguzhan Gunduz, *Controlled release of donopezil-loaded polyvinyl alcohol (PVA) microbubbles / nanoparticles using microfluidic t-junction device***

**15:55 – 16:10 Oral Presentation**

**3. Ayca Aydin, Songul Ulag, Burak Aksu, Cem Bulent Ustundag, Oguzhan Gunduz, *Production of drug reinforced electrospun nanofibers as a diabetic wound dressing material***

**16:10 – 16:25 Oral Presentation**

**4. Muhammed Enes Tasci, Sumeyye Cesur, Aybuke Gur, Eray Tabak, Oguzhan Gunduz, *Controlled release of risperidone loaded polylactic acid (pla) microparticles using electrospray***

**16:25 – 16:40 Oral Presentation**

**5. Ciprian Iacob, Taejun Yoo, James Runt, *Biobased polyfarnesene- molecular dynamics as studied by broadband dielectric spectroscopy and oscillatory shear rheology***

**16:40– 16:55 Oral Presentation**

**6. Teodora A. Iacob, Oana M. Ionescu, Maria Drăgan, Anton Fikai, Ecaterina Andronescu, Lenuța Profire, *Biological evaluation of chitosan bio-mimetic electrospun nanofibers embedded with arginine and propolis***

**16:55– 17:10 Oral Presentation**

**7. Mustafa Şengör, *Effect of frequency change in the horizontal movement of the collector electrode in electrospinning***

**17:10– 17:25 Oral Presentation**

**8. Alina Vladescu, Iulian Pana, Catalin Vitelaru, *Biodegradable coatings with controllable degradability***

**17:25– 17:40 Oral Presentation**

**9. Pana Iulian, Elena Ungureanu, Lidia R. Constantin, Cosmin M. Cotrut, Alina Vladescu, *In vitro bioactivity and degradation evaluation of biocompatible ag doped hydroxyapatite coatings***

**17:40– 17:55 Oral Presentation**

**10. Maria Marinela Lazăr, Maria Valentina Dinu, *Synthesis, characterization and sorption performances of chitosan-based composite cryogels***

**17:55– 18:10 Oral Presentation**

**17 September, 2020**

11. **Roxana Cristina Popescu, Bogdan Stefan Vasile, Roxana Trusca, Adina Boldeiu, Laurentiu Mogoanta, George Dan Mogosanu, Mihaela Temelie, Mihai Radu, Alexandru Mihai Grumezescu, Diana Savu, Ecaterina Andronescu**, *Gemcitabine-conjugated iron oxide nanoparticles for in vitro potentiated cytotoxic effects in human cancer cells*

18:10–18:25 **Oral Presentation**

12. **Vitalie Cobzac, Jian Mariana, Mostovei Andrei, Nacu Viorel**, *Bone augmentation with natural and synthetic materials*

18:25–18:40 **Oral Presentation**

13. **Jian Mariana, Cobzac Vitalie, Nacu Viorel**, *Fibroblasts isolation by volumetric regulation cycles*

**Session D Green applied chemistry and agro-resources valorization**

**Chairpersons: Prof. Cristian Simion, Prof. Anicuta Stoica**

**MICROSOFT TEAMS/ SICHEM'20**

15:00 – 15:25 **Keynote Lecture**

**Alina-Violeta Ursu, Gholamreza Djelveh, Alain Marcati, Anissa Awi, Zaineb Trad, Bogdan Trica, Philippe Michaud, Tanase Dobre, Christophe Vial**, *Microalgal biopolymers with complex interfacial and rheological properties: strategies of extraction-purification and examples of application*

15:25 – 15:40 **Oral Presentation**

1. **Maria Madalina Nichitoi, Raluca Isopescu, Ana Maria Josceanu, Vasile Lavric**, *Extraction of bioactive compounds from propolis. Influence of operating parameters*

15:40 – 15:55 **Oral Presentation**

2. **Mihaela Popescu, Petrica Iancu, Costin-Sorin Bildea, Valentin Pleșu, Cristina Todașcă**, *Carotenoids green extraction from tomatoes*

15:55–16:05 **Oral Presentation**

3. **Staicu V., Neagu M., Tomescu J.A., Popescu A.F.**, *Valorization of active principles from elecampane (Inula Helenium), in a concentrated and purified form, by solvent extractions and ultrasound treatment*

16:05–16:20 **Oral Presentation**

4. **Ana-Maria Brezoiu, Laura Bajenaru, Mihaela Deaconu, Daniel Lincu, Raul-Augustin Mitran, Cristian Matei, Daniela Berger**, *Antioxidant activity of polyphenolic extract from rosé wine grape marc loaded on functionalized mesoporous silica*

16:20–16:35 **Oral Presentation**

5. **Elisabeta Geană, Violeta Niculescu, Daniela Dutu, Anton Ficai, Ecaterina Andronescu**, *Valorization of apple pomace extract using mesoporous silica support with enhanced stability*

16:35–16:50 **Oral Presentation**

6. **Bogdan Trica, Victor Faraon, Naomi Tritcan, Diana Constantinescu Aruxandei**,

**17 September, 2020**

**Florin Oancea**, *Characterization of batch bottom spray fluid bed coating of seeds with sodium alginate using a minimum-run resolution V design*

16:50–17:05 **Oral Presentation**

7. **Inga Zinicovscaia, Nikita Yushin, Dmitrii Grozdov, Konstantin Vergel, Alexey Safonov**, *Removal of heavy metals from nickel-containing effluents using *Shewanella Xiamenensis* biofilm placed on zeolite*

**18 September, 2020**

**General Session,**

**Chairpersons: Prof. Tanase Dobre, Prof. Danciu Tiberiu /9:00-10:20 si 12:00-12:40**

**Assoc. Prof. Oguzdun Gunduz//10:20-11:00**

**Assoc. Prof. Adina Gavrila/10:20-11:00**

**Prof. Stefania Stoleriu, Prof Tanase Dobre/11:00-11:20**

**Prof. Tanase Dobre, Prof. Anton Ficai/11:20-12:00**

**MICROSOFT TEAMS/ SICHEM'20**

9:00 – 9:40 **Plenary Lecture**

**Vial CRISTOPHE**, *BIOLOGICAL METHANATION: A CHALLENGE IN CHEMICAL ENGINEERING*

9:40 – 10:20 **Company Presentation-ICCF**

**Irina LUPESCU**, *NATIONAL INSTITUTE FOR CHEMICAL-PHARMACEUTICAL R&D - CORE STAKEHOLDER OF THE ROMANIAN PHARMACEUTICAL RESEARCH*

10:20 – 11:00 **Plenary Lecture**

**Nermin DEMIRKOL**, *COMPARISON OF MECHANICAL AND BIOACTIVITY PROPERTIES OF NANO HYDROXYAPATITE COMPOSITES CONTAINING CERAMIC OXIDES*

11:00 – 11:20 **Company Presentation-CEPROCHIM**

**Doru Vladimir PUȘCAȘU, Jenica PACEAGIU**, *CEPROCIM – A PROACTIVE PARTNER IN ROMANIAN RESEARCH*

11:20 – 12:00 **Plenary Lecture**

**Serghei SAVILOV**, *SARK PLASMA SINTERING AS EFFECTIVE WAY FOR COMPACTIZATION OF CARBON NANOMATERIALS AND SOLIDE ELECTROLYTES FOR BATTERIES*

12:00 – 12:40 **Plenary Lecture**

**Fabrice GROS**, *ARTIFICIAL PHOTOSYNTHESIS FOR THE PRODUCTION OF SOLAR FUELS: FROM CHEMISTRY TO PHOTOREACTIVE SYSTEM ENGINEERING*

**18 September, 2020**

**Session A Chemical and biochemical engineering – POSTERS**

**Chairpersons: Prof Raluca Isopescu**

**Assoc. Prof. Mocanu Alexandra**

**MICROSOFT TEAMS/ SICHEM'20**

13:00 – 13:05

**1. Amaury Danican, Benoît Chezeau, Faten Dahak, Alina Violeta Ursu, Jean-Pierre Fontaine, Christophe Vial, *Experimental and numerical investigation of the mixing quality in bioreactors containing newtonian and non-newtonian fluid***

13:05 – 13:10

**2. Amaury Danican, Benoît Chezeau, David Duchez, Gwendoline Christophe, Alina Violeta Ursu, Jean-Pierre Fontaine, Christophe Vial, *Impact of turbulence on biohydrogen production under "dark fermentation" operating conditions***

13:10 – 13:15

**3. Baraa Ezzo, Alina-Violeta Ursu, Pierre Fontanille, Rawa Adbalah, Hajar Bahry, Christophe Vial, *Efficiency of mixed physical and electrochemical treatments on liquid effluents from an anaerobic digester***

13:15 – 13:20

**4. Gabriela Isopencu, Alina-Monica Mares, Gheorghita Jinescu, *Use of the three-phase fluidized bed for wastewater treatment***

13:20 – 13:25

**5. Andra Buçe, Dan Vasiliu, Oana Cristina Pârvulescu, Mihaela Mureșan, *Assessment of some heavy metals in M. Galloprovincialis BIVALVE molluscs from NW Black Sea shelf (Romania)***

13:25 – 13:30

**6. Gabriela Isopencu, Alexandra Mocanu, *Microbial rennin synthesis using different carbon sources***

13:30 – 13:35

**7. Anamaria Vartolomei, Ioan Calinescu, Adina-Ionuta Gavrila, Mircea Vinatoru, Timothy Mason, *Continuous flow reactor for ultrasound assisted enzymatic esterification***

13:35 – 13:40

**8. Doinita-Roxana Cioroiu Tirpan, Ancaelena E. Sterpu, Claudia I. Koncsag, Alina G. Ciufu, Tanase Dobre, *Sustainable approach in bioethanol production from brown algae***

13:40 – 13:45

**9. Alexandru Suciu, Georgeta Alexandru, Mariana Popescu, Dobre Tănase, *Freeze-drying of garlic. A comparative study with convective hot air-drying. Effect on alliin yield***

13:45 – 13:50

**18 September, 2020**

10. **Paula Postelnicescu, Raluca Isopescu**, *Temperature profile simulation for biodegradable polymer injection molding*

13:50 – 13:50

11. **Paula Postelnicescu, Anca Madalina Dumitrescu**, *Kinetic study on the controlled release of ciprofloxacin from polymer matrix tablets*

13:55 – 14:05

12. **Ramona Leordean, Alexandru Ozunu, Zoltán Török**, *Explosion risk assessment of ammonium nitrate storage in warehouses. Case study: The BEIRUT Disaster*

**Section B Applied organic, inorganic, and supramolecular chemistry in process engineering-Posters**

**Chairpersons: Prof. Anca Cojocaru, Assoc. Prof. Ioana Maior**

**MICROSOFT TEAMS/ SICHEM'20**

13:00 – 13:05

1. **Mirabela N. Foran, Sorin Aurel Dorneanu, Ioan M. Purcar, Petru Ilea**, *Enhancement of Iron Electrocorrosion Rate In Different Inorganic Electrolytes*

13:05 – 13:10

2. **Marian I. Frîncu, Sorin A. Dorneanu, Eniko Kovacs, Petru Ilea**, *Selective Electroextraction Of Sn-Pb From Cu Free Leaching Solution Obtained During The Recycling Of Waste Printed Circuit Boards Using The KBr - HBr System*

13:10 – 13:15

3. **Iuliana Mihalache, Daniel Bogosel, Răzvan Pascu, Anton Ficai**, *Carbon Dots for Enhanced Photoresponse of Self-Powered Sensor Based On Nanostructured Silicon*

13:15 – 13:20

4. **Ileana Mohanu, Ioana Gomoiu, Dan Mohanu, Roxana Fechet, Ionela Petre, Adriana Moanță, Nicoleta Cîrstea**, *Evaluation of the Behavior of Restoration Materials Experimentally Applied in Ecclesial Monuments Located in Cave Spaces*

13:20 – 13:25

5. **Marius-George Pârvan, Georgeta Voicu, Victor Opreșan Fruth**, *Cementitious Composites Containing Barium Titanate For Real Time Damage Assessment In Smart Structures*

13:25 – 13:30

6. **Amalia Ștefaniu, Eleonora-Mihaela Ungureanu, Liviu Bîrzan, Veronica Anăstăsoaie**, *In Silico Analysis Of Reactivity Parameters Of 1,3,4-Thiadiazole Derivatives*

13:30 – 13:35

7. **Amalia Ștefaniu, Mihaela Brînzei, Olga Iulian, Oana Istrate**, *Density Functional Theory (Dft) And Thermodynamics Calculations Of L-Valine And L-Serine*

13:35 – 13:40

8. **Roxana Truță, Simona Varvara, Sorin-Aurel Dorneanu, Petru Ilea**, *Mn And Fe Ions Effect on Zn Electrodeposition from Acidic Leaching Solutions Obtained by Zn-Mn Spent Batteries Recycling*

13:40 – 13:45

9. **Cristina Andreea Vișan, Alina Bădănoiu, Adrian Nicoară, Iulia Barcan**, *New Phosphate Cement For The Immobilization Of Hazardous Wastes With Heavy Metals Content*

13:45 – 13:50

**18 September, 2020**

10. **Ioana Maior, Ioana Maria Nicola, Ioana-Alina Ciobotaru, Anca Cojocar, Oana Cristina Pârvulescu**, *The Influence of the Operating Parameters on the Applications of the Titanium Passivation Process by Anodizing*

13:50 – 13:55

11. **Lenuta Stroea, Violeta Melinte, Andreea Laura Scutaru, Cristian Petcu, Tinca Buruiana**, *Structural And Morphological Characterization Of Some Plant Extract-Mediated Metallic And Metal Oxide Nanoparticles*

**Section C Biomaterials and composites in chemical and biochemical applications – POSTERS**

**Chairpersons: Assoc. Prof. Adina Gavrilă, Prof. Ovidiu Oprea**

**MICROSOFT TEAMS/ SICHEM'20**

13:00 – 13:05

1. **Petruta Preda, Marioara Avram, Diana Stan, Lorena-Andreea Mateescu, Oana Tutunaru, Iuliana Mihalache, Ana-Maria Enciu, Anton Fikai**, *Isolation and characterization of collagen from tails of *Hypophthalmichthys Molitrix* for use as biomaterial*

13:05 – 13:10

2. **Cosmin C. Mustaciosu, Roxana C. Popescu, Catalin Luculescu, Bogdan S. Calin, Irina A. Paun**, *Complex structures produced by two-photon polymerization for tissue regeneration*

13:10 – 13:15

3. **Raluca Manea, Violeta Purcar, Valentin Rădițoiu, Alina Rădițoiu, Monica Florentina Raduly, Cristian Andi Nicolae, Mihai Anastasescu, Georgiana Cornelia Ispas, Luminița Eugenia Wagner**, *Sol-gel thin films prepared with silane precursors, deposited on plastic substrates*

13:15 – 13:20

4. **Amalia Stefaniu, Lucia Pîrvu**, *Computed aided study on oral availability and bioactivity screening for luteolin derivatives*

13:20 – 13:25

5. **Toma Fistos, Anda Maria Baroi, Roxana Ioana Brazdis, Irina Fierascu, Irina Elena Chican, Radu Claudiu Fierascu**, *A versatile material of the XXI-st century: apatitic compounds with multifunctional properties*

13:25 – 13:30

6. **Iuliana-Marilena Andrei, Narcis-Catalin Anghel, Iuliana Spiridon**, *Novel materials based on natural polymers for drug delivery*

13:30 – 13:35

7. **Alexa-Maria Croitoru, Anton Fikai, Denisa Fikai, Roxana Trușcă, Georgiana Dolete, Ecaterina Andronescu, Stefan Claudiu Turculeț**, *Chitosan/graphene oxide nanocomposite membranes as adsorbents with applications in water purification*

13:35 – 13:40

8. **Iulia Ioana Lungu, Ecaterina Andronescu, Florian Dumitrache, Claudiu Fleaca, Angela Staicu, Simona Nistorescu, Mihaela Balas**, *Potentially therapeutic nanostructures for breast cancer treatment*

13:40 – 13:45

9. **Angela Spoială, Cornelia I. Ilie, Denisa Fikai, Anton Fikai, Miruna S. Stan, Roxana D. Trușcă, Ovidiu Oprea, Ecaterina Andronescu, Lia M. Dițu**, *Preparation and characterization of silver nanoparticles/ alginate membranes for skin tissue engineering*

**18 September, 2020**

13:45 – 13:50

10. **Liliana Marinescu, Ecaterina Andronescu, Anton Fikai, Denisa Fikai, Alina-Maria Holban, Ovidiu Oprea**, *Functionalization routes with siloxanes and silver nanoparticles on the stone substrate*

13:50 – 13:55

11. **Angela Spoială, Cornelia I. Ilie, Denisa Fikai, Anton Fikai, Roxana D. Truşcă, Ecaterina Andronescu**, *TiO<sub>2</sub> nanoparticles for wastewater treatment*

13:55 – 14:00

12. **Georgiana-Mădălina Popa (Lemnar), Roxana Doina Trusca; Cornelia-Ioana Ilie; Roxana Elena Țiplea; Denisa Fikai, Ovidiu Oprea; Anicuța Stoica-Guzun; Anton Fikai, Lia-Mara Ditu**, *Bacterial cellulose dressings loaded with antibiotics for the treatment of wounds*

14:00 – 14:05

13. **A.V. Paduraru, A. Musuc, B.S. Vasile, E. Andronescu, O. Oprea, R. Trusca**, *New cerium substituted hydroxyapatites for biological fluorescence labeling*

14:05 – 14:10

14. **Georgiana Dolete, Alexa-Maria Croitoru, Anton Fikai, Ionela-Andreea Neacșu, Adrian-Ionuț Nicoară, Bogdan-Ștefan Vasile, Roxana Truşcă, Ecaterina Andronescu**, *Synthesis and characterization of a multifunctional nanocomposite material based on Fe<sub>3</sub>O<sub>4</sub> and hydroxyapatite for bone cancer therapy*

**Section D Green applied chemistry and agro-resources valorization**

**Chairpersons: Prof. Anicuta Stoica, Assoc. Prof. Oana Parvulescu**

**MICROSOFT TEAMS/ SICHEM'20**

13:00 – 13:05

1. **Sonia Benacer, Alina-Violeta Ursu, Abdelhamid Elias, Frédéric Brun, Fabrice Audonnet, Christophe Vial**, *Optimization of olive oil mill wastewater treatment by means of electrocoagulation*

13:05 – 13:10

2. **Neagu, A.M., Luntraru, C.M., Bîra (Popescu) A.F., Tomescu, J.A., Ionescu (Bordei) N.**, *Characterization of white willow by hplc and spectrophotometric methods*

13:10 – 13:15

3. **Raluca Sanda Komartin, Marta Stroescu, Nicoleta Chira, Raluca Stan, Anicuta Stoica-Guzun**, *Lallemantia iberica seeds oil extraction*

13:15 – 13:20

4. **Petronela Matei, Alexandru Ștefan, Anicuta Stoica-Guzun**, *Blackberries seed oil extraction*

13:20 – 13:25

5. **Natalița Ionescu (Bordei), Andreea-Miruna Neagu, Mariana Popescu**, *Plant oils used in the development of lipid nanotransporter (nlc) - based hydrogels for varicose veins treatment – composition study*

13:25 – 13:30

6. **Alice Grigore, Lucia Pirvu, Corina Bubueanu, Georgeta Neagu**, *Potential medicinal value of hemp selective fractions*

13:30 – 13:35

7. **Mariana Minuț, Mihaela Roșca, Mariana Diaconu, Petronela Cozma, Maria**

**18 September, 2020**

**Gavrilescu**, *Using bacteria to enhance the phytoremediation process applied to soils polluted with inorganic pollutants*

13:35 – 13:40

**8. Ionela Cătălina Vasilachi, Mihaela Roșca, Mariana Minuț, Petronela Cozma, Maria Gavrilescu**, *Lead-inhibitory effects in tolerance and early growth of cereals*

13:40 – 13:45

**9. Dana-Mihaela Asiminicesei, Ionela Cătălina Vasilachi, Petronela Cozma, Mihaela Roșca, Mariana Minuț, Maria Gavrilescu**, *Toxicity of single and combined ions of lead and cadmium for lettuce (*Lactuca sativa* Attraction)*

13:45 – 13:50

**10. Daniela Simina Ștefan, Mircea Stefan**, *Afforestation a most efficient method to reduce CO<sub>2</sub>*

13:50 – 13:55

**11. Andreea Dima, Carmen Mateescu, Oana Pârvulescu**, *Assesing an advanced pretreatment method on the biodegradability of sunflower seed cake to biogas*

13:55 – 14:00

**12. Aila-Elmaz Geambulă, Tănase Dobre, Claudia-Irina Damian**, *Experimental investigation methods of polymer degradation*



