



# SICHEM 2020

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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*

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**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	GREATINGS FOR ORGANIZERS: PROF. THEODOR PRISECARU, UPB SENATE			
10:25-10:35	GREATINGS FOR ORGANIZERS: PROF. CRISTINA ORBECI, CASM DEAN			
10:35-10:45	GREATINGS FOR ORGANIZERS: PROF ECATERINA ANDRONESCU, SICR FOUNDER			
10:45- 10:55	GREATINGS FOR ORGANIZERS: PROF VALERIU JINESCU, ASTR GENERAL SECRETARY			
10:55-11:05	GREATINGS 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> <b>Plenary Lectures and Companies Presentations</b>			
<b>15:00 – 19:00</b>	<b>Parallel Sessions</b> <b>Keynote Lectures and Oral Presentations</b>			
	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

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

## CONFERENCE PROGRAMME ORAL COMMUNICATIONS

**17 September, 2020**

**10:00-11:10**

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

**Chair / Co-chair: 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**

**Chair / Co-chair: 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**

**Chair / Co-chair: Prof. Vasile Lavric, Conf. Petrica Iancu/15:00-16:20**

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

**MICROSOFT TEAMS/ SICHEM'20**

15:00 – 15:25 **Keynote Lecture**

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

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15:25 – 15:40 **Oral Presentation**

**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; Zoltán 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**

**Chair / Co-chair: Conf. Daniela Istrate, 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*

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*Methylene Blue*

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**

**Chair / Co-chair: Prof. Ecaterina Andronescu, Prof. S. Savilov/15:00-16:20**

**Prof. Stefania Stoleriu, Prof. Alina Badanoiu/16:20-17.35**

**Prof. Nermin Demirkol, Prof. Constantin Zaharia /17:35-18.35**

**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.**



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**Piticescu**, *Rare earths doped zirconia nanomaterials: synthesis, processing and applications*

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 donepezil-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*

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**17:55– 18:10 Oral Presentation**

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**

**Chair / Co-chair: 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 ehecampane (*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**

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

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**General Session,**

**Chair / Co-chair: Prof. Tanase Dobre, Prof. Tiberiu Danciu**

**Prof. Ecaterina Andronescu, Prof. Anton Ficai**

**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*

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

**Chair / Co-chair: Prof. Raluca Isopescu, Prof. Ioan Calinescu**

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**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 Bucșe, 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 Suci, 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

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

13:50 – 13:50

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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**

**Chair / Co-chair: 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

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

13:50 – 13:55

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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**

**Chair / Co-chair: Assoc. Prof. Adina Gavrila, 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 and TiO<sub>2</sub> sensitized with iron (III) phthalocyanine*

13:15 – 13:20

4. **Amalia Stefanu, 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*

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*

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*the stone substrate*

13:50 – 13:55

11. **Angela Spoială , Cornelia I. Ilie, Denisa Ficai, Anton Ficai, 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 Ficai, Ovidiu Oprea; Anicuța Stoica-Guzun; Anton Ficai, 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 Ficai, 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  
Chair / Co-chair: Prof. Anicuta Stoica, Prof. Claudia-Irina Damian**

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

13:35 – 13:40

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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 Ștefan**, *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*