

**INTERNATIONAL CONFERENCE**

**CHIMIA 2024**

**“NEW TRENDS IN APPLIED CHEMISTRY”**



**PROGRAM**

*May 30 – June 1, 2024*  
Constanta, ROMANIA



## **Foreword for the 10<sup>th</sup> Conference “CHIMIA” 2024**

*Chimia 2024 is part of an on-going Conference series, the ten in the cycle CHIMIA, focuses on applied chemistry problems. This conference was organized by our department starting with 2000.*

*The conference abstracts are published in the volume of “International Conference “Chimia”. Book of Abstracts”, a journal with a periodicity of two years (ISSN 2360-3941). The full-text manuscripts can be published in “Ovidius University Annals of Chemistry”, an open access journal indexed in several international databases, like Emerging Sources Citation Index (ESCI), Chemical Abstracts Service (CAS), Directory of Open Access Journals (DOAJ), Index Copernicus (IC) etc.*

*At this meeting you can present your most recent research achievements and ideas. The organizers intend to create a warm and friendly atmosphere for stimulating the scientific discussions and confrontations.*

*Constanta is the second largest city in Romania and the biggest port at the Black Sea, an important cultural and economic centre, worth exploring for its archaeological treasures and the atmosphere of the old town centre. The name of Constanta dates from the Byzantine ruling when Tomis appears in Byzantine and later Italian documents, as Constantia, after an important imperial Roman family.*

*We wish you all a fruitful conference in Constanta with many new ideas and contacts all over Europe. We look forward to meet each of you at the CHIMIA 2024!*

*Sincerely,  
Viorica Popescu  
Conference Chairperson  
Chimia 2024 Organizing Committee*

# **CONFERENCE PROGRAM**

**Thursday – May 30, 2024**

**8<sup>30</sup> – 9<sup>30</sup>**     **Registration**, *Bavaria Blu Hotel, Central Hall*

**9<sup>30</sup> – 9<sup>50</sup>**     **Opening ceremony**, *Bavaria Blu Hotel, Conference Room*

**Welcome addresses.**

- Rector of „Ovidius” University of Constanta
- Conference CHIMIA 2024 Chairperson

**9<sup>50</sup> – 10<sup>30</sup>**     **Plenary session (I)**, *Bavaria Blu Hotel, Conference Room*

**PL1. Andrei MEDVEDOVICI**, *University of Bucharest, Romania*

**10<sup>30</sup> – 11<sup>00</sup>** **KN1. Nicoleta VÎRVOREA, DOBROGEA GRUP**

*Consumer chemistry with our products – the magical recipe for success*

**11<sup>00</sup> – 11<sup>20</sup>** *Coffee break*

**11<sup>20</sup> – 12<sup>40</sup>**     **Plenary session (II)**, *Bavaria Blu Hotel, Conference Room*

**PL2. Eleonora-Mihaela UNGUREANU**, *UNST Politehnica of Bucharest, Romania*

**PL3. Timur CHIȘ**, *University of Petroleum - Gases of Ploiesti, Romania*

**12<sup>40</sup> – 13<sup>40</sup>**     **Oral sessions (I)**, *Bavaria Blu Hotel, Conference Room*

**13<sup>40</sup> – 14<sup>40</sup>** *Lunch*

**14<sup>40</sup> – 16<sup>20</sup>**     **Oral sessions (II)**, *Bavaria Blu Hotel, Conference Room*

**16<sup>20</sup> – 16<sup>40</sup>** *Coffee break*

**NOMARES Workshop**

*New materials for electrochemical recognition of inorganic and biological species*

**16<sup>40</sup> – 17<sup>20</sup>**     **Plenary session NOMARES Workshop**, *Bavaria Blu Hotel, Conference Room*

**PL4. Vesna MIŠKOVIĆ-STANKOVIĆ**, *University Union-Nikola Tesla, Belgrade, Serbia*

**17<sup>20</sup> – 17<sup>40</sup>**     **Oral sessions NOMARES Workshop**, *Bavaria Blu Hotel, Conference Room*

**17<sup>40</sup> – 18<sup>30</sup>**     **Posters session (I)**, *Bavaria Blu Hotel, Conference Room*

## **Friday – May 31, 2024**

**9<sup>00</sup> – 11<sup>00</sup> Plenary session (III), Bavaria Blu Hotel, Conference Room**

**PL5. Stefano GIROTTI, Michele PROTTI, Laura MERCOLINI, Luca FERRARI, University of Bologna, Italy**

**PL6. Cristina Ileana COVALIU-MIERLA, Gigel PARASCHIV, Sorin Stefan BIRIS, UNST Politehnica of Bucharest, Romania**

**PL7. Daniela BERGER, Simona IONITA, Roxana-Cristina POPESCU, Mihaela DEACONU, Mona Mihăilescu, Nicu Tarbă, Cristian MATEI, Liviu CRĂCIUN, Diana-Iulia SAVU, UNST Politehnica of Bucharest, Romania**

**11<sup>00</sup> – 12<sup>00</sup> Oral sessions (III), Bavaria Blu Hotel, Conference Room**

*12<sup>00</sup> – 12<sup>20</sup> Coffee break*

**12<sup>20</sup> – 13<sup>20</sup> Oral sessions (IV), Bavaria Blu Hotel, Conference Room**

*13<sup>20</sup> -15<sup>00</sup> Lunch*

**15<sup>00</sup> – 16<sup>40</sup> Oral sessions (V), Bavaria Blu Hotel, Conference Room**

**16<sup>40</sup> – 17<sup>30</sup> Posters session (II), Bavaria Blu Hotel, Conference Room**

**17<sup>30</sup> – 18<sup>00</sup> Closing ceremony, Bavaria Blu Hotel, Conference Room**

**19<sup>30</sup> – Gala Dinner, Bavaria Blu Hotel**

## **Saturday – June 1, 2024**

**10<sup>00</sup> Social Program**

**May 30, 2024**

**8<sup>30</sup> – 9<sup>30</sup>**      **Registration, Bavaria Blu Hotel, Central Hall**

**9<sup>30</sup> – 9<sup>50</sup>**      **Opening ceremony, Bavaria Blu Hotel, Conference Room**

**PLENARY LECTURES (I)**

*9<sup>50</sup> – 12<sup>40</sup>, Bavaria Blu Hotel, Conference Room*

**Chairpersons:**

**Viorica POPESCU**, *Ovidius University of Constanta, Romania*

**Ionela POPOVICI**, *Ovidius University of Constanta, Romania*

**PL1.**      **Andrei MEDVEDOVICI**, *University of Bucharest, Romania*

CURRENT TRENDS IN CHROMATOGRAPHY AND  
RELATED TECHNOLOGIES

**KN1.**      **Nicoleta VÎRVOREA**, *DOBROGEA GRUP, Romania*

CONSUMER CHEMISTRY WITH OUR PRODUCTS – THE  
MAGICAL RECIPE FOR SUCCESS

*11<sup>00</sup> – 11<sup>20</sup> Coffee break*

**PL2.**      **Eleonora-Mihaela UNGUREANU**, *UNST Politehnica of  
Bucharest, Romania*

ON RHODANINE-AZULENE ELECTROCHEMISTRY

**PL3.**      **Timur CHIS**, *University of Petroleum–Gases of Ploiesti,  
Romania*

CERTAINTY AND UNCERTAINTY IN PETROLEUM  
AND PETROCHEMISTRY

**ORAL SESSIONS (I)**

*12<sup>40</sup> – 13<sup>40</sup>, Bavaria Blu Hotel, Conference Room*

**Chairpersons:**

**Călin DELEANU**, *Center of Organic Chemistry "C.D. Nenițescu" of the Romanian Academy*

**Timur CHIȘ**, *University of Petroleum-Gases of Ploiesti, Romania*

**Section A: Natural and Synthetic Compounds**

**OA1.** Catalin-Paul CONSTANTIN

ELECTROACTIVE POLYMERS CONTAINING DOUBLE ELECTRON DONOR UNITS WITH POTENTIAL USE IN SMART WINDOW APPLICATIONS

**OA2.** Robert I. BOTEĂ, Augustin MĂDĂLAN

STRATEGIC SYNTHESIS OF MONO- AND BINUCLEAR COMPLEXES USING POLYDENTATE LIGANDS WITH EXTENDED p SYSTEMS

**OA3.** Mihaela DEACONU, Mădălina GHIUȚĂ, Layla ZIKO, Nada SEDKY, Ana-Maria PRELIPCEAN, Ana-Maria SECIU-GRAMA, Ana-Maria BREZOIU, Cristian MATEI, Daniela BERGER

VACCINIUM SP. EXTRACTS ENCAPSULATED IN HOLLOW SILICA SPHERES – ADJUVANTS IN BACTERIAL INFECTIONS

**13<sup>40</sup> – 14<sup>40</sup> Lunch**



## **ORAL SESSIONS (II)**

14<sup>40</sup> – 16<sup>20</sup>, Bavaria Blu Hotel, Conference Room

**Chairpersons:**

**Gabriela-Iulia DAVID**, *University of Bucharest, Romania*

**Katya PEYCHEVA**, *Medical University of Varna, Bulgaria*

### **Section A: Natural and Synthetic Compounds**

**OA4.** Codruta FRINCUL, Elena BICU, Catalina-Ionica CIOBAN, Sergiu SHOVA, Dalila BELEI

AN EFFICIENT METHOD FOR THE C-ALKYLATION OF  
1,2,3-TRIAZOLES

**OA5.** Mădălina-Roxana BIRTEA, Elena BÎCU, Sergiu SHOVA, Dalila BELEI

1,3-DIPOLE CYCLOADDITIONS OF DIMETHYL  
MALEATE TO N-PHENACYL-4-METHYLPYRIDINIUM  
BROMIDE

### **Section B: Analytical and Environmental Chemistry**

**OB1.** Laurentiu-Valentin SOROAGA, Cecilia ARSENE, Romeo-Iulian OLARIU

THE INFLUENCE OF COLLISION GAS FLOW AND  
AEROSOL DILUTION ON THE LOQ OF AN ICP-MS  
METHOD TAILORED FOR ATMOSPHERIC PARTICLES  
ANALYSIS

**OB2.** Silviu-Laurentiu BADEA, Nicolae-Ionut CRISTEA, Violeta-Carolina NICULESCU, Yevheniia KOROLOVA, Costel BUMBAC, Oana-Romina BOTORAN, Roxana-Elena IONETE

BIODEGRADATION OF DIFFERENT  
HEXACHLOROCYCLOHEXANE ISOMERS BY  
CLOSTRIDIUM PASTEURIANUM. STUDY OF  
KINETICS AND METABOLITES

- OB3.** Maria-Lorena JINGA, Daniel PREDA, Mihaela DONI, Lucian-Gabriel ZAMFIR, Ana-Maria GURBAN, Gabriela-Iulia DAVID  
OPTIMIZATION STUDY FOR INDIRECT  
VOLTAMMETRIC DETERMINATION OF CORTISOL

**16<sup>20</sup> – 16<sup>40</sup> Coffee break**

### **Workshop NOMARES**

#### **PLENARY LECTURES (II)**

*16<sup>40</sup> – 17<sup>20</sup> Bavaria Blu Hotel, Conference Room*

**Chairpersons:**

**Eleonora-Mihaela UNGUREANU**, *UNST Politehnica of Bucharest, Romania*

**Gabriela STANCIU**, *Ovidius University of Constanta, Romania*

- PL4.** Vesna MIŠKOVIĆ-STANKOVIĆ, *University Union-Nikola Tesla, Belgrade, Serbia*

POLY(VINYL ALCOHOL) HYDROGELS FOR MEDICAL  
APPLICATIONS

#### **ORAL SESSIONS NOMARES Workshop**

*17<sup>20</sup> – 17<sup>40</sup>, Bavaria Blu Hotel, Conference Room*

- ON1.** Madalina Marina HRUBARU, Alina VASILE (CORBEL), Amalia STEFANIU, Eleonora-Mihaela UNGUREANU

DENSITY FUNCTIONAL THEORY-BASED  
ELECTROCHEMICAL MODELS FOR  
TETRAHYDROACRIDINES

**POSTERS (I)**

17<sup>40</sup> – 18<sup>30</sup>, Bavaria Blu Hotel, Conference Room

**Chairpersons:**

**Andrei MEDVEDOVICI**, University of Bucharest, Romania

**Semaghiul BIRGHILĂ**, Ovidius University of Constanta, Romania

**Section A: Natural and Synthetic Compounds**

- PA1.** Ștefania ARDELEANU, Mihaela BADEA, Anca DUMBRAVĂ,  
Rodica OLAR  
SYNTHESIS AND PHYSICO-CHEMICAL  
CHARACTERISATION OF COPPER(II) COMPLEXES  
WITH MIXED LIGANDS (AMINO ACIDS AND  
TRIAZOLOPYRIMIDINE DERIVATIVES)
- PA2.** Tudor JULA, Cătălin MAXIM, Mihaela BADEA, Anca  
DUMBRAVĂ, Rodica OLAR  
COPPER(II) COMPLEXES WITH N-BASED DONOR  
LIGANDS DESIGNED AS BIOLOGICALLY ACTIVE  
SPECIES
- PA3.** Andra ANDREI, Rodica OLAR, Cătălin MAXIM, Mihaela  
BADEA  
SYNTHESIS AND PHYSICO-CHEMICAL  
CHARACTERISATION OF COPPER(II) COMPLEXES  
WITH BENZIMIDAZOLE DERIVATIVES
- PA4.** Diana AMĂRĂZEANU, Andra ANDREI, Rodica OLAR, Cătălin  
MAXIM, Mihaela BADEA  
SYNTHESIS AND PHYSICO-CHEMICAL  
CHARACTERISATION OF NEW COMPLEXES WITH  
PHENANTHROLINE DERIVATIVES
- PA5.** Ioana-Alexandra TROFIN, Radu-Dan RUSU, Catalin-Paul  
CONSTANTIN, Mariana-Dana DAMACEANU  
FLUORINATED HYPERBRANCHED POLYIMIDES FOR  
FREE-STANDING MEMBRANES

- PA6.** Gabriela STANCIU, Simona LUPSOR, Ramona ROTARIU  
INVESTIGATION OF THE ANTIOXIDANT PROFILE OF THE WHITE TRUFFLE SPECIES *TUBER MAGNATUM PICO* FROM ROMANIA
- PA7.** Gabriela STANCIU, Simona LUPSOR, Elena OANCEA  
EVALUATION OF ANTIOXIDANT ACTIVITY IN RELATION TO PHENOLIC CONTENT AND MINERAL PROFILE OF VARIOUS *LILIUM* SPP. BULBS MACERATES
- PA8.** Gabriela STANCIU, Simona LUPSOR, Ramona ROTARIU  
COMPARATIVE STUDY OF THE ANTIOXIDANT ACTIVITY AND MINERAL PROFILE OF ROSEMARY FROM THE AREA OF DOBROGEA AND THE COASTAL AREA OF BULGARIA

### **Section B: Analytical and Environmental Chemistry**

- PB1.** Alina-Giorgiana NEGRU, Laurentiu-Valentin SOROAGA, Romeo-Iulian OLARIU, Cecilia ARSENE  
A COST-EFFECTIVE ICP-MS METHOD FOR TOTAL METALS CONTENT ANALYSIS IN SIZE-RESOLVED ATMOSPHERIC PARTICLES. POTENTIAL HEALTH IMPLICATIONS
- PB2.** Gabriela Iulia DAVID, Teodora Maria SAVU, Mihaela-Carmen CHEREGI, Emilia-Elena IORGULESCU, Hassan NOOR  
SENSITIVE RIFAMPICIN VOLTAMMETRIC DETERMINATION AT THE COST-EFFECTIVE PENCIL GRAPHITE ELECTRODE
- PB3.** Mihaela-Carmen CHEREGI, Iulia-Gabriela DAVID, Ana-Maria DOBRE, Victor DAVID  
VOLTAMMETRIC BEHAVIOR OF TROLOX FOR ESTIMATION OF THE ANTIOXIDANT CAPACITIES OF TOCOPHEROLS IN PHARMACEUTICALS

- PB4.** Gabriela-Iulia DAVID, George-Eduard FOLTOZAN, Mihaela-Carmen CHEREGI, Emilia-Elena IORGULESCU, Adriana GHEORGHE, Hassan NOOR  
LISINOPRIL VOLTAMMETRIC INVESTIGATION
- PB5.** Gabriela-Iulia DAVID, Adriana GHEORGHE, Mihaela-Carmen CHEREGI, Emilia-Elena IORGULESCU  
UV-VIS SPECTROMETRIC ANALYSIS OF BINARY MIXTURES OF BIOLOGICAL AND PHARMACEUTICAL IMPORTANT COMPOUNDS
- PB6.** Maria Lorena JINGA, Daniel PREDA, Gabriel-Lucian RADU, Petruța OANCEA, Adina RĂDUCAN  
THE INFLUENCE OF CAFFEIC ACID IN LACCASE-DIPYRIDAMOLE SYSTEM
- PB7.** Daniel PREDA, Maria Lorena JINGA, Gabriel-Lucian RADU, Gabriela-Iulia DAVID  
DISPOSABLE MIP-BASED ELECTROCHEMICAL SENSOR FOR SENSITIVE DETERMINATION OF DYPYRIDAMOLE
- PB8.** Daniel PREDA, Anca MATEI, Mihaela-Carmen CHEREGI, Emilia-Elena IORGULESCU, Gabriel-Lucian RADU, Gabriela-Iulia DAVID  
OXYTETRACYCLINE ANALYSIS AT DISPOSABLE PENCIL GRAPHITE ELECTRODE
- PB9.** Ioana-Aspasia BENTOIU (SIMERIA), Cristina ICHIM (VANGHELE), Lucica BARBEȘ  
GEOTECHNICAL CHARACTERISTICS OF THE ROMANIAN COASTAL ZONE - INSIGHTS FROM FIELD AND LABORATORY RESEARCH
- PB10.** Stanislava GEORGIEVA, Angelika GEORGIEVA, Temenuga TRIFONOVA  
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) IN BIVALVES (*MYTILUS GALLOPROVINCIALIS*) FROM THE BULGARIAN BLACK SEA COAST AND ASSESSMENT OF POSSIBLE HUMAN HEALTH RISK

- PB11.** Nicoleta MATEI, Semaghiul BIRGHILA, Simona DOBRINAS, Alina SOCEANU, Viorica POPESCU  
METHOD VALIDATION FOR DETERMINATION OF COPPER IN HAIR SAMPLES THROUGH ATOMIC ABSORPTION SPECTROMETRY
- PB12.** Simona DOBRINAS, Semaghiul BIRGHILA, Nicoleta MATEI, Alina SOCEANU, Viorica POPESCU, Elda CALIL  
COMPARATIVE DIGESTION PROCEDURES USED FOR THE DETERMINATION OF Cd, Cr and Pb CONTENT IN BABY FOOD
- PB13.** Violeta-Carolina NICULESCU, Silviu-Laurentiu BADEA, Laurentiu ASIMOPOLOS, Eugen Laurentiu NICULICI, Violeta-Monica RADU  
MAGNETIC BIOCHAR FROM WALNUT SHELLS MODIFIED WITH CATIONIC SURFACTANT
- PB14.** Nicoleta MATEI, Semaghiul BIRGHILA, Simona DOBRINAS, Alina SOCEANU, Viorica POPESCU, Roxana PRICOPIE  
QUALITY EVALUATION OF EDIBLE OILS AVAILABLE IN ROMANIAN LOCAL MARKET
- PB15.** Maria COVEL, Dana PERNIU, Cristina BOGATU, Camelia DRAGHICI, Anca DRAGHICI  
EDUCATIONAL INITIATIVES TO FACE PLANETARY BOUNDARIES CAUSED BY PLASTIC RELEASE IN ENVIRONMENT
- PB16.** Maria COVEL, Cristina BOGATU, Dana PERNIU, Ioana TISMANAR, Anca DUTA, Hermine STROESCU, Madalina NICOLESCU, Jose Maria CALDERON MORENO, Irina ATKINSON, Mariuca GARTNER  
VIS-ACTIVE PHOTOCATALYTIC THIN FILM BEADS FOR WASTEWATER TREATMENT
- PB17.** Gabriel DOBRICĂ, Naliana LUPASCU, Carmen MAFTEI, Ionela CARAZEANU POPOVICI  
CURRENT CHEMISTRY OF NUNTASI LAKE AND ITS TEMPORAL CHANGES

**Section C: Physical Chemistry**

- PC1.** Mihaela SILION, Daniela IONITA, Mariana CRISTEA  
STRUCTURAL INVESTIGATIONS OF POLYESTER RESINS WITH ANTHRACENE-PROTECTED MALEIMIDE GROUPS USING MASS SPECTROMETRY AND THERMAL ANALYSES
- PC2.** Aycan ALTUN KAVAKLI, Osman Nuri ŞARA, Mioara-Jeanina LUNGU, Sibel OSMAN  
THERMOPHYSICAL AND EXCESS PROPERTIES OF BINARY BLENDS OF BIODIESEL WITH DIETHYL ETHER, DIETHYLENE GLYCOL DIMETHYL ETHER AND DIMETHYL CARBONATE AT DIFFERENT TEMPERATURES

**NOMARES Workshop**

- PN1.** Irinela CHILIBON, Ovidiu-Teodor MATICA, Cristina VASILIU, Gabriela STANCIU, Elena DIACU, Eleonora-Mihaela UNGUREANU  
STUDY OF SENSITIVE ELECTRODES BASED ON COMPLEXING AZULENE POLYMER FILMS
- PN2.** Elena Valentina IONITA, Alina Giorgiana BROTEA, Ovidiu-Teodor MATICA, Magdalena-Rodica BUJDUVEANU, Francis Aurelien NGOUNOU KAMGA, Eleonora-Mihaela UNGUREANU  
OPTICAL AND ELECTROCHEMICAL EXPERIMENTS FOR Hg(II) ANALYSIS IN SOLUTION AND ON AZULENE-PHENYLOXAZOLONE-CMEs
- PN3.** Maria-Francesca TICULESCU, Anastasia BURLACIOC, Madalina-Marina HRUBARU, Francis Aurelien NGOUNOU KAMGA, Elena DIACU, Eleonora-Mihaela UNGUREANU  
CHEMICALY MODIFIED ELECTRODES BASED ON SEVERAL AZULENYL-PHENYLOXAZOLONE FOR Cu(II) ANALYSIS

- PN4.** Cecilia LETE, Mariana MARIN, Sorina Alexandra LEAU, Stelian LUPU  
DEVELOPMENT OF SENSITIVE NANOCOMPOSITE MATERIALS FOR BIOLOGICALLY ACTIVE COMPOUNDS
- PN5.** Amalia STEFANIU, Alina-Giorgiana BROTEA, Ovidiu-Teodor MATICA, Oana ENACHE, Gabriela STANCIU, Eleonora-Mihaela UNGUREANU  
OPTICAL EXPERIMENTS AND DFT CALCULATIONS FOR AZULENE-PHENYLOXAZOLONES
- PN6.** Cornelia Elena MUȘINĂ (BORȘARU), Alina-Giorgiana BROTEA, Madalina PANDELE, Roxana TRUSCA, Mihaela CRISTEA, Eleonora-Mihaela UNGUREANU  
MODIFIED ELECTRODES BASED ON ETHENE-2,1-DIYLTETRATHIOPHENE AZULENE DERIVATIVE FOR HEAVY METALS ANALYSIS
- PN7.** Andreea DRĂGOI BRÎNZA, Raluca Ioana VAN STADEN, Damaris Cristina GHEORGHE, Gabriela STANCIU  
DETERMINATION OF EICOSAPENTANOIC ACID ETHYL ESTER IN THE LIVER OF STINGRAY
- PN8.** Andreea-Elena DORNEANU, Raluca-Ioana VAN STADEN, Catalina CIOATES NEGUT, Gabriela STANCIU  
DETERMINATION OF HUMIC ACID IN SAPROPEL USING A NEW STOCHASTIC SENSOR

*The posters will be displayed on May 30, between 12:00 – 16:00, before the poster's session.*



**May 31, 2024**

**PLENARY LECTURES (III)**

*9<sup>00</sup>– 11<sup>00</sup>, Bavaria Blu Hotel, Conference Room*

**Chairpersons:**

**Cristina BOGATU**, *Transilvania University of Brasov, Romania*

**Mihaela CHEREGI**, *University of Bucharest, Romania*

**PL5. Stefano GIROTTI, Michele PROTTI, Laura MERCOLINI, Luca FERRARI**

NEW PSYCHOACTIVE SUBSTANCES (NPS): EDUCATION  
AND RISK PREVENTION THROUGH INNOVATIVE  
PEDAGOGICAL MODELS FOR STUDENTS

**PL6. Cristina Ileana COVALIU-MIERLA, Gigel PARASCHIV, Sorin Stefan BIRIS**

CURRENT APPLICATION OF NANOTEHNOLOGY IN  
WASTEWATER TREATMENT

**PL7. Daniela BERGER, Simona IONITA, Roxana-Cristina POPESCU, Mihaela DEACONU, Mona Mihăilescu, Nicu Tarbă, Cristian MATEI, Liviu CRĂCIUN, Diana-Iulia SAVU**

DRUG DELIVERY SYSTEMS BASED ON FUNCTIONALIZED  
MESOPOROUS SILICA FOR CANCER THERAPY

**ORAL SESSIONS (III)**

**11<sup>00</sup> -12<sup>00</sup>** *Bavaria Blu Hotel, Conference Room*

**Chairpersons:**

**Daniela BERGER**, *UNST Politehnica of Bucharest, Romania*

**Anca DUMBRAVĂ**, *Ovidius University of Constanta, Romania*

**Section C: Physical Chemistry**

**OC1.** Adriana-Petronela CHIRIAC, Catalin Paul CONSTANTIN,  
Mariana Dana DAMACEANU

POLYMER BLENDS BASED ON POLYIMIDES  
CONTAINING TRITYL-SUBSTITUTED  
TRIPHENYLAMINE FOR CO<sub>2</sub> SEPARATION  
MEMBRANES

**OC2.** Andra-Elena BEJAN, Catalin-Paul CONSTANTIN, Mariana-Dana  
DAMACEAN

TRIPHENYLMETHANE BASED-POLYIMIDES:  
SYNTHESIS AND CHARACTERIZATION

**OC3** Mihaela SILION, Cristina M. AL-MATARNEH, Razvan Cristian  
PUF, Mariana PINTEALA

MASS SPECTROMETRIC CONFIRMATIONS REGARDING  
MECHANISTIC INSIGHTS IN THE DOEBNER REACTION

*12<sup>00</sup> – 12<sup>20</sup> Coffee break*

## **ORAL SESSIONS (IV)**

12<sup>20</sup> -13<sup>20</sup> *Bavaria Blu Hotel, Conference Room*

### **Chairpersons:**

**Stefano GIROTTI**, *University of Bologna, Italy*

**Timur CHIS**, *University of Petroleum - Gases of Ploiesti, Romania*

### **Section D: Petroleum Technology and Management**

**OD1.** Ioana-Alexandra TROFIN, Radu-Dan RUSU, Catalin-Paul CONSTANTIN, Mariana-Dana DĂMĂCEANU

THIOPHENE BASED HYPERBRANCHED POLYMERS  
FOR ELECTROCHROMIC AND ENERGY STORAGE  
APPLICATIONS

**OD2.** Claudia Ana Maria PATRICHI, Doinita Roxana CIOROIU TIRPAN, Ali A. Abbas ALJANABI, Bogdan TRIC, Ioana Catalina GIFU, Tanase DOBRE

EXTRACTION OF CELLULOSE FROM ULVA LACTUCA  
ALGAE AND ITS USE FOR MEMBRANE SYNTHESIS

### **Section E: Food Chemistry and Engineering**

**OE1.** Cătălin DUDUIANU, Raluca STAN, Alina NICOLESCU, Calin DELEANU

NMR METABOLOMICS OF TOMATOES DEGRADATION

**13<sup>20</sup> -15<sup>00</sup> Lunch**

## **ORAL SESSIONS (V)**

15<sup>00</sup> -16<sup>40</sup> Bavaria Blu Hotel, Conference Room

### **Chairpersons:**

**Veselina PANAYOTOVA**, *Medical University of Varna, Bulgaria*

**Ancaelena Eliza STERPU**, *Ovidius University of Constanta, Romania*

## **Section F: Medicinal and Pharmaceutical Chemistry**

- OF1.** Anca Daniela RAICIU, Amalia STEFANIU  
ACTIVE COMPOUNDS IN GLYCERIN  
HYDROALCOHOLIC EXTRACTS WITH POTENTIAL  
ANTI-INFLAMMATORY EFFECT
- OF2.** Anca Daniela RAICIU, Amalia STEFANIU  
PLANT EXTRACTS RICH IN NATURAL POLYPHENOLS  
AND FLAVONOIDS WITH LIVER-PROTECTIVE EFFECTS
- OF3.** Cristina Maria AL-MATARNEH  
UNLOCKING THE ANTIMICROBIAL POTENTIAL OF  
SMALL NITROGEN MOLECULES
- OF4.** Ramona LUNGU, Daniela AILINCAI, Luminita MARIN  
AN EXPERIMENTAL STUDY ON CHITOSAN-BASED  
HYDROGELS BIODEGRADATION FOR WOUND  
HEALING
- OF5.** Calin DELEANU, Cătălin DUDUIANU, Alina NICOLESCU  
NMR LIPIDOMICS

## **POSTERS (II)**

*16<sup>40</sup>- 17<sup>30</sup>, Bavaria Blu Hotel, Conference Room*

### **Chairpersons:**

**Andrei MEDVEDOVICI**, *University of Bucharest, Romania*

**Semaghiul BIRGHILĂ**, *Ovidius University of Constanta, Romania*

### **Section D: Petroleum Technology and Management**

- PD1.** Adriana-Petronela CHIRIAC, Mariana Dana DAMACEANU  
CONJUGATED POLYMERS BASED ON THIOPHENE FOR USE AS ELECTROCHROMIC AND CAPACITIVE MATERIALS
- PD2.** Andra-Elena BEJAN, Catalin-Paul CONSTANTIN, Mariana-Dana DAMACEANU  
NON-CONJUGATED ProDOT-BASED POLYAMIDES FOR ELECTROCHROMIC CAPACITIVE WINDOWS
- PD3.** Sorin-Lucian IONAȘCU, Lucica BARBEȘ  
RECYCLING AND VALORIZATION OF COMPONENTS FROM END-OF-LIFE VEHICLES THROUGH ADVANCED AND SUSTAINABLE TECHNOLOGIES
- PD4.** Emanoil-Andrei POPA, Viorel IONESCU, Anisoara - Arleziana NEAGU  
PERFORMANCE EVALUATION OF A THERMOELECTRIC COOLING BOX SYSTEM
- PD5.** Stefania PIRVU, Viorel IONESCU, Anisoara - Arleziana NEAGU  
ONE-DIMENSIONAL THERMAL MODEL FOR TEMPERATURE EVALUATION INSIDE THE WATER – COOLED PEMFC
- PD6.** Andrei BĂRBULESCU, Laura Andrea SFIRIAC, Maria STOICESCU  
OPTIMISATION OF OIL PRODUCTION FUNCTION TO POROUS ROCKS

- PD7** Doru BÂRSAN, Dan Ovidiu CIRJAN, Maria STOICESCU  
TREATMENT OF HYDROCARBON-POLLUTED WATERS THROUGH OXYGEN AND OZONE NANOBUBBLE TECHNOLOGY
- PD8** Doru BÂRSAN, Timur CHIS  
SEPARATION OF WATER FROM NATURAL GASES
- PD9** Mihaela HELSTERN, Laura Andrea SFIRIAC, Maria STOICESCU  
REZERVOIR OPTIMISATION OF OIL PRODUCTION BY IPR CURVES
- PD10** George Tiberiu SANDU, Claudiu DOLETTE, Maria STOICESCU  
OPTIMISATION OF GAS STORAGE
- PD11** George Tiberiu SANDU, Timur CHIS  
THE EFFECT OF CO<sub>2</sub> ON COLLECTOR ROCKS IN OIL FIELDS
- PD12** Alla ZEINAB, Andrei BĂRBULESCU<sup>1</sup>, Timur CHIS  
EFFECTS OF ACID TO OIL ROCKS
- PD13** Daniel IANCU, Al Jaseem Ameer MAKI, Timur CHIS  
CORROSION IN ROMANIAN OIL PLATFORMS-A CASE STUDY
- PD14** Daniel IANCU, Al Jaseem Ameer MAKI, Timur CHIS  
ODORIZATION OF NATURAL GAS- A CASE STUDY
- PD15** Derya UNLU, Sibel OSMAN  
A COMPARATIVE STUDY ON APPLICATION PROPERTIES OF DIESEL FUEL BLENDS WITH DIBUTYL ETHER (DBE)
- PD16** Ancaelena Eliza STERPU, Olga Valerica SAPUNARU  
EFFICIENT AND ECOLOGICAL PROCESSES IN OBTAINING SOAPS FROM WASTE COOKING OILS
- PD17** Ancaelena Eliza STERPU, Olga Valerica SAPUNARU  
UTILIZING WASTE COOKING OIL AS LUBRICATING OIL: A SUSTAINABLE APPROACH TO AUTOMOTIVE MAINTENANCE
- PD18** Mihaela HELSTERN, Timur CHIS  
MODELING POLYMER MOVEMENT IN RESERVOIR ROCKS

### **Section E: Food Chemistry and Engineering**

- PE1.** Rositsa STANCHEVA, Tonika STOYCHEVA, Albena MERDZHANOVA, Veselina PANAYOTOVA, Katya PEYCHEVA, Diana A. DOBREVA, Tatyana HRISTOVA  
NUTRITIONAL COMPOSITION AND LIPID QUALITY OF BLACK SEA *CHAMELEA GALLINA*
- PE2.** Tonika STOYCHEVA, Diana A. DOBREVA, Albena MERDZHANOVA, Katya PEYCHEVA, Veselina PANAYOTOVA, Rositsa STANCHEVA  
THE MICROGREEN PLANTS - A GOOD ALTERNATIVE FOR HEALTHY HUMAN DIET
- PE3.** Ramona LUNGU, Luminița MARIN, Iuliana SPIRIDON, Florin CIOLACU  
COATING FORMULATIONS BASED ON IMINE CHITOSAN DERIVATIVES USED IN FOOD PACKAGING
- PE4.** Nicoleta MATEL, Simona DOBRINAS, Semaghiul BIRGHILA, Alina SOCEANU, Andreea ANGHEL, Daniela JITARIU, Dorina NADOLU, Viorica POPESCU, Ionela CARAZEANU POPOVICI  
HEAVY METALS LEVELS IN COW'S, GOAT'S AND SHEEP'S FRESH RAW MILK, CURD, AND WHEY FROM DIFFERENT AREAS OF DOBROGEA, ROMANIA
- PE5.** Simona DOBRINAS, Alina SOCEANU, Viorica POPESCU, Georgiana Irina BERCEA, Irina IFRIM  
PLUM DISTILLED BEVERGAGES QUALITY ASSESSMENT
- PE6.** Simona DOBRINAS, Alina SOCEANU, Viorica POPESCU, Gabriela CRUDU, Georgiana Irina BERCEA  
TOTAL PHENOLIC CONTENT OF RAW AND COOKED VEGETABLES

### **Section F: Medicinal and Pharmaceutical Chemistry**

- PF1.** Ramona-Daniela PAVALOIU, Fawzia SHA'AT  
LIPOSOMES LOADED WITH KAEMPFEROL AS SENOMORPHIC FOR TARGETTING SENESCENT CELLS - OBTAINING AND CHARACTERISATION

- PF2.** Ivelin ILIEV, Kaloyan MICHALEV, Svetlana GEORGIEVA  
IR AND UV-VIS SPECTROSCOPIC CHARACTERIZATION OF NOVEL BEXAROTENE ESTERS
- PF3.** Kaloyan MIHALEV, Ivelin ILIEV, Svetlana GEORGIEVA  
*IN SILICO* PREDICTION OF PHYSICOCHEMICAL PROPERTIES AND DRUG-LIKENESS OF 5-MONO SUBSTITUTED ISATINES
- PF4.** Ivelin ILIEV, Yordanka STANEVA, Svetlana GEORGIEVA  
SYNTHESIS AND REACTION MONITORING OF NOVEL BEXAROTENE ESTERS
- PF5.** Yordanka STANEVA, Ivelin ILIEV, Svetlana GEORGIEVA, Albena MERDZHANOVA  
*IN SILICO* PREDICTION OF PHYSICOCHEMICAL PROPERTIES AND DRUG-LIKENESS OF OMEGA-3 FATTY ACIDS
- PF6.** Amalia STEFANIU, Misu MOSCOVICI  
DRUG-LIKE PROPERTY PREDICTION FOR BIDENTATE LIGANDS BINDING Fe-S CLUSTER PROTEINS
- PF7** Amalia STEFANIU, Anca Daniela RAICIU, Lucia Camelia PIRVU  
BIOAVAILABILITY OF SOME NATURALLY OCCURRING ANTHRAQUINONES: A COMPUTATIONAL APPROACH
- PF8** Rafaela VRABIE, Cristina Maria AL-MATARNEH  
SYNTHESIS, STRUCTURE AND ANTIMICROBIAL PROPERTIES OF NEW PYRROL 2(5H)-ONE HYBRIDS WITH TRIFLUOROMETHYL MOIETIS
- PF9** Camelia DRAGHICI, Dana PERNIU, Cristina Salca ROTARU, Ileana MANCIULEA, Codrina CSESZNEK, Eugen BUTILA, Cristina BOGATU  
OPEN EDUCATIONAL RESOURCES FOR ENVIRONMENTAL AWARENESS OF CITIZENS FROM RURAL COMMUNITIES
- PF10** Cristina BOGATU, Maria COVEI, Cristina SALCA ROTARU, Maria COCUZ, Camelia DRAGHICI, Dana PERNIU  
NEW PSYCHOACTIVE SUBSTANCE USE: PERCEPTION BY STUDENTS AND TEACHERS



**PF11** Mihai DELEANU, Jean-François HERNANDEZ, Luca  
CIPELETTI, Hervé COTTET, Joseph CHAMIEH

TAYLOR DISPERSION ANALYSIS: A NOVEL TOOL FOR  
MONITORING THE AGGREGATION OF  $\beta$ -AMYLOID  
PEPTIDES

*The posters will be displayed on May 31, between 12:00 – 16:00, before  
the poster's session.*

**17<sup>30</sup> – 18<sup>00</sup>** **Closing ceremony, Bavaria Blu Hotel, Conference Room**

**19<sup>30</sup> Gala Dinner, Bavaria Blu Hotel**