

**INTERNATIONAL CONFERENCE**

**CHIMIA 2018**

**“NEW TRENDS IN APPLIED CHEMISTRY”**



**PROGRAM**

*May 24 – 26, 2018*  
Constanta, ROMANIA



## **Foreword for the 8<sup>th</sup> Conference “Chimia” 2018**

*The eight in the cycle “Chimia”, this conference was organized by our department starting with 2000 every three years until 2012, since it is organized every two years.*

*Chimia 2018 is part of an on-going Conference series which focuses on applied chemistry problems. This edition of “Chimia” includes the 5<sup>th</sup> edition of the francophone workshop “Nouveaux matériaux pour la reconnaissance électrochimique des minéraux et des espèces biologiques”, acronyme «NOMARES» (“New materials for electrochemical recognition of mineral and biological species”) organized by the Romanian Society of Chemistry and Politehnica University of Bucharest.*

*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 stimulate the scientific discussions and confrontations.*

*Chimia 2018 is conducted at the University “Ovidius” of Constanta. The meeting halls and poster area are designed to facilitate interactions among Conference participants.*

*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 meeting you at Chimia 2018!*

*Sincerely,  
Viorica Popescu  
Conference Chairperson  
Chimia 2018 Organizing Committee*

*SPONSOR:*  
S.C. CONPET S.A. PLOIEȘTI

## **CONFERENCE PROGRAM**

**Thursday – May 24, 2018**

**8<sup>30</sup> – 9<sup>30</sup> Registration, “Ovidius” University of Constanta, Library Central Hall**

**9<sup>30</sup> – 10<sup>00</sup> Opening ceremony, “Ovidius” University of Constanta, Aula B1**

**Welcome addresses**

- Rector of “Ovidius” University of Constanta
- Conference CHIMIA 2018 Chairperson
- NOMARES Workshop Chairperson

**10<sup>00</sup> – 11<sup>20</sup> Plenary session (I), “Ovidius” University of Constanta, Aula B1**

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

**PL2. Tănase DOBRE, Politehnica University of Bucharest, Romania**

**11<sup>20</sup> – 11<sup>40</sup> Coffee break**

**11<sup>40</sup> – 12<sup>20</sup> Plenary session, “Ovidius” University of Constanta, Aula B1**

**PL3. Simona Carmen LITESCU–FILIPESCU, National Institute of Research and Development for Biological Sciences, Bucharest, Romania**

**12<sup>20</sup> - 12<sup>50</sup> Pro Analysis Systems SRL, Bucharest, Romania, Aula B1**

**13<sup>00</sup>– 15<sup>00</sup> Lunch**

**15<sup>00</sup> – 16<sup>00</sup> Keynote session (I), “Ovidius” University of Constanta, Aula B1**

**KN1. Eleonora-Mihaela UNGUREANU, Politehnica University of Bucharest, Romania**

**KN2. Eric SAINT-AMAN, Christopher BUCHER, Christophe KAHLFUSS, Université Grenoble Alpes, Grenoble, France**

**16<sup>00</sup> – 17<sup>30</sup> Oral sessions (I), “Ovidius” University of Constanta, ABI Room**

**Oral sessions (II), “Ovidius” University of Constanta, Aula B1**

**17<sup>30</sup> – 17<sup>45</sup> Coffee break**

**17<sup>45</sup> – 19<sup>00</sup> Posters session (I), “Ovidius” University of Constanta, Library Central Hall**

**Friday – May 25, 2018**

9<sup>00</sup> – 11<sup>00</sup> **Plenary session (II), “Ovidius” University of Constanta, Aula B1**

**PL4. Stefano GIROTTI, Luca FERRARI, Michele PROTTI, Laura MERCOLINI, University of Bologna, Italy**

**PL5. Guy ROYAL, Université Grenoble Alpes, France**

**PL6. Marie-Noëlle COLLOMB, Université Grenoble Alpes, France**

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

11<sup>20</sup> -12<sup>20</sup> **Keynote session (II), “Ovidius” University of Constanta, Aula B1**

**KN3. Vesna MIŠKOVIĆ-STANKOVIĆ, University of Belgrade, Serbia**

**KN4. Serge COSNIER, Université Grenoble Alpes, France**

12<sup>20</sup> -13<sup>30</sup> **Oral sessions (III), “Ovidius” University of Constanta, AB1 Room**

**Oral sessions (IV), “Ovidius” University of Constanta, Aula B1**

**13<sup>30</sup> -15<sup>30</sup> Lunch**

15<sup>30</sup> - 17<sup>00</sup> **Posters session (II) “Ovidius” University of Constanta, Library Central Hall**

17<sup>00</sup> – 17<sup>30</sup> **Closing ceremony, “Ovidius” University of Constanta, Aula B1**

18<sup>30</sup> –19<sup>15</sup> **Concert**

19<sup>30</sup> – **Gala Dinner, “Ovidius” University of Constanta**

**Saturday – May 26, 2018**

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

**May 24, 2016**

**PLENARY LECTURES**

10<sup>00</sup> – 12<sup>20</sup>, “Ovidius” University of Constanta, Aula B1

**Chairpersons:**

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

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

**PL1. Andrei MEDVEDOVICI**, Silvana VASILCA, Florentin TACHE  
**CHAOTROPICS IN RPLC SEPARATION MECHANISM**

**PL2. Tănase DOBRE**  
**STOCHASTIC MODELLING IN CHEMICAL  
ENGINEERING-CELLULAR MODELS**

11<sup>20</sup> – 11<sup>40</sup> *Coffee break*

**PL3. Simona Carmen LITESCU–FILIPESCU**, Ioana VASILESCU,  
Ramona PENU, Andreia ALECU, Mirela DIACONU, Sandra  
EREMIA, Gabriel-Lucian RADU  
**ELECTROCHEMICAL SENSORS VERSATILITY IN  
CONTAMINANTS ANALYSIS**

12<sup>20</sup> - 12<sup>50</sup> **Pro Analysis Systems SRL**, Bucharest, Romania

**BEYOND AND ABOVE THE FRONTIERS OF TODAY –  
PREPARE YOUR LABORATORY FOR TOMORROW  
ULTRA HIGH PERFORMANCE CHROMATOGRAPHY  
AND MASS SPECTROMETRY**

13<sup>00</sup> – 15<sup>00</sup> *Lunch*



**KEYNOTE SESSION (I)**

**Workshop NOMARES**

15<sup>00</sup> – 16<sup>00</sup>, “Ovidius” University of Constanta, Aula B1

**Chairpersons:**

**Guy ROYAL**, *Université Grenoble Alpes, Grenoble, France*

**Vesna MIŠKOVIĆ-STANKOVIĆ**, *University of Belgrade, Serbia*

**KN1. Eleonora-Mihaela UNGUREANU**

**AZULENE BASED MATERIALS FOR HEAVY METAL IONS DETECTION**

**KN2. Eric SAINT-AMAN, Christopher BUCHER, Christophe KAHLFUSS**

**A NEW EXAMPLE OF MOLECULAR METAMORPHISM: A MOLECULAR ASSEMBLY INVOLVING HINGES BASED ON INORGANIC Pd(II) COMPLEXES WITH  $\pi$ -DIMERIZABLE LIGANDS**

**ORAL SESSIONS (I)**

16<sup>00</sup> – 17<sup>30</sup>, “Ovidius” University of Constanta, **ABI Room**

**Chairpersons:**

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

**Simona Carmen LITESCU-FILIPESCU**, *National Institute of Research and Development for Biological Sciences, Bucharest, Romania*

**Section A: Natural and Synthetic Compounds**

**OA1.** Camille LAROSA, Carol TSEN YUNG, Laurent LUNVEN, Bianca FURDUI, Rodica DINICA, Isabelle BAUSSANNE, Martine DEMEUNYNCK, **Sabine CHIERICI**

**IN SEARCH OF PROBES OR INHIBITORS OF AMYLOID FIBERS: SYNTHETIC PEPTIDE FRAGMENTS AS FIBERS MODELS**

**OA2.** **Doina HRITCU**, Maria-CELINA ALEXANDRICA, Alina IBANESCU, Marcel Ionel POPA

**MAGNETIC CHITOSAN COMPOSITE PARTICLES: SYNTHESIS REPRODUCIBILITY AND PARAMETER STUDY**

**OA3.** Raluca IANCHIS, **Claudia NINCIULEANU**, Catalina GIFU, Tatiana MUNTEANU, Elvira ALEXANDRESCU, Silviu PREDA, Raluca SOMOGHI, Bogdan TRICA, Raluca GABOR, Cristina NISTOR, Sabina NITU, Cristi PETCU

**POSSIBLE VEHICLES FOR CONTROLLED DRUG DELIVERY BASED ON PMAA-SALECAN-ORGANOMODIFIED CLAY NANOCOMPOSITES**

**Section B: Analytical and Environmental Chemistry**

**OB1.** Julia Gabriela DAVID, Mihaela BULEANDRĂ, Dana-Elena POPA

**VOLTAMMETRIC APPLICATIONS OF PENCIL GRAPHITE LEADS**

**OB2.** Maria-Celina ALEXANDRICA, Alina IBANESCU, Doina HRITCU, Marcel Ionel POPA

**EVALUATION OF MAGNETIC CHITOSAN COMPOSITE AS A GREEN ADSORBENT FOR REMOVAL OF REACTIVE ORANGE 16 FROM SIMULATED WASTEWATER**

**OB3.** Alina IBANESCU, Maria-Celina ALEXANDRICA, Doina HRITCU, Marcel Ionel POPA

**COPPER (II) IONS REMOVAL FROM SIMULATED WASTEWATER USING A CHITOSAN COMPOSITE ADSORBENT-STUDY OF PROCESS EQUILIBRIUM, KINETICS AND THERMODYNAMICS**

17<sup>30</sup> – 17<sup>45</sup> *Coffee break*

**ORAL SESSIONS (II)**

**Workshop NOMARES**

16<sup>00</sup> – 17<sup>30</sup>, “Ovidius” University of Constanta, *Aula B1*

**Chairpersons:**

**Marie-Noëlle COLLOMB**, *Grenoble Alpes University CNRS, France*

**Serge COSNIER**, *Grenoble Alpes University CNRS, France*

**OW1. George-Octavian BUICA**, Ioana Georgiana LAZAR, Eleonora-Mihaela UNGUREANU

**COLORIMETRIC AND VOLTAMMETRIC  
DETECTION OF MERCURY IONS USING AZULENE-  
EDTA**

**OW2. Aida PANTAZI**, Alin JDERU, Raluca MEȘTERCA, Geanina MIHAI, Oana LAZĂR, Stefania MARIN, Oana TUTUNARU, Dorel DOROBANȚU, Alexandru PUMNEA, Marius ENĂCHESCU

**ADHESIVE PROPERTIES STUDIES OF F-SWCNTS  
BASED NANOCOMPOSITE THIN FILMS**

**OW3. Veronica ANASTASOAI**, Mariana APOSTOIU POPESCU, Mihaela CRISTEA, Magdalena-Rodica BUJDUVEANU, Eleonora-Mihaela UNGUREANU

**NEW MODIFIED ELECTRODES FOR HEAVY METAL  
SENSING**

**OW4. Geanina MIHAI, Stefania COSTOVICI, Oana TUTUNARU,  
Liana ANICALI**, Marius ENACHESCU

**SYNTHESIS OF Cu NANOWIRES USING AQUEOUS  
AND IONIC LIQUID ELECTROLYTES FOR  
ELECTROCHEMICAL DETECTION**

17<sup>30</sup> – 17<sup>45</sup> *Coffee break*

**POSTERS (I)**

17<sup>45</sup> – 19<sup>00</sup>, “Ovidius” University of Constanta, Library Central Hall

**Chairpersons:**

**Luca FERRARI**, *University of Bologna, Italy*

**George BUICA**, *Politehnica University of Bucharest, Romania*

**Section A: Natural and Synthetic Compounds**

**PA1.** Mirela LUCA, Mihaela BADEA, **Anca DUMBRAVA**, Rodica OLAR

**COPPER (II) COMPLEXES WITH AROMATIC AMINES AS LIGANDS AS ANTIMICROBIAL SPECIES**

**PA2.** Elena PATRASCU, Mihaela BADEA, **Anca DUMBRAVA**, Rodica OLAR

**PHYSICO-CHEMICAL AND BIOLOGIC CHARACTERISATION OF SOME Cu(II) COMPLEXES WITH PENTAAZAMACROCYCLE LIGANDS**

**PA3.** Oana Alexandra ZĂBAVĂ, Rodica OLAR, Mihaela BADEA, **Mihaela Carmen CHEREGI**

**SYNTHESIS AND CHARACTERIZATION OF THE INCLUSION COMPLEX OF  $\beta$ -CYCLODEXTRIN AND [2-(2-BROMO-PHENYLCARBAMOYL)-PHENOXY]-ACETIC ACID ETHYL ESTER**

**PA4.** Raluca IANCHIS, **Claudia NINCIULEANU**, Catalina GIFU, Elvira ALEXANDRESCU, Silviu PREDA, Cristina NISTOR, Sabina NITU, Cristi PETCU

**VARIATION OF SALECAN CONCENTRATION IN PMAA-SALECAN – ORGANOMODIFIED CLAY NANOCOMPOSITES**

- PA5.** Ioana M.C. IENAȘCU, Adina CĂTA, Gerlinde RUSU, Mariana N. ȘTEFĂNUȚ, Paula SFIRLOAGĂ, Cristina MOȘOARCĂ, Cosmin PASCARIU, Firuța I. FIȚIGĂU

**SYNTHESIS AND CHARACTERIZATION OF THE INCLUSION COMPLEX OF  $\beta$ -CYCLODEXTRIN AND [2-(2-BROMO-PHENYLCARBAMOYL)-PHENOXY]-ACETIC ACID ETHYL ESTER**

- PA6.** Firuța I. FIȚIGĂU, Ioana M. C. IENAȘCU, Cristian G. VASZILCSIN, Zoltan URMOSI, Adina CĂTA, Mariana N. ȘTEFĂNUȚ

**MULTIVARIATE ANALYSIS OF THE VOLTAMMETRIC DATA OBTAINED IN ENZYMIC MODIFICATION REACTIONS OF DIFFERENT LIGNINS THROUGH OXIDATIVE COUPLING WITH HYDROPHILIC COMPOUNDS**

- PA7.** Adina CĂTA, Mariana ȘTEFĂNUȚ, Firuța FIȚIGĂU, Ioana M.C. IENAȘCU

**ULTRASOUND AND HEAT STABILITY OF SOME COMMERCIAL ANTHOCYANINS**

- PA8.** Fanică BĂLĂNESCU, Neculai GRIGORE, Gabriela GURĂU, Rodica Mihaela DINICĂ

**AROMATIC PLANT EXTRACTS: INVESTIGATION OF THEIR ANTIOXIDANT AND ANTIMICROBIAL ACTIVITIES**

- PA9.** Mihaela CUDĂLBEANU, Ioana Otilia GHINEA, Bianca FURDUI, Isabelle BAUSSANNE, Martine DEMEUNYNCK, Rodica Mihaela DINICĂ

**NATURAL SOURCES OF ACETYLCHOLINESTERASE INHIBITORS FROM SOUTH-EAST REGION OF ROMANIA**

**PA10.** Cristina Maria HERGHILIGIU, Irina CÂRLESCU, Dan SCUTARU, Nicolae HURDUC

**SYNTHETIC BIOMATERIALS FOR BIOLOGICAL APPLICATIONS**

**PA11.** Cristina Maria HERGHILIGIU, Nicolae HURDUC

**POTENTIAL OF SYNTHETIC BIOMATERIALS FOR NANOSCALE MANIPULATIONS OF BIOMOLECULES THROUGH OPTICAL METHODS**

**PA12.** Mihaela Carmen EREMIA, Amalia STEFANIU

**CHARACTERIZATION AND MOLECULAR DOCKING STUDIES ON A SERINE PROTEASE INHIBITOR ISOLATED FROM THE SEEDS OF *CITRULLUS VULGARIS***

**PA13.** Gheorghe-Lucian IRIMIA, Corina DUDA-SEIMAN, Carina-Aida PETRESCU, Adina NEGREA, Dorina DUGĂEȘESCU, Daniel-Marius DUDA-SEIMAN, Speranța AVRAM

**CHEMICAL COMPOSITION, ANTIMICROBIAL ACTIVITY AND CHEMOINFORMATICS STUDY OF GINGER (*ZINGIBER OFFICINALE*) EXTRACT**

**PA14.** Valentina ANUȚA, Cristina Elena DINU-PÎRVU, Alina ORȚAN, Mihaela Violeta GHICA, Lăcrămioara POPA, Răzvan Mihai PRISADA, Bruno Ștefan VELESCU

**OPTIMIZATION OF A MICROWAVE-ASSISTED EXTRACTION METHOD FOR THE ISOLATION OF NATURAL COMPOUNDS FROM THE ANTHRISCUS SYLVESTRIS AERIAL PARTS**

**PA15.** Ioana Adina OANCEA, Elena OANCEA, Eleonora-Mihaela UNGUREANU

**CHEMICAL AND MOLECULAR OBSERVATIONS OF SOME PLANT-SOURCE EXTRACTS**

**PA16.** Gabriela STANCIU, **Simona LUPSOR**, Lucica BARBES, Elena OANCEA

**DETERMINATION OF THE POLYPHENOLIC COMPOUNDS IN ALCOHOLIC EXTRACT OF LAVANDULA AUGUSTIFOLIA L. BY HPLC/DAD**

**PA17.** **Gabriela STANCIU**, Simona LUPSOR, Rodica SIRBU, Aneta TOMESCU

**ANTIOXIDANT CAPACITIES AND PHENOLS COMPOSITION OF WILD AND CULTIVATED BERRIES**

**PA18.** **Alef MUSTAFA**, Rodica SIRBU

**CHITOSAN EXTRACTION FROM EXOSKELETON OF PACHYGRAPSUS MORMORATUS CRAB FOR APPLICATION IN THE PHARMACEUTICAL INDUSTRY**

**PA19.** **Olimpia DUMITRIU BUZIA**, Nela MARDARE, Alexandra FLOREA, Camelia DIACONU, Rodica-Mihaela DINICĂ

**BIOLOGICAL ACTIVE COMPOUNDS FROM CAPSICUM ANNUM AND PIPERUM NIGRUM USED IN THE FORMULATION OF ANTIREUMATIC PHARMACEUTICAL FORMS**

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

**PB1.** **Georgiana Ileana BADEA**, Maria CAGGIANI, Philippe COLOMBAN, Eugenia TEODOR, Eugen TEODOR, Gabriel-Lucian RADU

**ANALYTICAL METHODS APPLIED FOR CHARACTERIZATION OF ARCHAEOLOGICAL ARTEFACTS FROM AMBER**



**PB2.** Iulia Gabriela DAVID, Mihaela NICULAE, Emilia-Elena IORGULESCU, Mihaela BULEANDRĂ, Vasile DAVID

**DETERMINATION OF PARABENS IN COSMETICS  
USING A DISPOSABLE GRAPHITE ELECTRODE**

**PB3.** Maria Antonia TĂNASE, Mihaela Carmen CHEREGI, Iulia Gabriela DAVID, Victor DAVID

**RETENTION STUDIES FOR VARIOUS PEPTIDES IN  
LIQUID CHROMATOGRAPHY BASED ON  
HYDROPHILIC INTERACTION MECHANISM**

**PB4.** Iulia Gabriela DAVID, Mihaela BULEANDRĂ, Dana-Elena POPA, Lorelei IORDACHE, Mihaela-Carmen CHEREGI, Raluca RADU

**VOLTAMMETRIC INVESTIGATION OF NARINGIN**

**PB5.** Lorelei IORDACHE, Iulia Gabriela DAVID, Mihaela-Carmen CHEREGI, Dana-Elena POPA, Paul LAZĂR

**APPLICATION OF THE PENCIL GRAPHITE  
ELECTRODE TO THE DIPYRIDAMOLE  
DETERMINATION**

**PB6.** Mihaela BULEANDRĂ, Alexandru VICOL, Iulia Gabriela DAVID, and Anton Alexandru CIUCU

**VOLTAMMETRIC METHOD FOR CAPTOPRIL  
DETERMINATION**

**PB7.** Mădălina LEPĂDATU, Iulia Gabriela DAVID, Lorelei IORDACHE, Dana-Elena POPA, Mihaela BULEANDRĂ, Emilia-Elena IORGULESCU

**RAPID VOLTAMMETRIC ANALYSIS OF DIPYRONE IN  
PHARMACEUTICALS**

**PB8.** Dimitrina KRASTEVA, Katya GABROVSKA, Tzonka GODJEVARGOVA

**PREPARATION OF CONJUGATE OF ANTI-CD45  
ANTIBODY WITH FLUOROCHROMES FITC AND  
ATTO465**

- PB9.** Mariana Nela STEFĂNUT, Adina CĂȚA, Firuța FIȚIGĂU, Marius DOBRESCU, Cristian TĂNASIE, Dan ROȘU, Ioana IENAȘCU  
**A RAPID METHOD FOR PESTICIDE RESIDUES DETECTION AND MONITORING IN SOME FOODS**
- PB10.** Rodica Mihaela FRINCU, Olga IULIAN  
**LONG TERM TRENDS OF OXYGEN PARAMETERS IN THE LOWER DANUBE (1996-2014)**
- PB11.** Ionela CARAZEANU POPOVICI, Semaghiul BIRGHILA, Georgeta Voicu, Viorel IONESCU, Iuliana DOBRILA  
**USE OF METALLURGIC COKE AS ABSORBING MATERIAL FOR THE RETENTION OF ANIONIC SPECIES**
- PB12.** Simona DOBRINAS, Alina SOCEANU, Valentina COATU, Nicoleta BUCUR  
**ANALYSIS OF OCPs AND PCBs IN BLACK SEA SEDIMENTS**
- PB13.** Cristina-Andreea SINGUREANU, Alexandru WOINAROSCHY  
**SIMULATION OF PROCESSES IN A SEQUENCING BATCH REACTOR USING THE STOAT 5.0 PROGRAM**
- PB14.** Alice IORDACHE, Cristina-Andreea SINGUREANU, Alexandru WOINAROSCHY  
**SAFETY MANAGEMENT OF DRINKING WATER QUALITY**
- PB15.** Michele PROTTI, Manuela LAROCCA, Laura MERCOLINI  
**DETECTION OF PEPTIDE HORMONES AND GROWTH FACTORS IN DRIED URINE MICROSAMPLES: A NEW APPROACH FOR ANTI-DOPING ANALYSIS**

- PB16.** Cristina ROTARU SALCA, Ileana MANCIULEA, Lucia DUMITRESCU, Dana PERNIU, Anca VASILESCU, Lubomir SIMEONOV, Yordan SIMEONOV, **Camelia DRAGHICI**

**TOX-OER FOR LEARNING ENVIRONMENTAL MONITORING THROUGH OPEN EDUCATIONAL RESOURCES**

### **Section C: Physical Chemistry**

- PC1.** Amalia STEFANIU, **Mihaela BRINZEI**, Olga IULIAN

**PREDICTION OF REACTIVITY PARAMETERS USING DENSITY FUNCTIONAL THEORY (DFT) CALCULATIONS FOR SULPHUR CONTAINING AMINO ACIDS**

- PC2.** **Irina NITA**, Sibel OSMAN

**MODELS FOR THE ESTIMATION OF VOLUMETRIC AND TRANSPORT PROPERTIES OF DIESEL FUEL + BIOALCOHOLS BLENDS**

- PC3.** **Mihaela Violeta GHICA**, Mădălina Georgiana ALBU KAYA, Denisa Ioana UDEANU, Ștefania MARIN, Maria Minodora MARIN, Durmuş Alpaslan KAYA, Cristina DINU-PÎRVU, Lăcrămioara POPA

**COLLAGEN-SODIUM CARBOXYMETHYLCELLULOSE SPONGIOUS MATRICES LOADED WITH NON-STEROIDAL ANTI-INFLAMMATORY DRUG FOR BURN HEALING**

- PC4.** **Atoumane NDIAYE**, Anca DUMBRAVA, Jeanina LUNGU, Adrian GEORGESCU, Corneliu I. OPREA, Florin MOSCALU, Alle DIOUM, Aboubaker Chedikh BEYE, Issakha YOUM, Mihai A. GÎRȚU

**DFT CALCULATIONS OF PROTON AFFINITIES OF NATURAL DYES USED IN SOLAR CELLS**

- PC5.** **Viorel IONESCU**, Anisoara-Arleziana NEAGU, Alina SOCEANU

**FEM MODELLING OF MASS TRANSFER IN ELECTRODIALYSIS DESALINATION**

- PC6.** Alina SOCEANU, Viorica POPESCU, Simona DOBRINAS  
**KINETIC STUDY OF SOME COMMERCIAL  
PHARMACEUTICAL FORMULATIONS OF  
ACETYLSALICYLIC ACID**
- PC7.** Alina SOCEANU, Viorica POPESCU, Simona DOBRINAS,  
Florentina MEILA  
**INFLUENCE OF FACTORS ON NICKEL  
ELECTROPLATING**
- PC8.** Anca DUMBRAVA, Mihaela BADEA, Rodica OLAR, Gabriel  
PRODAN, Corneliu OPREA, Florin MOSCALU  
**THERMAL DECOMPOSITION OF ZINC OXIDE  
NANOPOWDERS FUNCTIONALIZED WITH  
ANTHOCYANINS**

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

- PD1.** Irina NITA, Sibel OSMAN  
**TRANSPORT PROPERTIES OF SOME BIOFUELS  
BLENDS**
- PD2.** Sibel OSMAN, Irina NITA  
**TERNARY FUELS BLENDS WITH APPLICATIONS IN  
TRANSPORT DOMAINE**
- PD3.** Sanda GEAMBAȘU, Gheorghe Alexandru RADU, Rodica  
NICULESCU, Adrian CLENCI, Victor Siman IORGA, Vladimir  
MĂRDĂRESCU  
**THE INFLUENCE OF PHYSICO-CHEMICAL  
PROPERTIES OF DIESEL-BIODIESEL-ALCOHOL  
MIXTURES ON THE ENGINE PERFORMANCES**

**PD4.** Olga Valerica TAGA SĂPUNARU, Claudia Irina KONCSAG, Gheorghita JINESCU

**PERFORMING ESTERIFICATION REACTIONS THROUGH REACTIVE DISTILLATION**

**PD5.** Anca-Iuliana DUMITRU

**PERFORMANCE OF Co-Mo-Ni CATALYSTS ON POLYCYCLIC AROMATIC HYDROCARBONS TRANSFORMATION IN HYDROCRACKING PROCESS**

**PD6.** Cyrille Alode VODOUNON, Ancaelena Eliza STERPU, Iuliana Marlena PRODEA, Claudia Irina KONCSAG

**ADDITIVATED LUBRICATING GREASES MADE OF AGRICULTURAL RESOURCES**

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

**PE1.** Zlatina PETEVA, Bernd KROCK, Stanislava GEORGIEVA, Anelia GERASIMOVA, Mona STANCHEVA, Lubomir MAKEDONSKI

**SUMMER PROFILE OF LIPOPHILIC TOXINS IN SHELLFISH FROM BULGARIA**

**PE2.** Stanislava GEORGIEVA, Zlatina PETEVA, Mona STANCHEVA

**HUMAN HEALTH RISK OF ORGANOCHLORINE COMPOUNDS IN FISH FROM THE DANUBE RIVER, BULGARIA**

**PE3.** Albena MERDZHANOVA, Diana A. DOBREVA, Veselina PANAYOTOVA

**COMPARISON OF FATTY ACIDS, CHOLESTEROL, FAT SOLUBLE VITAMINS AND CAROTENOIDS CONTENT OF SKIN AND EDIBLE TISSUE OF FARMED AFRICAN CATFISH (*CLARIAS GARIEPINUS*, BURCHELL, 1822)**

- PE4.** Albena MERDZHANOVA, Veselina PANAYOTOVA, Diana A. DOBREVA, Rositsa STANCHEVA, Katya PEYCHEVA  
**LIPID COMPOSITION OF RAW AND COOKED RAPANA VENOSA FROM THE BLACK SEA**
- PE5.** Ana LEAHU, Cristina GHINEA, Mircea-Adrian OROIAN, Cristina DAMIAN  
**LEVELS OF SELECTED ESSENTIAL AND TOXIC ELEMENTS IN THE WHITE CABBAGES (*BRASSICA OLERACEA L. VAR. CAPITATA ALBA*) AND RED CABBAGES (*BRASSICA OLERACEA VAR. CAPITATA F. RUBRA*)**
- PE6.** Cristina DAMIAN, Ana LEAHU, Sorina ROPCIUC, Mircea-Adrian OROIAN  
**SOME QUALITY PARAMETERS OF MUSTARDS FROM THE ROMANIAN MARKET**
- PE7.** Milka ATANASOVA, Yavor IVANOV, Tzonka GODJEVARGOVA  
**STUDY OF THE METABOLIC ACTIVITY OF YEASTS USED IN BREWING INDUSTRY AND BIOETHANOL PRODUCTION**
- PE8.** Zlatina BECHEVA, Yavor IVANOV, Tzonka GODJEVARGOVA  
**MAGNETIC NANOPARTICLE BASED IMMUNOFLUORESCENCE ASSAY OF STAPHYLOCOCCAL ENTEROTOXIN A IN MILK**
- PE9.** Alexandru STEFAN, Ana Maria GRIGORIU, Anicuta STOICAGUZUN  
**OPTIMIZATION OF GLUTEN FREE BREAD PREPARATION USING ENZYMES**
- PE10.** Nicoleta MATEI, Simona DOBRINAS, Alina SOCEANU, Viorica POPESCU, Andreea COJOCARU  
**NITRITES IN PROCESSED VENISON MEAT**

**PE11.** Lucica BARBES, Gabriela STANCIU, Antoanela POPESCU,  
**Monica OANCEA**

**DETERMINATION OF THE POLYPHENOLIC  
COMPOUNDS IN SOME RED GRAPES AND  
DERIVATIVE PRODUCTS BY HPLC/DAD**

*The posters will be displayed on May 24, between 12:00 – 17:00, before  
the posters session.*

**May 25, 2018**

**PLENARY LECTURES (II)**

9<sup>00</sup>– 11<sup>00</sup>, “Ovidius” University of Constanta, Aula B1

**Chairpersons:**

**Eric SAINT-AMAN**, *Grenoble Alpes University CNRS, Grenoble, France*

**Gabriel-Lucian RADU**, *Politehnica University of Bucharest, Romania*

**PL4.** **Stefano GIROTTI**, **Luca FERRARI**, **Michele PROTTI**, **Laura MERCOLINI**, Roberto MANDRIOLI, Camelia DRAGHICI

**OUTCOMES AND IMPACT OF A MASSIVE OPEN ON-LINE COURSE IN OPEN EDUCATIONAL RESOURCES AND E-LEARNING IN TOXICOLOGY: THE TOX-OER PROJECT**

**PL5.** **Guy ROYAL**

**THE DIMETHYLDIHYDROPYRENE PHOTOCROME: MULTI STIMULI-RESPONSIVE MOLECULES AND THERAPEUTIC APPLICATIONS**

**PL6.** **Marie-Noëlle COLLOMB**, Robin GUERET, Laurélie POULARD, Mathew OSHINOWO, Jérôme CHAUVIN, Jérôme FORTAGE, Laurélie POULARD, Philippe LAINE

**PHOTO-INDUCED REDOX CATALYSIS FOR HYDROGEN PRODUCTION IN WATER WITH MOLECULAR COMPOUNDS BASED ON EARTH ABUNDANT ELEMENTS**

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



**KEYNOTE SESSION (II)**

**Workshop NOMARES**

11<sup>20</sup> -12<sup>20</sup>, “Ovidius” University of Constanta, Aula B1

**Chairpersons:**

**Guy ROYAL**, *Université Grenoble Alpes, Grenoble, France*

**Elena DIACU**, *Politehnica University of Bucharest, Romania*

**KN3. Vesna MIŠKOVIĆ-STANKOVIĆ**

**ELECTROCHEMICAL SYNTHESIS OF NOVEL  
ANTIBACTERIAL SILVER DOPED POLY(VINYL  
ALCOHOL)/CHITOSAN/GRAPHENE HYDROGELS**

**KN4. Serge COSNIER**

**DESIGN OF SUPRAMOLECULAR BIOASSEMBLIES  
BASED ON NANO-OBJECTS AND ORGANIC BINDERS  
FOR BIOSENSING OR ELECTROCATALYSIS  
APPLICATIONS**

## **ORAL COMMUNICATIONS (III)**

**12<sup>20</sup> -13<sup>30</sup> “Ovidius” University of Constanta, ABI Room**

**Chairpersons:**

**Claudia KONCSAG, “Ovidius” University of Constanta, Romania**

**Albena MERDZHANOVA, Medical University of Varna, Bulgaria**

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

**OD1. Jaafar ABDELHAFIDH**

**PROGRESS IN COLLECTING AND RECYCLING OF  
WASTE OILS**

**OD2. Ana Maria SIVRIU, Claudia KONCSAG, Gheorghita JINESCU**

**MODELLING THE THERMAL CRACKING PROCESS  
OF VEGETABLE OILS**

**OD3. Timur CHIS, Erdin FEIZULA**

**PREDICTION OF OIL BLENDING PROPERTIES**

**OD4. Timur CHIS, Dorina URSEA**

**DIESEL BLENDING PROPERTIES PREDICTION**

**OD5. Doinita-Roxana CIOROIU, Claudia Irina KONCSAG, Oana  
Cristina PÂRVULESCU, Tânase DOBRE**

**BLACK SEA ALGAE BIOMASS AS AN ALTERNATIVE  
RESOURCE IN BIOFUELS PRODUCTION**

**13<sup>30</sup> -15<sup>30</sup> Lunch**

**ORAL COMMUNICATIONS (IV)**

**Workshop NOMARES**

12<sup>20</sup> -13<sup>30</sup>, “Ovidius” University of Constanta, *Aula B1*

**Chairpersons:**

**Tzonka GODJEVARGOVA**, University “Prof. Assen Zlatarov”, Bulgaria

**Liana ANICAI**, Politehnica University of Bucharest, Romania

**OW5.** **Serban N. STAMATIN**, Adriana BALAN, Catalin CEAUS, Isabela TREFILOV

**ELECTROCHEMICAL DISSOLUTION OF PLATINUM GROUP METALS FROM A MULTI COMPONENT MATRIX**

**OW6.** **Călin MOISE**, Alin JDERU, Aida PANTAZI, Raluca MESTERCA, Dorel DOROBANTU, Marius ENACHESCU

**THREE CARBON NANOMATERIALS SYNTHESIZED BY KRF LASER ABLATION IN AN INNOVATIVE REACTOR**

**OW7.** **Geanina MIHAI**, Călin MOISE, Aida PANTAZI, Alin JDERU, Oana TUTUNARU, Raluca MEȘTERCA, Oana LAZĂR, Alexandru PUMNEA, Dorel DOROBANȚU, Marius ENĂCHESCU

**OPTIMIZATION OF PMMA PROCESSING AS A PREREQUISITE FOR NANODEVICE BUILDING USING ELECTRON BEAM LITHOGRAPHY**

13<sup>30</sup> -15<sup>30</sup> *Lunch*

**POSTERS (II)**

**Workshop NOMARES**

15<sup>30</sup>- 17<sup>00</sup>, "Ovidius" University of Constanta, Library Central Hall

**Chairpersons:**

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

**Sebastian STAMATIN**, University of Bucharest, Romania

**PW1. Ioana Adina OANCEA**, Elena OANCEA, Eleonora-Mihaela UNGUREANU

**ELECTROCHEMISTRY APPLIED ON SOME PLANT-SOURCE EXTRACTS**

**PW2. Georgeta Ramona IVAN**, Ion ION, Luiza CAPRA, Marian DEACONU, Alina Catrinel ION

**COMPETITIVE SORPTION OF HYDROPHOBIC ENDOCRINE DISRUPTORS BY MULTI-WALLED CARBON NANOTUBES IN AQUEOUS SYSTEMS**

**PW3. Raluca Madalina SENIN**, Ion ION, Virgil BADESCU, Alina Catrinel ION

**COMPETITIVE SORPTION OF ORGANIC CONTAMINANTS BY MULTI-WALLED CARBON NANOTUBES IN THE PRESENCE OF AQUATIC NATURAL ORGANIC MATTER**

**PW4. Alina Alexandra VASILE**, Liviu BIRZAN, Magdalena-Rodica BUJDUVEANU, Eleonora-Mihaela UNGUREANU

**ELECTROCHEMICAL STUDY OF NEW AZULENE-ETHER CROWN COMPOUND**

**PW5.** Cristian OMOCEA, Veronica ANASTASOAI, Magdalena-Rodica BUJDUVEANU, Liviu BIRZAN, Eleonora-Mihaela UNGUREANU

**ELECTROCHEMICAL STUDY OF CERTAIN  
TRIPHENYLALKYLARSONIUM DERIVATIVES**

**PW6.** Amalia STEFANIU, Georgiana-Luiza TATU, Liviu BIRZAN, Gabriela STANCIU, Mariana POPESCU APOSTOIU, Eleonora-Mihaela UNGUREANU

**EVALUATION OF CHEMICALLY MODIFIED  
ELECTRODES PERFORMANCES FROM QUANTUM  
MECHANICAL CALCULATIONS**

**PW7.** Cristina DINU, Irinela CHILIBON, Cristina VASILIU, Raluca STEFAN, Raluca ISOPESCU, Eleonora-Mihaela UNGUREANU

**CHARACTERIZATION OF POLYAZULENE  
COMPLEXING FILMS**

**PW8.** Amalia STEFANIU, Eleonora-Mihaela UNGUREANU, Liviu BIRZAN, Mariana POPESCU APOSTOIU, Lucia PINTILIE, Gabriela STANCIU

**QUANTUM CHEMICAL CALCULATIONS FOR  
EVALUATION OF AZULENES AS COMPLEXING  
AGENTS FOR ELECTROCHEMICAL APPLICATIONS**

**PW9.** Ioana-Georgiana LAZĂR, Elena DIACU, Alexandru Anton IVANOV, Eleonora-Mihaela UNGUREANU, George-Octavian BUICĂ

**EXPERIMENTAL INVESTIGATIONS ON THE  
ANALYTICAL PERFORMANCES FOR LEAD  
ANALYSIS USING CHEMICALLY MODIFIED  
ELECTRODES BASED ON POLYAZULENE  
COMPOUND**

*The posters will be displayed on May 25, between 12:00 – 14:30, before  
the posters session.*

**17<sup>00</sup> – 17<sup>30</sup> Closing ceremony, “Ovidius” University of Constanta, Aula B1**

**18<sup>30</sup> –19<sup>15</sup> Concert**

**19<sup>30</sup> – Gala Dinner**



- Modular Gas Chromatography (GC) for easy (by customer) exchange of injectors and detectors according to the immediate needs of the lab.
- U-HPLC (1500 Bar) for high resolution chromatographic separation in complex matrices and elevated number of analytes.
- High Performance Ion Chromatography (HPIC) for simultaneous cations and anions analysis in water samples with preconcentration options.
- U-HPLC (1500 Bar) coupled with High Resolution and Accurate Mass Spectrometers (U-HPLC / HRAM MS/MS) for sub ppt analysis in complex matrices.
- HR GC coupled with High Resolution and Accurate Mass Spectrometers (HRGC / HRAM MS/MS) for high sensitivity, complex matrices selectivity and beyond any doubt confirmation of the quantitative results.
- Single and Triple Quadrupole Mass Spectrometers for HR GC or U-HPLC (1500 Bar) for high sensitive (S/N > 500 000 : 1, market leader) routine analysis.
- Ion Chromatography coupled with High Resolution and Accurate Mass Spectrometers (HPIC / MS /MS) for analysis of highly polar analytes (e.g. polar pesticides like Glyphosate).
- Ion Chromatography coupled with ICP/MS (HPIC / ICP /MS) for high sensitivity, cation speciation analysis (As (III) and As (V), Cr (III) and Cr (VI), Iodide and Iodate, Methylmercury /Ethylmercury, MeHg/EtHg).
- Automated, highly reproducible and easy to use sample preparation instrumentation: Accelerated Solvent Extraction (ASE), Fully Automated Solid Phase Extraction (AutoTrace), On-Line Automated Solid Phase Extraction (EQuan), Large Volume Automated Solvent Evaporator / Concentrator (Rocket Evaporator).
- Stable Isotope Ratio Mass Spectrometry (IRMS), coupled with HRGC, U-HPLC or Elemental Analysers (for Bulk IRMS) for pollution origin studies and food chain pollution impact in fragile ecosystems.