

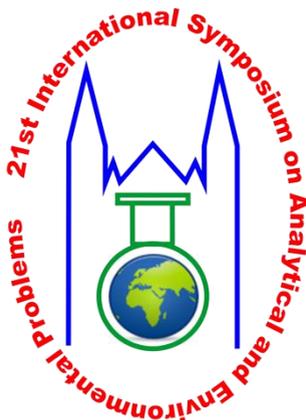


*21<sup>st</sup> International  
Symposium on Analytical and  
Environmental Problems*

*Szeged, Hungary*

*September 28, 2015*

**University of Szeged, Department of Inorganic  
and Analytical Chemistry**



**Final Program**

## ***21<sup>st</sup> International Symposium on Analytical and Environmental Problems***

### **Supporting Organizations**

*University of Szeged, Department of Inorganic and Analytical Chemistry  
Hungarian Academy of Sciences*

### **General information**

*The venue of the Symposium: MTA, SZAB székház, Szeged, Somogyi u. 7.  
The Symposium features recent findings from leading industrial and academic experts in the field of analytical chemistry and environment related problems.  
The symposium is bilingual, both English and Hungarian are accepted.*

### **Symposium Chairman:**

*István Ilisz, PhD*

### **Honorary Chairman:**

*Zoltán Galbács, PhD*

### **Organizing Committee:**

*István Ilisz, PhD*

associate professor

University of Szeged Department of Inorganic and Analytical Chemistry  
ilisz@chem.u-szeged.hu

*Zoltán Galbács, PhD*

honorary professor

University of Szeged Department of Inorganic and Analytical Chemistry  
zgalbacs@chem.u-szeged.hu

*Tünde Alapi, PhD*

assistant professor

University of Szeged Department of Inorganic and Analytical Chemistry  
alapi@chem.u-szeged.hu

## **TIMETABLE**

**10<sup>00</sup>-10<sup>10</sup>: Opening Ceremony**

**10<sup>10</sup>-12<sup>00</sup>: Oral Presentations: Session I**

**12<sup>00</sup>-14<sup>00</sup>: Poster session I (P01-P73)**

**14<sup>00</sup>-16<sup>10</sup>: Oral Presentations: Session II**

**16<sup>20</sup>-18<sup>00</sup>: Poster session II (P74-P101)**

**18<sup>00</sup>: Closing Remarks**

## Oral Presentations

10<sup>10</sup>-10<sup>25</sup>

### The Perception of Social Responsibility among Students in Higher Education

László Berényi

*Institute of Management Science, University of Miskolc, Miskolc-Egyetemváros, Hungary*

10<sup>25</sup>-10<sup>35</sup>

### Új Pd-Komplexek Azometin-Származékokkal, és Fizikai-Kémiai Vizsgálatuk

ifj. Várhelyi Csaba<sup>1</sup>, Nagy Renáta-Ildikó<sup>1</sup>, Pokol György<sup>2</sup>, Szalay Roland<sup>3</sup>,

Mihály Judith<sup>4</sup>, Goga Firuța<sup>1</sup>, Golban Ligia-Mirabela<sup>1</sup>

<sup>1</sup>„Babeş-Bolyai” Tudományegyetem, Kémia és Vegyészmérnöki Kar, Kolozsvár

<sup>2</sup>Budapesti Műszaki és Gazdaságtudományi Egyetem, Vegyészmérnöki és Biomérnöki Kar

<sup>3</sup>„Eötvös Loránd” Tudományegyetem, Kémiai Intézet, Budapest

<sup>4</sup>MTA-Természettudományi Kutatóközpont, Anyag- és Környezetkémiai Intézet, Budapest

10<sup>35</sup>-10<sup>50</sup>

### Rare Earth Elements and Plants

Rudolf Kastori, Ivana Maksimović, Marina Putnik-Delić

*Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia*

10<sup>50</sup>-11<sup>00</sup>

### Copper Recovery from Spent Catalyst used in COSORB Processes

Livia Deveseleanu-Corici<sup>1\*</sup>, Liliana Cseh<sup>1</sup>, Marcel Lazarovici<sup>2</sup>, Laurențiu Demetrovici<sup>2</sup>, Ladislau Andres<sup>3</sup>,

Georgeta Simu<sup>4</sup>, Cristina Dehelean<sup>4</sup>, Otilia Costișor<sup>1</sup>

<sup>1</sup>Institute of Chemistry Timisoara of Romanian Academy, Timisoara, Romania

<sup>2</sup>S.C. Pro Air Clean Ecologic S.A., Timisoara, Romania

<sup>3</sup>National Research and Development Institute for Industrial Ecology – ECOIND, Bucharest, Romania

<sup>4</sup>“Victor Babes” University of Medicine and Pharmacy, Timișoara, Romania

11<sup>00</sup>-11<sup>10</sup>

### Homoleptic and Heteroleptic Pt(II) Complexes with Potential Biological Activity

Ioana Costinas<sup>1\*</sup>, Carmen Cretu<sup>1</sup>, Ramona Tudose<sup>1</sup>, Liliana Cseh<sup>1</sup>, Viorel Sasca<sup>1</sup>, Valentin Badea<sup>2</sup>, Otilia

Costisor<sup>1</sup>, Elisabeta I. Szerb<sup>1</sup>

<sup>1</sup>Institute of Chemistry Timisoara of Romanian Academy, Timisoara, Romania

<sup>2</sup>“Politehnica” University of Timisoara, Timisoara, Romania

11<sup>10</sup>-11<sup>20</sup>

### Olajszennyezett Vizek Tisztítása Ózonos Előkezeléssel Kombinált Membránszűréssel - Analitikai Problémák

Veréb Gábor, Sulumán Ádám, Kovács Ildikó, Kertész Szabolcs, Beszédes Sándor, Hodúr Cecília, László Zsuzsanna

*Szegedi Tudományegyetem, Mérnöki Kar, Folyamatmérnöki Intézet*

11<sup>20</sup>-11<sup>30</sup>

### Kézműves és Kisüzemi Sörök Antioxidáns Kapacitásának Vizsgálata és annak Függése a Sör Minőségi Jellemzőitől

Czura Bence<sup>1</sup>, Papp Nóra<sup>2</sup>, Stefanovits-Bányai Éva<sup>2</sup>, Hegyesné Vecseri Beáta<sup>1</sup>

<sup>1</sup>BCE, Élelmiszertudományi Kar, Sör- és Szeszipari Tanszék, Budapest,

<sup>2</sup>BCE, Élelmiszertudományi Kar, Alkalmazott Kémia Tanszék, Budapest

11<sup>30</sup>-11<sup>40</sup>

**Structural Characterization of 3d Metal Complexes Containing an Unconventional Schiff Base Ligand**  
**Carmen Cretu<sup>1\*</sup>, Diana Aparaschivei<sup>1</sup>, Liliana Cseh<sup>1</sup>, Ramona Tudose<sup>1</sup>, Catalin Maxim<sup>2</sup>, Marius Andruh<sup>2</sup>, Athanasios Salifoglou<sup>3</sup> and Otilia Costisor<sup>1</sup>**

<sup>1</sup>*Institute of Chemistry of the Romanian Academy, Timisoara, Romania*

<sup>2</sup>*Inorganic Chemistry Laboratory, Faculty of Chemistry, University of Bucharest, Bucharest, Romania*

<sup>3</sup>*Laboratory of Inorganic Chemistry, Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece*

11<sup>40</sup>-11<sup>50</sup>

**Silver flower-like nanoparticles. Obtaining and AFM study of Aggregation**

**Anca Lascu<sup>1</sup>, Ionela Creanga<sup>1</sup>, Anca Palade<sup>1</sup>, Mihaela Birdeanu<sup>1,2</sup>, Eugenia Fagadar-Cosma<sup>1</sup>**

<sup>1</sup>*Institute of Chemistry Timisoara of Romanian Academy, Timisoara, Romania*

<sup>2</sup>*National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania*

11<sup>50</sup>-12<sup>00</sup>

**Lithium Doped Polyphosphoester Composite**

**Nicoleta Plesu<sup>\*1</sup>, Milica Tara-Lunga-Mihali<sup>1,2</sup>, Smaranda Iliescu<sup>1</sup>, Lavinia Macarie<sup>1</sup>, Gheorghe Ilia<sup>1,2</sup>,**

<sup>1</sup>*Institute of Chemistry, Romanian Academy, Timisoara, Romania,*

<sup>2</sup>*Vest University Timisoara, Faculty of Chemistry-Biology-Geography, Timisoara, Romania*

**12<sup>00</sup> – 14<sup>00</sup>: Poster session I: P01-P73**

14<sup>00</sup>-14<sup>15</sup>

**Fertőtlenítés Szerepe Diclofenac-kal Szennyezett Víz Kezelése Során**

**Földényi Rita<sup>\*</sup>, Joó Szilvia**

*Föld- és Környezettudományi Intézeti Tanszék, Pannon Egyetem, Veszprém, Magyarország*

14<sup>15</sup>-14<sup>25</sup>

**Látható Fénnyel Történő Vízkézelés Rutil Fázisú Titán-Dioxid Fotokatalizátorokkal**

**Tamás Gyulavári<sup>1,3\*</sup>, Gábor Veréb<sup>2,3</sup>, Zsolt Pap<sup>3</sup>, Klára Hernádi<sup>1,3</sup>, András Dombi<sup>3</sup>**

<sup>1</sup>*Szegedi Tudományegyetem, Természettudományi és Informatikai Kar, Alkalmazott és Környezeti Kémiai Tanszék, Szeged*

<sup>2</sup>*Szegedi Tudományegyetem, Mérnöki Kar, Folyamatmérnöki Intézet, Szeged*

<sup>3</sup>*Szegedi Tudományegyetem, Természettudományi és Informatikai Kar, Környezetkémiai Kutatócsoport Szeged*

14<sup>25</sup>-14<sup>35</sup>

**TiO<sub>2</sub> Nanorészecskékel bevont Membránok Jellemzőinek és Fotokatalitikus Aktivitásának Vizsgálata**

**Kovács Ildikó, Kertész Szabolcs, Beszédes Sándor, Veréb Gábor, Hodúr Cecilia, László Zsuzsanna**

*Szegedi Tudományegyetem, Mérnöki Kar, Folyamatmérnöki Intézet, Szeged, Hungary*

14<sup>35</sup>-14<sup>50</sup>

**Confirmation and Differential Diagnosis of Congenital Adrenal Hyperplasia from Dried Blood Spots by UHPLC-MS/MS**

**Péter Monostori<sup>1\*</sup>, Pál Szabó<sup>2</sup>, Otilia Marginean<sup>3</sup>, Csaba Bereczki<sup>1</sup>, Eszter Karg<sup>1</sup>**

<sup>1</sup>*Department of Pediatrics, University of Szeged, Szeged, Hungary*

<sup>2</sup>*Institute of Organic Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest, Hungary*

<sup>3</sup>*Pediatric Endocrinology Department of "Louis Turcanu" Children Clinical Hospital, F<sup>1</sup> Pediatric Clinic of "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania*

14<sup>50</sup>-15<sup>05</sup>

**Neonicotinoid Insecticide Uptake by Maize and Appearance in Guttation Liquid**

Mária Mörthl<sup>1\*</sup>, Ágnes Vehovszky<sup>2</sup>, János Györi<sup>2</sup>, Béla Darvas<sup>1</sup>, András Székács<sup>1</sup>

<sup>1</sup>Agro-Environmental Research Institute, National Agricultural Research and Innovation Centre, Budapest

<sup>2</sup>Balaton Limnological Institute, Centre for Ecological Research, Hungarian Academy of Sciences, Tihany, Hungary

15<sup>05</sup>-15<sup>15</sup>

**Bio-Nanocomposites - Optoelectronics, Energy Conversion, Biosensors**

Richard Csekő<sup>1,2</sup>, Emil Nyérki<sup>1</sup>, Balázs Birta<sup>1</sup>, Hüseyin Anil Diblen<sup>1,2</sup>,

Bilge Hilal Cadirci<sup>2</sup>, Tibor Szabó<sup>1</sup>, Melinda Magyar<sup>1</sup>, Kata Hajdu<sup>1</sup>, Klára Hernádi<sup>1</sup>, László Nagy<sup>1</sup>

<sup>1</sup>Institute of Medical Physics and Informatics, University of Szeged, H, Szeged, Hungary

<sup>2</sup>Gaziosmanpasa University Tashciftlik campus, Faculty of Engineering and Natural Sciences, Department of Bioengineering

15<sup>15</sup>-15<sup>25</sup>

**Removal of Antibiotics From Aqueous Solution by Bioadsorbant**

A. E. Sarrai<sup>\*1, 2, 3</sup>, S. Hanini<sup>1</sup>, N. Kasbadji Merzouk<sup>2</sup>, D. Tassalit<sup>2</sup>, Tibor Szabó<sup>3</sup>, László Nagy<sup>3</sup>

<sup>1</sup>Laboratoire de Biomatiériaux et Phénomènes de Transports LBMP, Université Yahia Fares, Médéa, Algérie.

<sup>2</sup>Unité de Développement des Equipements Solaires, UDES/Centre de Développement des Energies Renouvelables, CDER, W. Tipaza, Algérie.

<sup>3</sup>Department of Medical Physics and Informatics, University of Szeged, Szeged, Hungary

15<sup>25</sup>-15<sup>35</sup>

**Environmental Monitoring of Glyphosate and Assessment of its Combined Cytotoxicity with Adjuvants**

Marianna Ottucsák, Szandra Klátyik, Gergő Gyurcsó, Mária Mörthl, Béla Darvas, András Székács\*

Agro-Environmental Research Institute, National Agricultural Research and Innovation Centre, Budapest, Hungary

15<sup>35</sup>-15<sup>50</sup>

**Degradation of Monuron in Aqueous Solution by Ionizing Radiation**

Krisztina Kovács<sup>1\*</sup>, Viktória Mile<sup>1</sup>, Tamás Csay<sup>1</sup>, Shijun He<sup>2</sup>, Erzsébet Takács<sup>1</sup>, László Wojnárovits<sup>1</sup>

<sup>1</sup>Institute for Energy Security and Environmental Safety, Centre for Energy Research, Hungarian Academy of Sciences, Budapest, Hungary

<sup>2</sup>Institute of Nuclear and New Energy Technology (INET), Tsinghua University, Beijing, China

15<sup>50</sup>-16<sup>00</sup>

**Az Oldható Elemtartalmak Változása Meszes Csernozjom Talajon Beállított Nehézfém Terhelés Szabadföldi Tartamkísérletben**

Szabó Anita, Pokovai Klára, Rékási Márk, Csathó Péter, Kádár Imre, Lehoczky Éva

Talajtani és Agrokémiai Intézet, Agrártudományi Kutatóközpont, Magyar Tudományos Akadémia, Budapest

16<sup>00</sup>-16<sup>10</sup>

**Ciszteín Tartalmú Oligopeptid Toxikus Fémionokkal való Kölcsönhatásának Vizsgálata Analitikai Felhasználás Céljából**

Szekeres Levente, Bálint Sára, Tóth Anikó, Jancsó Attila

Szervetlen és Analitikai Kémiai Tanszék, Szegedi Tudományegyetem, Szeged

**Poster Presentations**

**Poster Session I (P01-P73): 12<sup>00</sup>-14<sup>00</sup>**

P01

**Pollution from Meat Processing Factories**

**Dragan Adamović<sup>1\*</sup>, Mirjana Vojinović- Miloradov<sup>1</sup>, Jelena Radonić<sup>1</sup>, Maja Turk- Sekulić<sup>1</sup>, Savka Adamović<sup>2</sup>**

<sup>1</sup>*Department of Environmental Engineering and Occupational Safety and Health, Faculty of Technical Sciences, University of Novi Sad, 21000 Novi Sad, Trg Dositeja Obradovića 6, Serbia*

<sup>2</sup>*Department of Graphic Engineering and Design, Faculty of Technical Sciences, University of Novi Sad, 21000 Novi Sad, Trg Dositeja Obradovića 6, Serbia*

P02

**The Combined Electrocoagulation/Flotation and Adsorption Processes for Organic Substances Regeneration of Waste Printing Developer**

**Savka Adamovic<sup>1</sup>, Miljana Prica<sup>1</sup>, Bozo Dalmacija<sup>2</sup>, Jelena Trickovic<sup>2</sup>, Marijana Kragulj<sup>2</sup>, Snezana Maletic<sup>2</sup>, Dragan Adamovic<sup>1</sup>**

<sup>1</sup>*University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia*

<sup>2</sup>*University of Novi Sad, Faculty of Sciences, Novi Sad, Serbia*

P03

**Rabbits *in vivo* Experiments and Haematological Evaluation After Iron Toxicity**

**Mirela Ahmadi<sup>1\*</sup>, Dorel Dronca<sup>2</sup>, Cornelia Milovanov<sup>1</sup>, Oana Boldura<sup>1</sup>, Ioan Hutu<sup>1</sup>, Calin Mircu<sup>1</sup>, Camelia Tulcan<sup>1</sup>**

<sup>1</sup>*Faculty of Veterinary Medicine, University of Agriculture Sciences and Veterinary Medicine of Banat “King Michael 1st of Romania”, Timisoara, Romania*

<sup>2</sup>*Faculty of Animal Sciences and Biotechnologies, University of Agriculture Sciences and Veterinary Medicine of Banat “King Michael 1st of Romania”, Timisoara, Romania*

P04

**P-Nitrophenol Adsorption on Polystyrene-Co-Divinylbenzene Functionalized Copolymers**

**Roxana Babuța<sup>1\*</sup>, Adriana Popa<sup>2</sup>, Cornelia Păcurariu<sup>1</sup>, Ecaterina Stela Drăgan<sup>3</sup>, Ioan Lazău<sup>1</sup>**

<sup>1</sup>*Politehnica University Timișoara, Faculty of Industrial Chemistry and Environmental Engineering, Timișoara, România*

<sup>2</sup>*Institute of Chemistry Timișoara of Romanian Academy, Romanian Academy, Timișoara, România*

<sup>3</sup>*Petru Poni” Institute of Macromolecular Chemistry, Iași, România*

P05

**TiO<sub>2</sub> Thin Films on Si Substrate Obtained by PLD for Sensing Applications**

**Cornelia Bandas<sup>1</sup>, Ileana Cernica<sup>2</sup>, Corina Orha<sup>1</sup>, Stefania Rus<sup>1</sup>, Carmen Lazau<sup>1\*</sup>**

<sup>1</sup>*Department of Condensed Matter, National Institute for Research & Development in Electrochemistry and Condensed Matter, Timisoara, Romania*

<sup>2</sup>*National Institute for Research and Development in Microtechnologies, Bucharest, Romania*

P06

**Influence of Termic Treatment on *Armoracia Rusticana* Roots and Leaves, Total Polyphenols Content**

**Despina-Maria Bordean<sup>\*</sup>, Marinel Horablaga, Ioan Gogoasa, George Andrei Draghici, Lidia Sida, Luminita Pirvulescu<sup>\*\*</sup>, Luminita Cojocariu, Aurica Breica Borozan**

*Banat’s University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania*

**P07**

**Evaluation of Tomato Yield Using Statistical Tests**

**Diana Moigradean<sup>1</sup>, Mariana-Atena Poiana<sup>1</sup>, Liana-Maria Alda<sup>1</sup>, Simion Alda<sup>2</sup>,  
George-Andrei Draghici<sup>1</sup>**

<sup>1</sup>Faculty of Food Processing Technology, Banat's University of Agricultural Sciences and Veterinary Medicine „King Mihai I of Romania” from Timisoara, Timisoara, Romania

<sup>2</sup>Faculty of Horticulture and Forestry, Banat's University of Agricultural Sciences and Veterinary Medicine „King Mihai I of Romania” from Timisoara, Timisoara, Romania

**P08**

**Bio-Minerals Contribution of Seasonal Fruits to the Recommended Dietary Allowances**

**Ioan Gogoasa<sup>1\*</sup>, Liana Maria Alda<sup>1</sup>, George Andrei Drăghici<sup>1</sup>, Despina-Maria Bordean<sup>1\*\*</sup>, Adina Negrea,  
Gheorghita Jigoria<sup>1</sup>, Ariana Velciov<sup>1</sup>, Maria Rada<sup>3</sup>,  
Antonela Cozma<sup>1</sup>, Iosif Gergen<sup>1</sup>**

<sup>1</sup>Banat's University of Agricultural Science and Veterinary Medicine "King Mihai I of Romania", Romania

<sup>2</sup>Politehnica University - Timisoara, Romania

<sup>3</sup>Victor Babes University of Medicine and Pharmacy, Timisoara, Romania

**P09**

**The Influence of Total Chromium Soil Content on the Maize Zinc Levels, in a Polluted Area**

**Liana Maria Alda\*, Simion Alda, Diana Moigradean\*\*, Teodor Cristea, George Andrei Draghici,  
Luminita Pirvulescu, Iosif Gergen**

Banat's University of Agricultural Science and Veterinary Medicine "King Mihai I of Romania", Timisoara, Romania

**P10**

**Improved Electrical Response in GdMnO<sub>3</sub> Doped (K, Na)NbO<sub>3</sub> Piezoelectric Speaker**

**Bucur Raul Alin, Bucur Alexandra Ioana**

**P11**

**Pesticide Residues in Maize by LC-MS/MS**

**Gorica Vuković<sup>1\*</sup>, Vojislava Bursić<sup>2</sup>, Maja Meseldžija<sup>2</sup>, Bojana Špirović-Trifunović<sup>3</sup>, Snežana Tanasković<sup>4</sup>**

<sup>1</sup>Institute of Public Health, Belgrade, Serbia

<sup>2</sup>Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia

<sup>3</sup>Faculty of Agriculture, University of Belgrade, Zemun, Serbia

<sup>4</sup>Faculty of Agronomy Čačak, University of Kragujevac, Čačak, Serbia

**P12**

**Determination of Pesticide Residues in Honeybees by GC-MS and LC-MS/MS**

**Vojislava Bursić<sup>1\*</sup>, Gorica Vuković<sup>2</sup>, Sonja Gvozdenac<sup>1</sup>, Mira Pucarević<sup>3</sup>, Tijana Zeremski<sup>4</sup>, Zoran  
Stojanović<sup>5</sup>, Rada Đurović-Pejčev<sup>6</sup>**

<sup>1</sup>Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia

<sup>2</sup>Institute of Public Health, Belgrade, Serbia

<sup>3</sup>EDUCONS University, Faculty for Environmental Protection, Sremska Kamenica

<sup>4</sup>Institute of Field and Vegetable Crops, Novi Sad, Serbia

<sup>5</sup>Republic Hydrometeorological Service of Serbia, Belgrade, Serbia

<sup>6</sup>Institute of Pesticides and Environmental Protection, Belgrade, Serbia

**P13**

**Reduced Use of Pesticides in Tick Control in the Urban Environment**

**Aleksandra Petrovic, Aleksandar Jurisic, Ivana Ivanovic, Dragana Rajkovic**

<sup>1</sup>Department of Environmental and Plant Protection, Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia

<sup>1</sup>Department of Field and Vegetable Crops, Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia

**P14**

**Ground Beetles as Bioregulators of Harmful Insect Populations on Arable Land**

Aleksandra Popović, Miloš Petrović, Jovana Sućur, Aleksandra Petrović, Vojislava Bursić, Ivana Ivanović

**P15**

**Soil Herbicides Efficacy in Pumpkins**

Meseldzija Maja/ Brdar-Jokanovic, M., Ljevnaic-Masic, B., Bursic, V., Medic, J.

**P16**

**Assessment of Serum Metallograms in Patients with Purine Urolithiasis Before and After Treatment**

Zeno Gârban<sup>1,2</sup>, Alin Cumpănaș<sup>3</sup>, Adina-Elena Avacovic<sup>2</sup>, Cornel Baltă<sup>4</sup>, Ludovic Sayti<sup>5</sup>, Sorin Marinescu<sup>5</sup>, Mirela-Minerva Nedelcu<sup>6</sup>

<sup>1</sup>Department of Biochemistry and Molecular Biology (former), Faculty of Food Products Technology, University of Agricultural Sciences and Veterinary Medicine of Banat "King Michael I of Romania" from Timișoara, Timișoara, Romania

<sup>2</sup>Working Group for Xenobiochemistry, Romanian Academy-Branch Timișoara, Timișoara, Romania

<sup>3</sup>Clinic of Urology, Faculty of Medicine, University of Medicine and Pharmacy „Victor Babeș”, Timișoara, Romania

<sup>4</sup>West University „Vasile Goldiș” Arad, Faculty of Medicine, Arad, Romania

<sup>5</sup>Institute of Chemistry of the Romanian Academy, Timișoara, Romania

<sup>6</sup>Clinical Laboratory, Municipal Hospital, Timișoara, Romania

**P17**

**Fortified Foods With Mineral Elements - Conceptual and Applicative Data**

Gârban Gabriela<sup>1</sup>, Muselin Florin<sup>2</sup>, Negrea Adina<sup>3</sup>, Ujhelyi Robert<sup>4</sup>, Romînescu Ramona<sup>7</sup>, Gârban Zeno<sup>6,7</sup>

<sup>1</sup>Laboratory of Environment and Nutrition, National Institute of Public Health - Branch Timișoara, Timișoara, Romania

<sup>2</sup>Faculty of Veterinary Medicine, University of Agricultural Sciences and Veterinary Medicine of Banat "King Michael I of Romania" from Timișoara, Timișoara, Romania

<sup>3</sup>Faculty of Industrial Chemistry and Environmental Engineering, University Politehnica Timișoara, Timișoara, Romania

<sup>4</sup>Medical Department, S.C. CaliVita International, Timișoara, Romania;

<sup>5</sup>School Group for Food Industry, Timișoara, Romania

<sup>6</sup>Department of Biochemistry and Molecular Biology (former), Faculty of Food Products Technology, University of Agricultural Sciences and Veterinary Medicine of Banat "King Michael I of Romania" from Timișoara, Timișoara, Romania

<sup>7</sup>Working Group for Xenobiochemistry, Romanian Academy-Branch Timișoara, Timișoara, Romania

**P18**

**Single Crystalline Micrometric Magnetite for Magnetic Resonance Imaging**

Corina Beljung<sup>1</sup>, Mihaela Luminita Kiss<sup>1</sup>, Adrian Ieta<sup>2</sup>, Marius Chirita<sup>3,\*</sup>

<sup>1</sup>Politehnica University, Timisoara; <sup>2</sup> Department of Physics, SUNY Oswego, NY, USA; <sup>3</sup>National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania

**P19**

**Influence of CO<sub>2</sub> upon UV-Vis Spectroscopy of Silica-Tetra-3,4-Dimethoxy-Phenyl-Porphyrin Hybrid Nanomaterial**

Ionela Creanga<sup>1</sup>, Anca Palade<sup>1</sup>, Anca Lascu<sup>1</sup>, Ileana Cernica<sup>2</sup>, Mihaela Birdeanu<sup>1,3</sup>, Eugenia Fagadar-Cosma<sup>1</sup>

<sup>1</sup>Institute of Chemistry Timisoara of Romanian Academy, Timisoara, Romania

<sup>2</sup>National R&D Institute for Microtechnology, Romania

<sup>3</sup>National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania

## ***21<sup>st</sup> International Symposium on Analytical and Environmental Problems***

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**Anca Palade, Ionela Creanga, Anca Lascu, Eugenia Fağadar-Cosma**

*Institute of Chemistry Timisoara of Romanian Academy, Timisoara, Romania*

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**Luminita Crisan, Liliana Pacureanu**

*Department of Computational Chemistry, Institute of Chemistry of Romanian Academy, Timisoara, Romania*

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**Simona Funar-Timofei, Ana Borota, Alina Bora, Ramona Curpan, Sorin Avram**

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**Andreea Gabor\*, Corneliu-Mircea Davidescu, Adina Negrea, Mihaela Ciopec, Petru Negrea**

*University Politehnica Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, Timisoara, Romania*

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**Ioana M.C. Ienaşcu<sup>1,2</sup>, Adina Căta<sup>1\*</sup>, Mariana N. Ştefănuţ<sup>1</sup>, Cristian Tănăsie<sup>1</sup>,**

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**Roxana Istratie\*, Cornelia Păcurariu, Robert Ianoş**

*Politehnica University Timișoara, Faculty of Industrial Chemistry and Environmental Engineering, Timișoara, Romania*

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**Victor-Daniel Craia Joldes, Mircea Laurentiu Dan, Nicolae Vaszilcsin, Andrea Kellenberger, Narcis**

**Mihai Duteanu**

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**Mircea Laurentiu Dan\*, Nicolae Vaszilcsin, Andrea Kellenberger, Narcis Mihai Duteanu**

*University Politehnica Timișoara, Faculty of Industrial Chemistry and Environmental, Timisoara, Romania*

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**Capsaicin Extract as Corrosion Inhibitor for Carbon Steel in Sodium Chloride Aqueous Solution**

**Cristian George Vaszilcsin<sup>\*</sup>, Mircea Laurentiu Dan<sup>\*\*</sup>, Andreea Enache<sup>\*\*</sup>**

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**Andreea Enache<sup>\*</sup>, Mircea Laurentiu Dan, Nicolae Vaszilcsin**

*University Politehnica Timișoara, Faculty of Industrial Chemistry and Environmental Engineering, Timisoara, Romania*

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**Delia-Andrada Duca<sup>\*</sup>, Nicolae Vaszilcsin, Mircea Laurențiu Dan**

*University Politehnica Timișoara, Faculty of Industrial Chemistry and Environmental Engineering, Timisoara, Romania*

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**Agnes Jakab<sup>\*</sup>, Mircea Laurențiu Dan, Nicolae Vaszilcsin**

*Politehnica University of Timișoara, Faculty of Industrial Chemistry and Environmental Engineering, Timisoara, Romania*

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**Dorin Jurcau<sup>1</sup>, Nicoleta Plesu<sup>2\*</sup>, Lavinia Macarie<sup>2</sup>,**

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*Institute of Chemistry Timișoara of Romanian Academy, Timisoara, Romania*

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**Low Cost Production Method of Cds Based Photocatalysts**

**Radu Banica<sup>1,2</sup>, Petrica A. Linul<sup>1\*</sup>, Andrei Racu<sup>1,3</sup>, Paula Svera<sup>1,2</sup>, Cristina Mosoarca<sup>1</sup>**

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**Petru Negrea<sup>1</sup>, Lavinia Lupa<sup>1\*</sup>, Adriana Popa<sup>2</sup>, Marcela Stoia<sup>1</sup>**

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<sup>2</sup>*Institute of Chemistry Timisoara of Romanian Academy, Romanian Academy, Timisoara, Romania*

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*“Politehnica” University of Timisoara, Timisoara, Romania*

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**Marjana Simonič**

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*National R&D Institute for Industrial Ecology - ECOIND - Timisoara Branch, Timisoara, Romania*

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Nicolae Dinca<sup>1</sup>, Eugen Sisu<sup>1\*</sup>**

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<sup>4</sup>*"Faculty of Food Engineering, Tourism and Environmental Protection, "Aurel Vlaicu" University of Arad, Arad, Romania*

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**Oxidic Systems from Some Organometallic Precursors**

**Mircea Niculescu<sup>1,2</sup>, Mihai-Cosmin Pascariu<sup>2,3,4\*</sup>**

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**Ecological Survey of Padiș Area, Romania**

**Mihai-Cosmin Pascariu<sup>1,2,3</sup>, Tiberiu Tulucan<sup>4,5</sup>, Mircea Niculescu<sup>3,6</sup>, Iuliana Sebarchievici<sup>7\*</sup>**

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**TLC-Densitometric Investigation of Bioactive Components from Mediterranean Algae**

**Loreta-Andrea Bozin<sup>1#</sup>, Anca Dragomirescu<sup>1#</sup>, Georgeta Simu<sup>1#</sup>,  
Mihai-Cosmin Pascariu<sup>1,2,3</sup>, Alina Serb<sup>1</sup>, Eugen Sisu<sup>1\*</sup>**

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**Kazius-Bursi Salmonella Mutagenicity and Carcinogenicity Predicted by the Base of Acute Toxicity in Quantitative SAR (QSAR)-Analysis, by MLR and PNN Applied to 13- Thiophosphonates Pesticides Alina-Maria Petrescu<sup>1,\*</sup>, Gheorghe Iliu<sup>1,2</sup>**

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**Iuliana Popescu<sup>\*</sup>, Despina Bordean, Luminita Pirvulescu, Ioana Ienascu**

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**Miljana Prica<sup>1\*</sup>, Savka Adamović<sup>1</sup>, Jelena Radonić<sup>1</sup>, Maja Turk-Sekulić<sup>1</sup>, Milica Velimirović<sup>2</sup>, Jelena Tričković<sup>3</sup>**

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**Marina Putnik-Delić, Ivana Maksimović, Rudolf Kastori, Milica Perišić, Žarko Iliin**

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**Effect of Strain in Nickel Ferrite Thin Films**

**Florina Stefania Rus<sup>1\*</sup>, Andreas Herklotz<sup>2</sup>**

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**Experimental Study of the Ibuprofene's Interaction with Some Natural Supports**

**Georgeta-Maria Simu<sup>1\*</sup>, Maria Grad<sup>2</sup>, Sabrina Fessi<sup>1</sup>**

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**Toxicological Evaluation of the Organic Phase Resulted from the COSORB Process**

**Georgeta-Maria Simu<sup>1\*</sup>, Dorina Coricovac<sup>1</sup>, Liliana Cseh<sup>2</sup>, Codruța Șoica<sup>1</sup>, Cristina Dehelean<sup>1</sup>**

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**Wastewater Coagulation with Chitosan-Al-Compounds**

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**Oil Polluted Soils Phytoremediation by Grazing Culture**

**Masu Smaranda**

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**Oil Wastewater Coagulation with Industrial Waste Iron Coagulant**

**Smaranda Mășu\*, Ladislau Andres**

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**Simultaneous Determination of Mesotrione and Nicosulfuron in OD Formulations**

**Sanja Lazić, Dragana Šunjka, Jovana Bajčić, Slavica Vuković**

*Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia*

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**Effects of the Precursors on the Photocatalytic Water Splitting Activity of ZnS/CdS Compounds**

**Paula Svera<sup>\*1,2</sup>, Andrei V. Racu<sup>1,3</sup>, Cristina Mosoarca<sup>1</sup>, Daniel Ursu<sup>1,2</sup>, Petrica Linul<sup>1</sup>, Radu Baies<sup>1,2</sup>, Radu Banica<sup>1,2</sup>**

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**Paulina Vlazan, Maria Poienar, Iasmina Miron, Paula Sfirloaga**

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**Maria Poienar, Paulina Vlazan, Paula Sfirloaga, Daniel Ursu, Radu Baies**

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**As(V) Adsorption using MFe<sub>2</sub>O<sub>4</sub> (M=Cd<sup>2+</sup>, Ni<sup>2+</sup>) Ferrite Nanoparticles**

**Raluca Vodă<sup>1\*</sup>, Mihaela Ciopec<sup>1</sup>, Adina Negrea<sup>1</sup>, Lavinia Lupa<sup>1</sup>, Petru Negrea<sup>1</sup>, Corneliu M. Davidescu<sup>1</sup>**

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**Mihaela Birdeanu<sup>1,2\*</sup>, Mirela Vaida<sup>1</sup>, Francisc Peter<sup>1</sup>, Eugenia Fagadar-Cosma<sup>3</sup>**

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**Damian D., Segneanu A., Berki D., Grozescu I.**

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**Eszter Takács**

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**Mézek Összehasonlító Vizsgálata**

**Szigeti Ferenc<sup>1</sup>, Stefanovits-Bányai Éva<sup>2</sup>, Soós Anita<sup>1</sup>**

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**Noise Measurements and Noise Distribution in the City of Szeged**

**Zsolt I. Benkő**

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**Lipidomic Approach to Identify Patterns in Phospholipid Profiles in Atherosclerosis in Apoe Deficient Mice Infected with Chlamydia Pneumoniae**

**Nóra Kovács<sup>1</sup>, Ildikó Lantos<sup>2</sup>, Valéria Endrész<sup>2</sup>, Róbert Berkecz<sup>1</sup>**

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<sup>2</sup>*Department of Medical Microbiology and Immunobiology, University of Szeged, Szeged, Hungary*

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**Brain Phospholipid Profiling in a Mouse Model of Anxiety Disorder**

**Róbert Berkecz<sup>1</sup>, Sára Zsigrai<sup>1</sup>, Viktor Szegedi<sup>2</sup>**

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**Microbial Degradation of Hydrophobic Compounds under Various Environmental Conditions**

**Attila Bodor<sup>1,2</sup>, Krisztián Laczi<sup>1,2</sup>, Ágnes Kis<sup>2,3</sup>, Sándor Mészáros<sup>1</sup>, Nikolett Rácz<sup>1</sup>, Gábor Rákhely<sup>1,2,3</sup> and Katalin Perei<sup>1,2</sup>**

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**Antibacterial Effects of Sour Cherry and Sea Buckthorn**

**Diána Furulyás<sup>1</sup>, Szabolcs Keszi<sup>2</sup>, Tekla Engelhardt<sup>2</sup>, Csilla Mohácsi-Farkas<sup>2</sup>, Éva Stefanovits-Bányai<sup>3</sup>, Hegedűs Attila<sup>4</sup>, Papp Nóra<sup>3</sup>, Mónika Stégerne-Máté<sup>1</sup>**

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**Possibilities of Complex Food-Processing of Quince**

**Diána Furulyás<sup>1</sup>, Orsolya Nagy<sup>1</sup>, Nóra Papp<sup>2</sup>, Éva Stefanovits-Bányai<sup>2</sup>, Mónika Stéger-Máté<sup>1</sup>**

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**Ibolya Budai<sup>1,2</sup>, Dóra Hopenthaler<sup>1,2</sup>, Zsolt Molnár<sup>1</sup>, Marianna Radács<sup>1</sup>, Márta Gálfi<sup>1</sup>**

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**The Effect of the Plasma Sampling Depth and the Flow Rate of the Aerosol Dilution Gas on the Performance of Single Particle Inductively Coupled Plasma-Mass Spectrometry (SP-ICP-MS) Measurements**

**Ildikó Kálomista, Albert Kéri\*, Gábor Galbács**

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**Discriminant Analysis of Coal Samples by Laser Induced Breakdown Spectroscopy**

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**Enantioseparation of Amino Alcohol Analogs Possessing 1,2,3,4-Tetrahydroisoquinoline Skeleton and its Derivatives Using Polysaccharide-based Chiral Stationary Phases**

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**The Effects of Chlorobenzenes with the Combination of Extreme Low Electromagnetic Field**

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**Possible Neurotoxicity of Titanium Dioxide Nanoparticles in a Subacute Rat Model**

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**Synthesis and Characterization of Pt Nanoparticles with Controlled Size for Catalytic Applications**

Koppany Levente Juhász, M. Szabo, D. Dobo, A. Szamosvolgyi, E. Lazar, T. Varga, A. Sapi, A. Kukovecz, Z. Konya

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**Examination of the Photocatalytic Activity of Differently Shaped Bismuth Tungstate Microcrystals**

Zsolt Kása<sup>1\*</sup>, Kata Saszet<sup>2</sup>, Zsolt Pap<sup>1,2,3</sup>, Gábor Kovács<sup>2,3</sup>, András Dombi<sup>1</sup>, Klára Hernádi<sup>1,4</sup>, Lucian Baiã<sup>3</sup>, Virginia Danciu<sup>2</sup>

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**Reaction of Biofilms (Cyanobacterial, Diatom and Green Algae) from Lake Balaton and River Danube to Herbicide Preparation ROUNDUP and its Components**

(Glyphosate, POEA)

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**Waste Water Treatment by Iron Nanoparticles Prepared by Pulsed Electrochemical Deposition**

Zsuzsanna Máttyás-Karácsony, Péter Tolmács, Éva Fazakas, Mónika Furkó

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**Hydroxyl Radical Reaction with Monuron**

Viktória Mile<sup>1</sup>, Ildikó Harsányi<sup>1</sup>, Krisztina Kovács<sup>1</sup>, Tamás Földes<sup>2</sup>, Imre Pápai<sup>2</sup>, Erzsébet Takács<sup>1</sup>, László Wojnárovits<sup>1</sup>

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**Effect of Salinity Stress on Ion Accumulation and on the Photosynthetic Activity of a New Energy Plant, *Phalaris arundinacea* Cultivars**

Péter Poór<sup>1\*</sup>, Attila Ördög<sup>1</sup>, Barnabás Wodala<sup>1</sup>, Péter Borbély<sup>1</sup>, Ionel Samfira<sup>2</sup>, Monica Butnariu<sup>2</sup>, Dóra Hegedűs<sup>1</sup>, Katalin Szabó<sup>1</sup>, Attila Pécsváradi, Irma Tari<sup>1</sup>

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**Illékony Anyagcseremarkerek Meghatározása HS-SPME-GC-MS Technikával**

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**Ionization Techniques of Volatile Compounds. CI vs EI**

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**The Effect of the Simultaneous Presence of Four Non-Steroidal Anti-Inflammatory Drugs During the Vacuum Ultraviolet Photolysis**

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**Functionalized Hematite Photoelectrode for Solar Water Splitting**

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**Hol Jobb: A Fitotronban vagy a Konyhában?**

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**Módszerfejlesztés Szintetikus Kannabinoidok Kimutatására Vizelethől**

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**Identification of By-products Formed During the Oxidative Transformation of Phenylurea Pesticides**

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**Antioxidáns Hatású Vegyületek Koncentrációjának Változása Pírosribiszke-lé Membránszeparációval  
főrtendő Besűrítése során**

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