

# SCIENTIFIC PROGRAM

MONDAY, April 10, 2017

AURELIUS HALL

## 13:00 – 13:15 OPENING CEREMONY

*Assoc. Prof. Ing. Jaromír Lederer, Ph.D. | ČSPCH President  
Ing. Jaromír Lubojacký, MBA | Program Committee President  
Ing. Eduard Muřický, Ph.D. | Deputy Minister of Industry and Trade of the Czech Republic*

## 13:15 – 18:00 PLENARY LECTURES

*Chairman: Lederer J. | Litvínov*

### 1. Prospects of Unipetrol Development

*Assoc. Prof. Ing. Tomáš Herink, Ph.D. | Unipetrol RPA*

### 2. Energy Efficiency of Crude Oil Processing

*Prof. Ozren Ocić | Fakultet za inženjerski menadžment, Beograd, Serbia*

### 3. Prospects of Fertilizer Production – Construction of a New Ammonia Plant

*Ing. Branislav Brežný | Agrofert, Duslo, VUCHT, a.s*

*14:45 - 15:15 Coffee break with refreshment*

### 4. 100 Years of Chemistry in Sokolov. And What Then?

*Ing. Jan Nájemník | Synthomer a.s.*

### 5. Biofuels Based on FAME

*Prof. Ing. Josef Pašek, DrSc. | UCT Prague*

### 6. Trends in the Biofuels Production

*Ing. Martin Kubů | Agrofert Holding, a. s.*

### 7. Intensification in Industry – a Challenge for Process Engineering

*Prof. Ing. Tomáš Jirout, Ph.D. | CTU in Prague*

### 8. Status of Chemical Industry in Czech Republic

*Ing. Ivan Souček, Ph.D. | Association of Chemical Industry in Czech Republic*

### 9. 4.0 Industry and Applications in Chemical Industry

*Ing. Jiří Holoubek + round table | ELCOM, a.s.*

**18:00 – 22:00 POSTER SESSION, WELCOME DRINK***Chairman: Hanika J. | Praha*

The poster session program can be found on pages 21 – 31.

We ask the authors to be present at their posters at least from 19:00 to 20:00.

The Best Poster Prize will be awarded in Aurelius Hall at 21:00.

**8:30 – 12:10 MATERIAL ENGINEERING***Chairman: Vojtěch D. | Prague***MI1. Material Design Problems of Plasma-Chemical Reactors for Disposal Perfluorinated Compounds***Brožek V., Březina V., Mastný L., Kubatík T. F., Živný O. | Prague***MI2. Microbially Influenced Corrosion in Nuclear Repository Environment***Stoulil J.<sup>1</sup>, Dobrev D.<sup>2</sup>, Kouřil M.<sup>1</sup> | <sup>1</sup>Prague, <sup>2</sup>Řež***MI3. Prehľad korózných inhibítorov a používaných metód pri rehabilitácii železobetónových konštrukcií***Lovaši T., Kouřil M. | Praha***MI4. Treated Material Surfaces for Electronics and Tissue Engineering***Švorčík V.<sup>1</sup>, Slepíčka P.<sup>1</sup>, Lyutakov O.<sup>1</sup>, Siegel J.<sup>1</sup>, Slepíčková Kasálková N.<sup>1</sup>, Kolská Z.<sup>2</sup>, Kolářová K.<sup>1</sup>, Řezníčková A.<sup>1</sup> | <sup>1</sup>Prague, <sup>2</sup>Ústí nad Labem*

10:10 – 10:30 Coffee break

**MI5. Testing Bioactivity of Chemically Modified Polymers***Benkocká M.<sup>1</sup>, Kolářová K.<sup>2</sup>, Matoušek J.<sup>1</sup>, Kolská Z.<sup>1</sup> | <sup>1</sup>Ústí nad Labem, <sup>2</sup>Prague***MI6. Nové pěnové materiály připravené alkalickou aktivací přírodních zeolitů***Tišler Z.<sup>1,2</sup>, Bulánek R.<sup>2</sup> | <sup>1</sup>Litvínov-Záluží, <sup>2</sup>Pardubice***MI7. SiO<sub>2</sub> Fibers by Centrifugal Spinning: Beating up Traditional Sorbents***Hromadko L., Koudelkova E., Buk J., Bulanek R., Macak J. M. | Pardubice***MI8. Preparation of Spheroidized and Nano-Structural Spinels by the SPPS Method***Brozek V., Lukac F., Medricky J., Musalek R., Mastny L., Brodil R. | Prague*

12:10 – 13:40      Lunch  
Restaurant Bellevue (3<sup>rd</sup> floor) + Wine Cellar

**13:40 – 17:45      MODERN METALLIC BIOMATERIALS FOR MEDICAL PURPOSES**  
Chairman: Vojtěch D. | Prague

**MZ1.      Biodegradable Magnesium Alloys for Applications in Traumatology**  
Kubásek J., Vojtěch D., Jablonská E., Levorová J., Foltán R. | Prague

**MZ2.      Náhrady s nanostrukturovaným povrchem – nová generace implantátů**  
Joska L.<sup>1</sup>, Fojt J.<sup>1</sup>, Fencí J.<sup>2</sup>, Sekerka M.<sup>2</sup>, Cvrček L.<sup>1</sup> | <sup>1</sup>Praha, <sup>2</sup>Kladno

**MZ3.      Nový porézni biomateriál na bázi titanu**  
Novák P., Bernatíková A., Knaislová A. | Praha

**MZ4.      Porézni kovové materiály pro kostní náhrady připravené 3D tiskem**  
Fousová M., Vojtěch D., Jablonská E., Kubásek J. | Praha

15:20 – 15:40      Coffee break with refreshment

**MZ5.      Stabilita kovových biomateriálů v tělním prostředí**  
Fojt J., Joska L., Stehlíková K., Hybášek V., Průchová E. | Praha

**MZ6.      Příprava organizovaných nanotubulárních struktur na vývojových slitinách titanu**  
Hybášek V., Fojt J., Joska L., Průchová E. | Praha

**MZ7.      Nanostructured Ti-6Al-4V Surface with Antimicrobial Efficiency**  
Průchová E., Joska L., Kosová M., Hybášek V. | Prague

**MZ8.      Příprava stříbrných nanočástic redukcí z vodných roztoků pomocí sacharidů**  
Michalcová A., Machado L., Martinec M., Marek I., Vojtěch D. | Praha

**MZ9.      Preparation of Porous Biodegradable Metallic Materials**  
Čapek J., Vojtěch D. | Prague

**8:30 – 10:10 PETROCHEMICALS AND ORGANIC TECHNOLOGY***Chairmen: Lederer J. | Litvínov, Wichterle K. | Ostrava***PO1. Je chemické inženýrství věda?***Wichterle K. | Ostrava***PO2. Synergetic Effects of Lewis and Brønsted Acids in Prins Cyclization***Vyskočilová E., Fidlerová B., Červený L. | Prague***PO3. Liquid Phase Dehydrogenation of Isopropanol***Muntágová<sup>1</sup> L., Wenchich Š.<sup>1</sup>, Králik M.<sup>1</sup>, Végh Z.<sup>1</sup>, Kučera M.<sup>1</sup>, Bíro P.<sup>2</sup> | <sup>1</sup>Bratislava, <sup>2</sup>Šaľa***PO4. A Novel Multistage Membrane System for Nitrogen Removal from Natural Gas***Al-Rabiah A.A. | Riyadh (Saudi Arabia)**10:10 – 10:30 Coffee break***10:30 – 12:10 PETROCHEMICALS AND ORGANIC TECHNOLOGY***Chairmen: Bělohav Z. | Prague, Králik M. | Bratislava***PO5. Katalyzátor Cu-Zn-Al pro hydrogenační dehydroxylaci glycerolu***Soukupová L., Kolena J., Tišler Z. | Litvínov***PO6. Phloroglucinol Derivatives as Metal Deactivators***Alexanyan K., Yarullin N., Salmanov S., Naletova A. | Moscow (Russia)***PO7. Contribution Method for Kinetic Parameters Estimation Applied to the Steam Cracking Modeling***Karaba A.<sup>1,2</sup>, Zámotný P.<sup>2</sup> | <sup>1</sup>Ústí nad Labem, <sup>2</sup>Prague***PO8. Influence of Pigments Based on Chemical Modification of TNT on the Properties of Polyurea Lubricants***Alexanyan K., Glicheva K., Kilyakova A. | Moscow (Russian)**12:10 – 13:40 Lunch**Restaurant Bellevue (3<sup>rd</sup> floor) + Wine Cellar*

**13:40 – 14:30 PETROCHEMICALS AND ORGANIC TECHNOLOGY**

*Chairmen: Vyskočilová E., Patera J. | Prague*

**PO9. Ethanol Separation by Solvent Extraction Using [TDTHP][NTf<sub>2</sub>] Ionic Liquid: Alternatives of Extraction Solvent Regeneration**

*Steltenpohl P., Graczová E. | Bratislava*

**PO10. Catalytic and Thermal Cleavage of  $\beta$ -Pinene Oxide and Myrtenol**

*Patera J., Paterová I., Hladíková P. | Prague*

**14:30 – 15:20 OIL, GAS, COAL, FUEL, BIOFUELS**

*Chairmen: Vyskočilová E., Patera J. | Prague*

**RP1. Vliv obnovitelných zdrojů energie na emise skleníkových plynů z dopravy**

*Pospíšil M.<sup>1</sup>, Souček I.<sup>1</sup>, Šimáček P.<sup>1</sup>, Kittel H.<sup>2</sup> | <sup>1</sup>Praha, <sup>2</sup>Beroun*

**RP2. Výroba bionafty: zrychlení a zjednodušení separace přídavkem anorganické kyseliny**

*Vávra A., Skopal F., Hájek M. | Pardubice*

*15:20 – 15:40 Coffee break with refreshment*

**15:40 – 18:10 OIL, GAS, COAL, FUEL, BIOFUELS**

*Chairman: Blažek J. | Prague*

**RP3. Overview of Applications of Pyrolysis Bio-Oils**

*Staš M., Auersvald M., Shumeiko B. | Prague*

**RP4. Reliable Bio-Based Refinery Intermediates – Biomates**

*Heil V.<sup>1</sup>, Schulzke T.<sup>1</sup>, Bezergianni S.<sup>2</sup>, Kubička D.<sup>3</sup>, Rettenmaier N.<sup>1</sup>, Pfisterer U.<sup>1</sup>, Martin M.<sup>3</sup>, Mulder M.<sup>4</sup>, Diaz-Chavez R.<sup>5</sup> | <sup>1</sup>Oberhausen (Germany), <sup>2</sup>Thessaloniki (Greece), <sup>3</sup>Prague, <sup>4</sup>Arnhem (The Netherlands), <sup>5</sup>London (Great Britain)*

**RP5. Ablative fast pyrolysis – process for valorization of residual biomass**

*Conrad S., Schulzke T. | Oberhausen (Germany)*

**RP6. Study of Catalytic Hydrotreatment of Pyrolysis Bio-Oil**

*Auersvald M., Straka P., Shumeiko B., Staš M. | Prague*

**RP7. Hydrodeoxygenace bio-oleje na sulfidických katalyzátorech: vliv aditiv, druhu aktivní fáze a reakčních podmínek**

*Horáček J. | Litvínov-Záluží*

**RP8. Separation of Gases by Supported Liquid Membranes**

*Izák P., Žitková A., Žák M., Vejražka J., Kárászová M., Petrusová Z. | Prague*

**8:30 – 17:45 BIOTECHNOLOGY AND BIOREFINERY***Chairmen: Lovecká P., Patáková P. | Prague***BT1. Nástin možného vývoje a inovací potravin pro budoucí období v horizontu příštích dekád***Kaš tánek F., Kaš tánek P., Šolcová O. | Praha***BT2. Chemical Processes for Population Nourishment***Solcova O., Kastanek P., Rouskova M., Maleterova Y., Sabata S., Kastanek F., Hanika J. | Prague***BT3. Processing of Waste Chicken Feather into Digestible Source of Nitrogen in Microbial Culture Broths***Branská B., Paulová L., Dra hokoupil M., Stiborová H., Jírů M., Svátek A., Patáková P., Melzoch K. | Prague***BT4. Microalgae Biotechnology for Nutrition***Maleterova Y., Hanika J., Kastanek F., Kastanek P., Rouskova M., Solcova O. | Prague**10:10 – 10:30 Coffee break***BT5. Izolace a charakterizace biologicky aktivních látek z rostlinného materiálu***Lovecká P., Hromádková E., Fenclová M., Mac ůrková A., Demnerová K. | Praha***BT6. Supercritical Fluid Extraction - a Green Method for the Isolation of Valuable Substances from the Various Biological Matrices***Topiař M., Sajfrtová M., Šolcová O., Hradecký J., Hůrková K., Hajšlová J. | Prague***BT7. Use of Novel Waste Products in the Microbial Production of Lactic Acid***Dra hokoupil M., Paulová L., Kolek J., Patáková P. | Prague***BT8. Gas Fermentation to Biofuels and Other Chemicals***Patáková P. | Prague**12:10 – 13:40 Lunch  
Restaurant Bellevue (3<sup>rd</sup> floor) + Wine Cellar***BT9. Kinetics of Keratin Acidic Hydrolysis in Batch Autoclave***Hanika J., Solcova O., Kastanek P., Rousková M., Šabata S. | Prague*

**BT10. Mechanisms of Butanol Resistance in Solventogenic Clostridia**

*Kolek J.<sup>1</sup>, Branská B.<sup>1</sup>, Sedlář K.<sup>2</sup>, Provazník I.<sup>2</sup>, Koščová P.<sup>2</sup>, Kupková K.<sup>2</sup>, Vasylykivska M.<sup>1</sup>, Patáková P.<sup>1</sup> | <sup>1</sup>Prague, <sup>2</sup>Brno*

**BT11. Analysis of Clostridium Beijerinckii NRRL B-598 Coding Regions Using RNA-Seq Data of Closely Related Strain**

*Sedlar K.<sup>1</sup>, Kupkova K.<sup>1</sup>, Koscova P.<sup>1</sup>, Branska B.<sup>2</sup>, Kolek J.<sup>2</sup>, Patakova P.<sup>2</sup>, Provaznik I.<sup>1</sup> | <sup>1</sup>Brno, <sup>2</sup>Prague*

**BT12. Difficulties in Isolating Total RNA from Sporulating Solventogenic Clostridia**

*Vasylykivska M., Branská B., Patáková P. | Prague*

15:20 – 15:40      *Coffee break with refreshment*

**BT13. Assessing PHA Purity by Unusual Methods**

*Chytilova A., Sedlacek P., Enev V., Obruca S. | Brno*

**BT14. Optimization of Simultaneous Carotenoid and Lipid Production in Red Yeast**

*Rapta M.<sup>1</sup>, Shapaval V.<sup>2</sup>, Kohler A.<sup>2</sup>, Zimmermann B.<sup>2</sup>, Tafintseva V.<sup>2</sup>, Sztokowski M.<sup>1</sup>, Byrtusová D.<sup>1</sup>, Mikheichyk N.<sup>1</sup>, Márová I.<sup>1</sup> | <sup>1</sup>Brno, <sup>2</sup>Drøbakveien (Norway)*

**BT15. Vliv biologicky aktivních látek na biofilm kvasinek rodu *Candida***

*Lokočová K., Paldrychová M., Masák J. | Praha*

**BT16. Anti-Biofilm Effect of *Vitis Vinifera* Extract on the *Candida* Genus**

*Paldrychová M., Kolouchová I., Masák J. | Prague*

**BT17. Centrifugal Pump Characteristics Computation and Reliability Evaluation at Variable Speed Driven**

*Qazizada M. E.<sup>1</sup>, Pivarčiová E.<sup>1</sup>, Bialy W.<sup>2</sup> | <sup>1</sup>Zvolen, <sup>2</sup>Zabrze*

**8:30 – 10:10 INORGANIC TECHNOLOGY***Chairman: Fíla V. | Prague***AT1. Treatment of Flue Gas Desulphurization Gypsum***Jurišová J., Danielik V., Fellner P., Králik M. | Bratislava***AT2. Preparation of Calcium Carbonate with a Different Crystal Structure Exploiting Flue Gas Desulphurization Gypsum***Foltinovič T., Štefancová R., Lencsés L., Kučera M., Králik M. | Bratislava***AT3. Preparation of Nitrogen-Sulphur-Calcium Fertilizers from Flue Gas Desulphurization Gypsum***Štefancová R., Foltinovič T., Lencsés L., Králik M., Kučera M. | Bratislava***AT4. High Efficiency Electrochemical Production of Ferrates (VI)***Híveš J., Kerekeš K., Kubiňáková E. | Bratislava**10:10 – 10:30 Coffee break***10:30 – 12:10 INORGANIC TECHNOLOGY***Chairman: Híveš J. | Bratislava***AT5. Photoelectrochemical and Blocking Properties of Titania Layers Prepared by Spray Pyrolysis***Krýsová H., Zlámal M., Krýsa J., Kavan L. | Prague***AT6. Jetmill Versus Planetary Mill – Comparison of Properties of Milled  $\text{ZnFe}_2\text{O}_4$  Pigment***Luxová J., Podzemná V., Šulcová P. | Pardubice***AT7.  $\text{WO}_3$  Photoanodes Prepared by Spray Pyrolysis for Photo-Electrochemical Water Splitting***Zlámal M., Krýsa J. | Prague***AT8. Measuring of Electrical Conductivity in Low Melting Multicomponent Sodium Cryolite Based Melts***Kubiňáková E., Híveš J., Danielik V. | Bratislava**12:10 – 13:40 Lunch  
Restaurant Bellevue (3<sup>rd</sup> floor) + Wine Cellar*



**13:40 – 15:20 INORGANIC TECHNOLOGY**

*Chairman: Krýsa J. | Prague*

- AT9. Membranes for Gas Separation with Potential Application in Industry**  
*Martin-Gil V., Ahmad M. Z., Castro-Muñoz R., Dlouhy D., Ullsperger J., Friess K., Fíla V. | Prague*
- AT10. High Surface Carbon Electrodes for Capacitive Deionization**  
*Giurg A., Denk K., Paidar M. | Prague*
- AT11. Perfluorinated Sulphonated Acids as a Polymer Electrolyte and Electrode Compartments Separator in PEM Water Electrolysis**  
*Bystroň T., Mališ J., Brožová L., Zhigunov A., Bouzek K. | Prague*
- AT12. Design and Optimization of Membranes Separation Process in Biogas Upgrading Using Universal Simulation Program**  
*Fíla V. | Prague*

15:20 – 15:40 *Coffee break with refreshment*

**15:40 – 18:10 WASTE PROCESSING, AIR AND WATER PROTECTION, TECHNOLOGIES FOR THE DECONTAMINATION OF SOILS**

*Chairman: Slezák M | Pardubice*

- Z01. Electrode Materials Suitable for Anodic Oxidation of Wastewater**  
*Dušek L., Kočanová V. | Pardubice*
- Z02. Utilization Sorbent on Lignocellulose Materials Base for Removes Halogenated Dyes Increasing Parameter AOX from Model Effluent Water**  
*Filipi M., Halecka E., Milichovsky M. | Pardubice*
- Z03. Removal of Acid Dyes from Aqueous Effluents by Action of Ionic Liquids**  
*Weidlich T., Václavíková J., Šimek M. | Pardubice*
- Z04. Removal of Contaminants from a Solution of Boric Acid by Using Zeolite**  
*Kůs P.<sup>1</sup>, Foubíková A.<sup>1,2</sup>, Skala M.<sup>1</sup>, Koloušek D.<sup>2</sup>, Kotowski J.<sup>1</sup> | <sup>1</sup>Husinec – Řež, <sup>2</sup>Prague*
- Z05. Application of Ion Exchange Resins to Recovery of Metals from Decontamination Solutions**  
*Chlupáčová M.<sup>1,2</sup>, Kůs P.<sup>1</sup>, Parschová H.<sup>2</sup> | <sup>1</sup>Husinec – Řež, <sup>2</sup>Prague*
- Z06. Redukcia NO/NO<sub>x</sub> na zmesných oxidoch technológiou NSR**  
*Mikulec J., Hudec P., Slezáčková M., Pokorná L. | Bratislava*

**8:30 – 12:10 ECONOMY OF CHEMICAL INDUSTRY***Chairman: Baran D. | Prague***E1. Foresight as an Information Base for the Innovation Process of the Company***Kováříková L., Grosová S., Baran D. | Prague***E2. Deployment of the Multidimensional Discriminant Analysis When Drafting the New Forecasting Models for Financial Analysis for Industry***Baran D.<sup>1</sup>, Pastýr A.<sup>2</sup> | <sup>1</sup>Bratislava, <sup>2</sup>Trnava***E3. The Range of Services in the B2B Market with Products of the Chemical Industry***Vlckova V., Lostakova H. | Pardubice***E4. Nákladové modely v environmentálním managementu***Strachotová D., Dyntar J. | Praha**10:10 – 10:30 Coffee break***E5. Application of LCA Method in the Rubber Industry***Baran D. | Prague***E6. The Level and Development of Value Productivity in Selected Enterprises of Chemistry Industry Coming from the Crisis 2010-2014***Klečka J. | Prague***E7. Cost Analysis in Circulation Cooling Water Systems***Variny M., Véghová L., Mierka O., Margetíny T. | Bratislava***E8. Vliv období sklizně na kvalitu kaučuku***Kutnohorská O. | Praha**12:10 – 13.:40 Lunch**Restaurant Bellevue (3<sup>rd</sup> floor) + Wine Cellar*

**13:40 – 14:30 ECONOMY OF CHEMICAL INDUSTRY**

*Chairman: Lošťáková H. | Pardubice*

**E9. Ekonomické aspekty stárnutí populace**

*Botek M. | Praha*

**E10. New Management Warehouse System Design**

*Zemanová P., Botek M., Strachotová D. | Prague*

*15:20 – 15:40 Coffee break with refreshment*

**15:40 – 17:20 POLYMERS, COMPOSITES**

*Chairman: Kalenda P. | Pardubice*

**PK1. Stanovení obsahu ligninu v lignocelulózových materiálech pomocí FTIR spektroskopie**

*Benetková B.<sup>1</sup>, Filipi M.<sup>2</sup>, Ďurovič M.<sup>1</sup> | <sup>1</sup>Praha, <sup>2</sup>Pardubice*

**PK2. Vanadyl Complex with Tetradentate Macrocyclic Ligand as a Drier for Solvent-Borne Alkyd Paints**

*Charamzová I., Honzíček J., Vinklárek J. | Pardubice*

**PK3. Effect of Particle Design and Molar Mass on Coating Properties of Self-Crosslinking Waterborne Acrylic Binders**

*Machotová J., Podzimek Š., Zgoni H., Rückeroá A., Puková K. | Pardubice*

**PK4. Anionic Polymerization and Physical Properties of the Polymers Made from Trans-B-Farnesene**

*Trnka T.<sup>1</sup>, Pleska A.<sup>1</sup>, Yoo T.<sup>2</sup>, Henning S. K.<sup>2</sup> | <sup>1</sup>Kralupy nad Vltavou, <sup>2</sup>Exton (PA), USA*

**8:30 – 10:35 MATERIAL ENGINEERING***Chairman: Vojtěch D. | Prague*

- MI9. Štúdium nanokryštalických zliatin na báze niklu pre výrobu vodíka**  
*Zemanová M., Szúnyogh J., Dobročka E. | Bratislava*
- MI10. Vlastnosti perspektivních materiálů na bázi intermetalik Fe**  
*Průša F., Novák P., Vystrčil J., Kopeček J. | Praha*
- MI11. Optimalizace přípravy intermetalických sloučenin na bázi Fe-Al-Si mechanickým legováním**  
*Nová K., Novák P., Průša F. | Praha*
- MI12. Tepelně stabilní slitina Al-Fe připravená postupy práškové metalurgie**  
*Kučera V., Průša F., Vojtěch D. | Praha*
- MI13. Využití mechanického legování při syntéze fází Ti-Al**  
*Bernatíková A., Novák P. | Praha*

*10:35 – 10:55 Coffee break***10:55 – 11:45 SECURE MANAGEMENT PROCESSES, ACCIDENTS PREVENTION***Chairman: Babinec F. | Brno*

- BR1. Multilevel Data Analysis in Computer Aided Hazard Identification**  
*Janožovský J., Danko M., Labovský J., Jelemenský L. | Bratislava*
- BR2. Risk Analysis Based on the Criticality Classes and Their Determination Using Accelerating Rate Calorimetry**  
*Mašín J., Ferjenčík M., Šelešovský J. | Pardubice*

**8:30 – 10:35 OIL, GAS, COAL, FUEL, BIOFUELS***Chairman: Blažek J. | Prague*

- RP9. Analysis of Steam Reformer Furnace Key Operation Parameters on the SMR Unit Capacity and Performance**  
*Variny M., Kostelka R., Mierka O., Sláva J., Margetíny T. | Bratislava*

**RP10. Modelling of Fluidized Bed Hydrodynamics for a Ca-Looping System**

*Vodicka M., Hrdlicka J., Opatril J., Skopec P. | Prague*

**RP11. Evaluation of Marine Fuels Stability by Ultraviolet Light**

*Vráblík A., Hidalgo J. M., Černý R. | Litvínov*

**RP12. Vývoj stanovení kompresibilitního faktoru zemního plynu v plynárenství a porovnání jednotlivých metod**

*Navrátilová T., Hlinčík T. | Praha*

**RP13. Studies on the Copper Oxide Oxidation Capacities Under Various Conditions**

*Hudský T.<sup>1</sup>, Ciahotný K.<sup>1</sup>, Berka J.<sup>1,2</sup> | <sup>1</sup>Praha, <sup>2</sup>Řež*

10:35 – 10:55      *Coffee break*

**WEDNESDAY | April 12, 2017**

**PÁLAVA HALL**

**8:30 – 12:35      PHARMACEUTICAL TECHNOLOGY**

*Chairman: Kratochvíl B. | Prague*

**L1. Inverse Gas Chromatography (iGC) for Characterization of Material Surfaces**

*Otyepka M.<sup>1</sup>, Otyepková E.<sup>1</sup>, Gabriel R.<sup>2</sup>, Gavenda A.<sup>2</sup> | <sup>1</sup>Olomouc, <sup>2</sup>Opava*

**L2. Seeded Batch Cooling Crystallization of Heterocyclic API in Acetone**

*Gabriel R. | Opava*

**L3. Effect of Diluent Particle Size on Flow Properties and Homogeneity of Blends for Direct Tablet Compression**

*Zámstný P., Majerová D., Bartáková M. | Prague*

**L4. Solid Dispersions as Multicomponent Systems**

*Gruberová L., Kratochvíl B. | Prague*

**L5. Characterization the Mechanical and Chemical Behavior of API**

*Prudilová B.<sup>1</sup>, Otyepková E.<sup>1</sup>, Otyepka M.<sup>1</sup>, Kantor H.<sup>2</sup>, Gabriel R.<sup>2</sup> | <sup>1</sup>Olomouc, <sup>2</sup>Opava*

10:35 – 10:55      *Coffee break*

**L6. How to Produce Pure API?**

*Cvak L. | Opava*

- L7. Effect of Alcohol on Tramadol Hydrochloride Release from Controlled Release Formulations Containing Co-Processed Dry Binders**  
*Komersová A.<sup>1</sup>, Lochař V.<sup>1</sup>, Myslíková K.<sup>1</sup>, Mužíková J.<sup>2</sup> | <sup>1</sup>Pardubice, <sup>2</sup>Hradec Králové*
- L8. Photographic Observation of Disintegration of Solid Drug Forms Containing Salicylic and Ascorbic Acid**  
*Lochař V.<sup>1</sup>, Komersová A.<sup>1</sup>, Mužíková J.<sup>2</sup> | <sup>1</sup>Pardubice, <sup>2</sup>Hradec Králové*
- L9. Us Pharmacopoeia 40 and Its Impact for Methylene Blue as API**  
*Juhás E.<sup>1</sup>, Hronec M.<sup>2</sup> | <sup>1</sup>Pezinok, <sup>2</sup>Bratislava*

**WEDNESDAY | April 12, 2017**

**FRANKOVKA HALL**

**8:30 – 11:45 WASTE PROCESSING, AIR AND WATER PROTECTION, TECHNOLOGIES FOR THE DECONTAMINATION OF SOILS**  
*Chairman: Slezák M. | Pardubice*

**Z07. Bezpečné odstranění rtuti z ukončovaných provozů amalgámové elektrolýzy**  
*Raschman R., Zápotocký L., Říhová M. | Dřetovice*

**Z08. Simulanty bojových biologických látek pro testy termické desopce**  
*Zápotocký L., Šváb M. | Stehelčevy*

**Z09. Simulants of Chemical Warfare Agents for Tests of Thermal Desorption Technology**  
*Šváb M., Zápotocký L. | Stehelčevy*

**Z010. Development of a Pilot Plant for Reduction Hg Emission from Large Power Plant**  
*Pilař L.<sup>1</sup>, Veselý V.<sup>1</sup>, Vlček Z.<sup>1</sup>, Zseliga Z.<sup>2</sup> | <sup>1</sup>Prague, <sup>2</sup>Ostrava*

**Z011. Improved Filterability Slag in Large Power Plant**  
*Slezák M.<sup>1</sup>, Hůla M.<sup>2</sup>, Samek J.<sup>2</sup>, Prokeš J.<sup>3</sup> | <sup>1</sup>Pardubice, <sup>2</sup>Opatovice nad Labem, <sup>3</sup>Kosmonosy*

10:35 – 10:55 Coffee break

**Z012. Nano-Bio in Remediation Practice (The Use of Iron Nanoparticles in Combination with Materials Supporting Natural Attenuation During *In-Situ* Remediation of Groundwater Contaminated by Chlorinated Hydrocarbons)**  
*Lacina P.<sup>1</sup>, Steinova J.<sup>2</sup>, Czimmerova M.<sup>2</sup> | <sup>1</sup>Brno, <sup>2</sup>Liberec*

**Z013. Chlorinated Aromatics – Occurrence, Usage and Methods of Degradation**  
*Pérko J., Weidlich T. | Pardubice*