

1ST DAY

(MMM – Multimedia room, 1st floor)

9:00 – 9:10

Introductory word

Ján Klimas – Dean of faculty (*Comenius University Bratislava, Faculty of Pharmacy*)

9:10 – 9:25

History of Technology Days since 1967

Desana Matušová, Klára Gardavská, Daniel Krchňák (*Comenius University Bratislava, Faculty of Pharmacy, Dept. Of Galenic Pharmacy, Bratislava, Slovakia*)

1ST SESSION: "QUALITY BY DESIGN" & EVALUATION OF MEDICINES

Chairmen: Assoc. Prof. Ivan Malík (*Faculty of Pharmacy, Comenius University Bratislava*)

9:30 – 9:45

Rheological behaviour and texture analysis of an oleogel suspension containing chondroitin sulfate and fucoidan

Jozef Zima (*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia*)

9:50 – 10:05

Quality by Design Approach in the Discovery and Development of Indonesian Bioactive Natural Products

Florentinus Dika Octa Riswanto (*Research Group of Computer-Aided Drug Design and Discovery of Bioactive Natural Products, Faculty of Pharmacy, Sanata Dharma University, Yogyakarta, Indonesia*)

10:10 – 10:25

Bone scaffolds for targeted drug delivery and accelerated regeneration

Patricia Diaz-Rodriguez^{2,3}, Lara Touza-Otero¹, Patricia Garcia-Garcia^{2,3}, Carmen Évora^{2,3}, Mariana Landin¹, Araceli Delgado^{2,3} (¹*Department of Pharmacology, Pharmacy and Pharmaceutical Technology, Faculty of Pharmacy, Institute of materials (iMATUS), University of Santiago de Compostela, Santiago de Compostela, Spain*², *Departamento de Ingeniería Química y Tecnología Farmacéutica, Facultad de Farmacia, Universidad de La Laguna, San Cristobal de La Laguna, Spain*, ³*Instituto de Tecnologías Biomédicas (ITB), Universidad de La Laguna, Calle Sta. María Soledad, San Cristóbal de La Laguna, Spain*)

ORGANIZERS



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GENERAL PARTNER



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10:30 – 11:10

SOTAX

Presentation of the Company

11:10 – 11:45

COFFEE BREAK + POSTER SESSION (1st floor – Dept. of Galenic Pharmacy)

Chairmen:

Assoc. Prof. Zdeňka Šklubalová (Faculty of Pharmacy in Hradec Králové, Charles University in Prague)

11:50 – 12:05

Lubricant mixtures: A solution for tablets?

Sebastien Bailey (*Charles University in Prague, Faculty of Pharmacy in Hradec Králové, Czech Republic*)

12:10 – 12:25

Advancements and Pitfalls of Viniferins, Oligomers of Resveratrol Containing a (2,3-Dihydro)benzo[b]furan Privileged Scaffold

Ivan Malík (*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Pharmaceutical chemistry, Bratislava, Slovakia*)

12:30 – 12:45

Design and Optimisation of a Delivery System for Epigallocatechin Gallate from *Camellia sinensis* L.

Krume Bogeovski (*UGD Faculty of Medical Sciences, North Macedonia*)

12:50 – 13:05

Chitosan-Based Film-Forming Systems with Cannabidiol

Eva Šnejdrová¹, Andrea Veris², Jan Loskot², Rudolf Andrys³ (¹*Charles University, Faculty of Pharmacy, Dept. of Pharmaceutic Technology, Hradec Králové, Czech Republic*; ²*University of Hradec Králové, Faculty of Science, Dept. of Physics, Hradec Králové, Czech Republic*; ³*University of Hradec Králové, Faculty of Science, Dept. of Chemistry, Hradec Králové, Czech Republic*)

13:10 – 14:30

LUNCH BREAK (120 MIN)

14:30 – 14:45

Quality control of ibuprofen-containing medicines used in pediatric practice

Miroslava Sýkorová (*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Pharmaceutical chemistry, Bratislava, Slovakia*)

PARTNERS & EXHIBITORS

MEDIA PARTNERS



2ND SESSION: PHARMACEUTICAL COMPOUNDING

Chairmen: Dr. Eduard Tichý (Hameln rsd, Modra)

14:50 – 15:05

Innovations in the preparation of medicine in the hospital pharmacy of the National Institute of Cardiovascular Diseases

Róbert Čendula¹, Krajčiová Andrea¹, Pavol Kubala¹, Kristína Szmiceková¹, Slávka Porubcová¹ (¹ National Institute of Cardiovascular Diseases, Hospital Pharmacy, Bratislava, Slovakia)

15:10 – 15:40

Experience with the centralised pharmaceutical compounding in the PLV laboratory

Filip Novák (PLV laboratoř – BENU lékárna, Prague, Czech Republic)

15:45 – 16:00

Slovak Pharmaceutical Codex

Erika Řežuchová¹, Margaréta Šubová², Desana Matušová² (¹Pharmacopoeia Dept., State Institute for Drug Control, Bratislava, ²Institute of Pharmacy, Faculty of Medicine, Slovak Medical University, Bratislava, Slovakia)

16:05 – 16:45

COFFEE BREAK + POSTER SESSION (1st floor – Dept. of Galenic Pharmacy)

16:50 – 17:05

Magistral formulation focused on a pediatric patient.

Dominika Polakovičová (National Institute of Children's Diseases, Bratislava, Slovakia)

17:10 – 17:25

Unlocking the potential of individualised medicine: the strategic role of pharmaceutical compounding in public pharmacy practice.

Pavel Petrovič (Lekáreň LIBRA LAB)

17:30 – 17:45

Monitoring of storage conditions in community pharmacies as part of good pharmacy practice

Ondrej Sukel' (Slovak Chamber of Pharmacists, Bratislava, Slovakia)

17:50 – 18:05

Pharmacy practice (will not) make the master – our role in the education of future technologists

Martina Mrázová (PLV laboratoř – BENU lékárna, Prague, Czech Republic)

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19:00 – 21:00

SOCIAL EVENT (1st floor – MMM)

2ND DAY

3RD SESSION: **NANOPARTICULATE SYSTEMS IN DRUG DELIVERY**

Chairmen: Dr. Andrej Kováč (Faculty of Pharmacy, Comenius University Bratislava)

8:45 – 9:00

Capillary electrophoresis inductively coupled plasma mass spectrometry: a renaissance in pharmaceuticals and nanoparticle analysis

Tomáš Pluháček, Daniel Baron, Petra Švecová, Andrea Šebestová, Jan Petr (*Palacký University Olomouc, Dept. of Analytical chemistry, Olomouc, Czechia*)

9:05 – 9:20

Nanoparticle drug delivery systems for dermal administration of L-ascorbic acid

Kenneth Lawson (*Comenius University, Faculty of Pharmacy, Dept of Galenic Pharmacy, Bratislava, Slovakia*)

9:25 – 09:40

Biosynthesis of silver nanoparticles using medicinal plants

Ľudmila Balážová (*Univerzita veterinárskeho lekárstva a farmácie v Košiciach*)

9:45 – 10:15

Design of drug delivery systems derived from microalgae

Mária Klacsová¹, Marcela Chovancová¹, Krisztina Sebők-Nagy², Tibor Páli², László Almásy³, Daniela Uhríková¹ (*¹Comenius University Bratislava, Faculty of Pharmacy, Department of Physical Chemistry of Drugs, Bratislava, Slovakia; ²HUN-REN Biological Research Centre, Institute of Biophysics, Szeged, Hungary; ³HUN-REN Centre for Energy Research, Institute for Energy Security and Environmental Safety, Budapest Neutron Centre, Budapest, Hungary*)

10:15 – 10:45

COFFEE BREAK (30 MIN)

10:45 – 11:00

Modern ways of using nanoparticles in human medicine

Veronika Šimunková (*Comenius University, Faculty of Pharmacy, Dept of Galenic Pharmacy, Slovakia*)

PARTNERS & EXHIBITORS

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11:05 – 11:35

Bioactive surfactants as an effective tool in the synthesis and functionalisation of silver and gold nanoparticles

Martin Pisárčik, Klára Oláhová, Melissa Záteková (*Comenius University, Faculty of Pharmacy, Dept. of Chemical Theory of Drugs, Bratislava, Slovakia*)

4TH SESSION: MEDICAL TECHNOLOGIES

Chairmen: Dr. Milica Molitorisová (*Faculty of Pharmacy, Comenius University Bratislava*)

11:40 – 11:55

Training of AI superagents by healthcare workers

Andrej Thurzo (*Comenius University in Bratislava, Medical Faculty, Dept. of Orthodontics, Regenerative and Forensic Dentistry, Bratislava, Slovakia*)

12:00 – 12:30

Innovation and managerial aspects for healthcare using artificial intelligence and robotics

Robert Furda¹, Michal Gregus, Sr.¹, Alena Furdova² (¹*Comenius University Bratislava, Faculty of Management, Dept. of Information Management and Business Systems, Bratislava, Slovakia*, ²*Comenius University Bratislava, Faculty of Medicine, Dept. of Ophthalmology, Hospital Ruzinov, Bratislava, Slovakia*)

12:35 – 12:50

Regulatory requirements for medical devices placed on the market in Slovakia

Zuzana Baťová^{1,2} (¹*Comenius University, Faculty of Pharmacy, Dept. of Health Technologies, Bratislava, Slovakia*, ²*State Institute for Drug Control, Medical Device Dept., Bratislava, Slovakia*)

12:55 – 13:10

Regulations MDR 745 and IVDR 746 in healthcare

Jana Kubíková (*Comenius University, Faculty of Pharmacy, Dept. of Medical Technologies, Bratislava, Slovakia*)

13:10 – 14:10

LUNCH BREAK (60 MIN)

14:10 – 14:25

Digital Instruments for Enhancing Pharmaceutical Care and Medication Adherence

Vanessa Schnorrerová¹, Patrícia Schnorrerová², Alžbeta Garajová³, Tomáš Fazekaš¹ (¹*Dept. of Physical Chemistry of Drugs, Faculty of Pharmacy, Comenius University in Bratislava, Slovakia*,

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²*Institute of Pharmacology and Clinical Pharmacology, Faculty of Medicine, Comenius University in Bratislava, Bratislava, Slovakia,* ³*Center for Information Technologies, Comenius University in Bratislava, Bratislava, Slovakia)*

14:30 – 14:45

Applications of artificial intelligence in respiratory diseases

Tomáš Valena, Tomáš Tesař (*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Organisation and Management of Pharmacy, Bratislava, Slovakia*)

14:50 – 15:05

Competence-based education and assessment research project proposal

Milica Molitorisová¹, Miroslava Snopková², Katarína Gubíniiová³ (¹*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Health Technologies, Bratislava, Slovakia,* ²*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Organisation and Management of Pharmacy, Bratislava, Slovakia,* ³*Comenius University Bratislava, Faculty of Management, Dept. of Marketing and Commerce, Bratislava, Slovakia*)

15:10 – 15:25

Diabetes technology in sport and exercise management for individuals with type one diabetes

Ľudmila Oreská (*Comenius University Bratislava, Faculty of Physical Education and Sport, Dept. of Biological and Medical Sciences, Bratislava, Slovakia*)

15:30

The Conclusion of the 40th Technology Days

Veronika Šimunková (*Comenius University Bratislava, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia*)

PARTNERS & EXHIBITORS

MEDIA PARTNERS



POSTER SESSION

TD Po1 Structural changes in liposomes induced by antivirals

Alexander Búcsi¹, Adriána Čelková Ďuranová¹, Daniela Uhríková¹

⁽¹⁾Comenius University Bratislava, Faculty of Pharmacy, Dept. of Physical Chemistry of Drugs, Bratislava, Slovakia)

TD Po2 Quality control of therapeutic peptides by capillary zone electrophoresis with repeated sample injection strategy

Paula Čermáková¹, Patrícia Jackuliaková¹, Ondrej Štefánik², Juraj Piešťanský^{1,3} (⁽¹⁾Comenius University, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia; ⁽²⁾Comenius University, Faculty of Pharmacy, Dept. of Pharmaceutical Analysis and Nuclear Pharmacy, Bratislava, Slovakia; ⁽³⁾Institute of Neuroimmunology, Slovak Academy of Sciences, Bratislava, Slovakia)

TD Po3 Preparation and characterisation of nanodispersion systems for enhanced delivery of poorly soluble curcumin

Mária Čuchorová¹, Miroslava Špaglová¹, Miroslava Potůčková¹, Desana Matušová¹ (⁽¹⁾Comenius University, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia)

TD Po4 Mechanical characterisation of co-processed excipients using the compaction triangle and heckel modeling in early formulation design

Martin Dominik¹, Aleš Franc¹ (⁽¹⁾Masaryk University, Faculty of Pharmacy, Dept. of Pharmaceutical Technology, Brno, Czech Republic)

TD Po5 Pharmaceutical forms of over-the-counter drugs

Dominika Faixová¹, Zita Faixová² (⁽¹⁾University of Veterinary Medicine and Pharmacy in Košice, Dept. of pharmaceutical technology, pharmacognosy and botany, Košice, Slovakia; ⁽²⁾University of Veterinary Medicine and Pharmacy in Košice, Dept. of biology and physiology, Košice, Slovakia)

TD Po6 Evaluation of the Wound-Healing Activity of Transfersomal Gel Containing Binahong Leaf Extract (Anredera cordifolia (Ten.) Steenis) for Accelerating Diabetic Wound Closure

Angelina Pratiwi Deviyanto¹, Sri Hartati Yuliani¹, Handika Immanuel¹ (⁽¹⁾Sanata Dharma University, Faculty of Pharmacy, Yogyakarta, Indonesia)

TD Po7 Autooxidation-induced structural alterations of exogenous pulmonary surfactant

Lukáš Hubčík¹, Nina Kráľovič¹, Juan Carlos Martínéz², Daniela Uhríková² (⁽¹⁾Comenius University Bratislava, Faculty of Pharmacy, Dept. of Physical Chemistry of Drugs, Bratislava, Slovakia; ⁽²⁾ALBA Synchrotron, Cerdanyola del Vallès, Barcelona, Spain)

TD Po8 Liposomes – potential carriers of the antiviral agent gc376

Marcela Chovancová¹, Mária Klacsová¹, Alexander Búcsi¹, Daniela Uhríková¹ (⁽¹⁾Comenius University, Faculty of Pharmacy, Dept. of Physical Chemistry of Drugs, Bratislava, Slovakia)

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TD P09 Preparation of monoclonal antibody tocilizumab for inhalation delivery route

Patricia Jackuliaková¹, Paula Čermáková¹, Juraj Piešťanský^{1,2} (¹Comenius University, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia; ²Institute of Neuroimmunology, Slovak Academy of Sciences, Bratislava, Slovakia)

TD P10 Assessment of mucoadhesive properties of oromucosal preparations

Daniël Krchňák¹, Veronika Mikušová¹, Margaréta Šubová², Miroslava Špaglová¹
(¹Comenius University Bratislava, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia, ²Slovak Medical University, Faculty of Medicine, Institute of Pharmacy, Bratislava, Slovakia)

TD P11 Orally disintegrating tablets containing linden extract (*Tilia platyphyllos* Scop.) prepared by the volatile substance compression method

Slavomír Kurhajec^{1,2}, Marek Šarišský³, Kristína Štucková¹, Karel Šmejkal² (¹University of Veterinary Medicine and Pharmacy in Košice, Dept. of Pharmaceutical Technology, Pharmacognosy and Botany, Košice, Slovakia; ²Masaryk University, Faculty of Pharmacy, Dept. of Natural Drugs, Brno, Czechia; ³Pavol Jozef Šafárik University in Košice, Faculty of Medicine, Dept. of Pharmacology, Košice, Slovakia)

TD P12 Determination of sun protection factor and sensory Analysis of photoprotective creams

Dávid Laššák, Patricia Jackuliaková, Paula Čermáková, Miroslava Špaglová, Mária Čuchorová and Juraj Piešťanský (Comenius University, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia)

TD P13 Pharmaceutical promises of benzofuran derivatives: synthetic development and in silico evaluation of skin permeation

Nádaská Dominika¹, Malík Ivan¹ (¹Comenius University Bratislava, Faculty of Pharmacy, Dept. of Pharmaceutical Chemistry, Bratislava, Slovakia)

TD P14 Study of chondroitin sulfate and fucoidan on the blood count of laboratory mice

Eva Nováková^{1,2,3}, Jozef Zima¹, Martina Labudová³, Miroslava Špaglová², Miroslava Šupolíková^{1,2} (¹Comenius University Bratislava, Faculty of Pharmacy, Department of Galenic Pharmacy, Bratislava, Slovakia, ²Comenius University Bratislava, Faculty of Natural Sciences, Department of Microbiology and Virology, Bratislava, Slovakia, ³Biomedical Research Center of the Slovak Academy of Sciences, Institute of Virology, Bratislava, Slovakia)

TD P15 Investigation of the effect of temperature on physicochemical parameters of micellization of surfactant – UNDECYLTRIMETHYLAMMONIUM BROMIDE in aqueous solution by three experimental techniques

Jarmila Oremusová (Comenius University Bratislava, Dept. of Physical Chemistry of Drugs, Faculty of Pharmacy in Bratislava, Bratislava, Slovakia)

TD P16 Analytical strategies for characterisation of keyhole limpet hemocyanin

Juraj Piešťanský^{1,2}, Paula Čermáková¹, Patrícia Jackuliaková², Petra Majerová², Andrej Kováčik^{1,2} (¹Comenius University, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia ²Institute of Neuroimmunology, Slovak Academy of Sciences, Bratislava, Slovakia)

TD P17 Veterinary eye drops with a biological component

Miroslava Potůčková¹, Desana Matušová¹, Mária Raučinová¹, Zuzana Valachová¹, Miroslav Kubeš² (¹Comenius University, Faculty of Pharmacy, Dept. of Galenic Pharmacy, Bratislava, Slovakia; ²BIOM-Research, s.r.o., Bratislava)

TD P18 Paracetamol – its determination in suppositories by UV/VIS spectrophotometry

Miroslava Sýkorová¹ (¹Comenius University, Faculty of Pharmacy, Dept. of Pharmaceutical Chemistry, Bratislava, Slovakia)

TD P19 The role of Pharmacies in Magistral formulation

Zuzana Vaňková¹ (¹Lékareň Dr. Max, Poliklinika Tehelná)

TD P20 Development of liquisolid systems for improved dissolution rate of tadalafil

Barbora Vraníková¹, Noemi Frigola Verhein¹ (¹Charles University, Faculty of Pharmacy in Hradec Králové, Dept. of Pharmaceutical Technology, Hradec Králové, Czech Republic)

TD P21 Dynamics interactions profiling of serpentine as an acetylcholinesterase inhibitor: aromatic interaction occupancy and MM-PBSA evaluation

Virginando Kevin Bon¹, Stephanus Satria Wira Waskitha^{1*}, Florentinus Dika Octa Riswanto¹ (Research Group of Computer-Aided Drug Design and Discovery of Bioactive Natural Products, Faculty of Pharmacy, Sanata Dharma University, Indonesia)

TD P22 Formulation of stimuli-responsive gels containing silver complex with nicotinamide

Wolaschka, Tomáš¹, Rohalová, Simona^{2*}, Průšová, Ivana¹, Hisirová, Simona², Mudroňová, Dagmar², Vargová Zuzana³ (¹Dept. of Pharmaceutical Technology, Pharmacognosy and Botany, University of Veterinary Medicine and Pharmacy in Košice, Košice, Slovakia; ²Dept. of Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Košice, Slovakia; ³Dept. of Inorganic Chemistry, Faculty of Science, P.J.Šafárik University, Košice, Slovakia)

WORKSHOPS

1. SOTAX Company

Place: Laboratory of the Dept. of Galenic Pharmacy

2. CALEVA Company

Place: Laboratory of the Dept. of Galenic Pharmacy

ORGANIZERS



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