20 September 2018 – Thursday

Lecture Hall Szent-Györgyi Albert (1st floor)

09.00 – 09.30 Satellite Symposium Opening ceremony

Greeting:

Ildikó Csóka
President of the Symposium

Éva Szökő
Hungarian Society for Pharmaceutical Sciences

09.30 – 10.50 Early Morning Section

Chairs: Éva Szökő, Ildikó Csóka

IL-1
09.30 – 10.10 EUFEPS opinion on future trends of biopharmaceuticals
Bilensoy, E.
President of the European Federation
for Pharmaceutical Sciences

IL-2
10.10 – 10.50 Development and production of biopharmaceuticals
Kollár, É.
Head of Biopharmaceutical Formulation Development,
Gedeon Richter Plc., Hungary

10.50 – 11.10 Coffee break
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<th>Time</th>
<th>Section</th>
<th>Title</th>
<th>Speaker(s)</th>
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<td>11.10 – 12.20</td>
<td>Morning Section</td>
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<td>Chairs: <strong>Piroska Szabó-Révész, Gábor Katona</strong></td>
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<td>IL-3</td>
<td>11.10 – 11.40</td>
<td>Quality aspects of the regulation of biosimilars</td>
<td><strong>LENGYEL, K.</strong></td>
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<td>IL-4</td>
<td>11.40 – 12.20</td>
<td>New formulations of adalimumab</td>
<td><strong>SZÖKÖ, É.</strong></td>
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<td><em>President of the Hungarian Society for Pharmaceutical Sciences</em></td>
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<td><em>Semmelweis University, Budapest, Hungary</em></td>
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<td>12.20 – 13.20</td>
<td>Lunch</td>
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<td>13.20 – 15.00</td>
<td>Afternoon section</td>
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<td>Chairs: <strong>Miklós Vecsernyés, Ildikó Bácskay</strong></td>
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<td>IL-5</td>
<td>13.20 – 14.00</td>
<td>Transporters as key determinants of ADME of drugs</td>
<td><strong>KIS, E.</strong></td>
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<td>IL-6</td>
<td>14.00 – 14.30</td>
<td>Molecular recognition and inhibition of proteins with foldamers: a route to functional antibody mimetics</td>
<td><strong>MARTINEK, T.</strong></td>
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<td>IL-7</td>
<td>14.30 – 15.00</td>
<td>Formulation possibilities for delivery of biopharmaceuticals</td>
<td><strong>SOVÁNY, T., KATONA, G., KRISTÓ, K., CSÓKA, I.</strong></td>
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<td><em>Institute of Pharmaceutical Technology and Regulatory Affairs</em></td>
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<td><em>University of Szeged, Hungary</em></td>
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<td>15.00 – 16.00</td>
<td>Coffee break</td>
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12th CENTRAL EUROPEAN SYMPOSIUM ON PHARMACEUTICAL TECHNOLOGY AND REGULATORY AFFAIRS

SCIENTIFIC PROGRAMME

20 September 2018 – Thursday

Lecture Hall Juhász Gyula (1st floor)

16.00 – 16.30 Opening ceremony

Greetings:

László Rovó
Rector of University of Szeged

István Zupkó
Dean of Faculty of Pharmacy, University of Szeged

Éva Szökő
President of the Hungarian Society of Pharmaceutical Sciences

Ildikó Csóka
President of the Symposium

Aleš Mrhar
Co-President of the Symposium

Géza Regdon jr.
President of the Scientific Committee of the Symposium

Tamás Sovány
Secretary of the Symposium
16.30 – 18.30  **Plenary section**  
*Lecture Hall Juhász Gyula (1st floor)*

**Chairs:** Ildikó Csóka, Aleš Mrhar

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**PL-1**  
**16.30 – 17.15**  **The Changing Landscape of Personalised Medicine**  
OLÁH, M.  
*Gedeon Richter Plc., Hungary*

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**KN-1**  
**17.15 – 17.45**  **ELI ALPS – The next generation of attosecond sources**  
VARJÚ, K.  
*ELI-ALPS Research Institute, Szeged, Hungary*

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**PL-2**  
**17.45 – 18.30**  **Regulatory approach in pharmaceutical R&D**  
PAÁL, T. L.  
*National Institute of Pharmacy and Nutrition and University of Szeged, Hungary*

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18.30  **Welcome reception in the restaurant of Hotel Forrás**

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20.00  **Visit and organ concert in the The Cathedral and Votive Church of Our Lady of Hungary, Szeged**  
*(Buses depart from Hotel Forrás at 20.00)*
21 September 2018 – Friday

Lecture Hall Juhász Gyula (1st floor)

09.00 – 10.30  Printing Technologies Section

Chairs: Malgorzata Sznitowska, Tamás Sovány

KN-2
09.00 – 09.30  Are printing technologies completely changing drug manufacturing of the future?
SANDLER, N.
Åbo Akademi University, Turku, Finland

OP-1
09.30 – 09.50  Speed it up, slow it down – bicalutamide release from 3D printed tablets
JAMRÓZ, W.,1, KUREK, M.,1, SZAFRANIEC, J.1,2, CZECH, A.,1, GAWLAK, K.2, JACHOWICZ, R.1
1Department of Pharmaceutical Technology and Biopharmaceutics, Jagiellonian University Medical College, Krakow, Poland; 2Department of Physical Chemistry and Electrochemistry, Jagiellonian University, Krakow, Poland

OP-2
09.50 – 10.10  Production of Highly Drug-Loaded Orodispersible Films Using Extrusion Based 3D-Printing
EL AITA, I.,1, YILDIR, E.,2, BREITKREUTZ, J.,1, QUODBACH, J.1
1Heinrich Heine University Duesseldorf, Institute of Pharmaceutics and Biopharmaceutics, Duesseldorf, Germany; 2Abo Akademi University Turku, Pharmaceutical Sciences Laboratory, Turku, Finland
OP-3
10.10 – 10.30 3D floating tablets: appropriate 3D design from the perspective of different in vitro dissolution testing methodologies
ILYÉS, K.1, BALOGH, A.2, BORBÁS, E.2, CASIAN, T.1, DÉMUTH, B.2, KOVÁCS, N. K.3, MAROSI, GY.2, TOMUTĂ, I.1, NAGY, ZS. K.2
1Department of Pharmaceutical Technology and Biopharmacy, Faculty of Pharmacy, University of Medicine and Pharmacy „Iuliu Hatieganu”, Cluj-Napoca, Romania; 2Department of Organic Chemistry and Technology, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics, Budapest, Hungary; 3Department of Polymer Engineering, Faculty of Mechanical Engineering, Budapest University of Technology and Economics, Budapest, Hungary

10.30 – 11.00 Coffee break

11.00 – 12.50 Delivery of Proteins and Biologicals 1. Section
Chairs: Andreas Zimmer, Rita Ambrus

KN-3
11.00 – 11.30 Oral peptide drug delivery: What intestinal barriers fear the most
BERNKOP-SCHNÜRCH, A.
University of Innsbruck, Austria

OP-4
11.30 – 11.50 Design of experiment (DOE) based methodology for designing polymeric NPs encapsulating Liraglutide for oral delivery
ISMAIL, R., SOVÁNY, T., CSÓKA, I.
University of Szeged, Faculty of Pharmacy, Institute of Pharmaceutical Technology and Regulatory Affairs, Szeged, Hungary
**OP-5**

11.50 – 12.10  Probiotic encapsulation technologies to protect and deliver microorganisms to specific target location  
MIRTIC, J.1, ZUPANČIČ, Š.1, RIJAVEC, T.2, ZVONAR POBIRK, A.1, LAPANJE, A.2, KOCBEK, P.1, KRISTL, J.1  
1Faculty of Pharmacy, University of Ljubljana, Slovenia; 2Institute Josef Stefan, Ljubljana, Slovenia

**OP-6**

12.10 – 12.30  Solid formulation of living Clostridium butyricum by electrospinning  
VASS, P.1, HIRSCH, E.1, ANDERSEN, S. K.2, VERRECK, G.2, VIGH, T.2, NÉMETH, Á.1, MAROSI, GY.1, NAGY, ZS. K.1  
1Budapest University of Technology and Economics, Budapest, Hungary; 2Oral Solids Development, Janssen R&D, Beerse, Belgium

**SP-1**

12.30 – 12.50  Non-destructive quantification of impurities in 100 mg pharmaceutical samples using energy-dispersive X-ray fluorescence (EDXRF)  
RAYNER, M., XIAO, Y., KEMPENAERS, L.  
Malvern Panalytical, Netherlands

12.50 – 13.50  Lunch

13.50 – 15.40  Special Patient Needs Section

   Chairs: István Antal, Piroska Szabó-Révész

**KN-4**

13.50 – 14.20  Drug formulations for paediatric and geriatric patients  
BREITKREUTZ, J.  
Heinrich Heine University, Germany
OP-7
14.20 – 14.40 Development of particles with double pH-dependant release of model compound for application of suspension via feeding tubes
DREU, R., RAČIĆ, A.
Chair of Pharmaceutical Technology, Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia

OP-8
14.40 – 15.00 Combination Products: Balancing Innovation and Regulatory Constraints
CARAMELLA, C. M.
Department of Drug Sciences, University of Pavia, Pavia, Italy

OP-9
15.00 – 15.20 The transparency principle for pharmacopoeial reference standards
VOLOVYK, N., LEONTIEV, D., GRYZODUB, O.
Ukrainian Scientific Pharmacopoeial Center for Quality of Medicines, Kharkiv, Ukraine

IL-1
15.20 -15.40 Drug delivery in the pediatric and geriatric patient population – speaking about multiparticulates
BARTHOLD, S.
Glatt Pharmaceutical Services GmbH & Co KG, Germany

15.40 – 15.50 Coffee break

15.50 – 17:00 Poster section I.

Poster section – Dermal and Transdermal Delivery 1.

Chairs: Mirjana Gašperlin, Anita Kovács

P1/1 Development and Characterization of Fusidic Acid Loaded Thermosensitive In Situ Gels
AKSU, N. B.,¹ YOZGATLI, V.,² USTUNDAG OKUR, N.²
¹ University of Altinbas, School of Pharmacy, Department of Pharmaceutical Technology, Turkey;
² University of Istanbul Medipol, School of Pharmacy, Department of Pharmaceutical Technology, Turkey
P1/2 Evaluation of Emulsion Forms via Quality by Design (Qbd) Approach
AKSU, N. B., KALAYI, M., YEGEN, G., YOZGATLI, V.
1Altinbas University, Faculty of Pharmacy, Istanbul, Turkey; 2Medipol University, Faculty of Pharmacy, Istanbul, Turkey

P1/3 DSC compatibility study in binary physical mixtures of adapalene, levofloxacin, meloxicam, and miconazole
RUSU, A., BÎRSAN, M., DONÁTH-NAGY, G., TODORAN, N.
1University of Medicine and Pharmacy of Tîrgu Mures, Tîrgu Mures, Romania; 2“Grigore T. Popa” University of Medicine and Pharmacy of Iasi, Iasi, Romania

P1/4 DSC evaluation of ethylcellulose as dispersion modulator for including oxicams in hypromellose matrices developed for dermal use
REDAI, E., ANTONOAEA, P., TODORAN, N., CIURBA, A., RUSU, A.
Faculty of Pharmacy, University of Medicine and Pharmacy of Tîrgu Mures, Tîrgu Mures, Romania

P1/5 Development of bioactive compounds-loaded chitosan films using a QbD approach
COLOBATIU, L., GAVAN, A., MOCAN, A., BOGDAN, C., MIREL, S., TOMUTA, I.
1Department of Medical Devices, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania; 2Department of Pharmaceutical Botany, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania; 3Department of Dermatopharmacy and Cosmetics, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania; 4Department of Pharmaceutical Technology and Biopharmacy, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

P1/6 Stability Testing Of Semisolid Individual Preparations Containing Cacao Butter
SZÉKELY, A., PÁL, S., TAKÁCSI-NAGY, A.
Institute of Pharmaceutical Technology and Biopharmacy, University of Pécs, Pécs, Hungary
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<td>P1/7</td>
<td>Formulation and Evaluation of Carvedilol Ointment</td>
<td>PILIPOVIĆ, B.¹, PILIPOVIĆ, S.², PAŠIĆ, M.¹</td>
<td>Bosnalijek d.d. Sarajevo, Bosnia and Herzegovina; Agency for medicines Bosnia and Herzegovina, Sarajevo, Bosnia and Herzegovina</td>
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<tr>
<td>P1/8</td>
<td>Carvedilol ointment stability</td>
<td>PILIPOVIĆ, B.¹, PILIPOVIĆ, S.², UZUNOVIĆ, A.²</td>
<td>Bosnalijek d.d. Sarajevo, Bosnia and Herzegovina; Agency for medicines Bosnia and Herzegovina, Sarajevo, Bosnia and Herzegovina</td>
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<td>P1/9</td>
<td>Oscillatory rheometric detection and tracking of interactions between macrogol-phenolic compounds</td>
<td>SZALKAI, P., BUDAI, L., BUDAI, M., MIKE-KASZÁS, N., ANTAL, I.</td>
<td>Department of Pharmaceutics, Semmelweis University, Budapest, Hungary</td>
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<td>P1/10</td>
<td>Textural properties of matrix adhesive system containing plant extract</td>
<td>HARŠÁNYOVÁ, T.¹, BAUEROVÁ, K.², MATUŠOVÁ, D.¹</td>
<td>Faculty of Pharmacy, Comenius University, Bratislava, Slovakia; Slovak Academy of Sciences, Institute of Experimental Pharmacology and Toxicology, Slovakia</td>
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<td>P1/11</td>
<td>Pharmaceutical development and in vitro evaluation of novel core-shell microcapsules for topical delivery of berberine</td>
<td>BOGDAN, C.¹, PAȘCALĂU, V.², SUCIU, M.³, IUGA, C. A.¹, STIUFIUC, R.¹, BODOKI, A.¹, TOMUTĂ, I.¹, MOLDOVAN, M.¹</td>
<td>&quot;Iuliu Hatieganu&quot; University of Medicine and Pharmacy, Cluj-Napoca, Romania; Technical University of Cluj-Napoca, Romania; National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania</td>
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P1/12 Proposal of a pharmaceutical form for cosmetic use with volatile oil of Anethum graveolens and evaluation of its effectiveness
ANDREI, E.-C., OLTEANU, C., ALEXA, E., DRAGOMIRESCU, A.
1Faculty of Pharmacy, University of Medicine and Pharmacy, Timisoara, Romania; 2Favisan Laboratories, Lugoj, Romania; 3Banat’s University of Agricultural Sciences, Timisoara, Romania

P1/13 Microemulsion-based hydrogels with clotrimazole – design of formulation and evaluation of antifungal properties
SOSNOWSKA, K., WIECZOREK, P., TRYNISZEWSKA, E., WINNICKA, K.
1Department of Pharmaceutical Technology, Medical University of Białystok, Białystok, Poland; 2Department of Microbiological Diagnostics and Infectious Immunology, Medical University of Białystok, Białystok, Poland

P1/14 Formulation and pharmaceutical evaluation of topical foams
KÓSA, D., BÁCSKAY, I., VECSERNYÉS, M., FEHÉR, P., FENYVESI, F., VÁRADI, J., SINKA, D., VASVÁRI, G., UJHELYI, Z.
Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary

P1/15 Application of image analysis in the development and optimization of pharmaceutical foams
FARKAS, D., BALOGH, E., LENGYEL, M., ANTAL, I.
Department of Pharmaceutics, Semmelweis University, Budapest, Hungary

Poster section – Nanoparticles 1.

Chairs: Ferenc Fenyvesi, Edina Pallagi

P2/1 Optimization and Characterization of Nanosuspension of Cilostazol by Smart Particle Size Reduction (Top Down) Approach
AGHRBI, I.
University of Semmelweis, Budapest, Hungary
P2/2 Scaling up of combined wet milling process
BARTOS, CS., REGDON, G. JR.,
JÓJÁRT-LACZKOVICH, O., SZABÓ-RÉVÉSZ, P.
Institute of Pharmaceutical Technology and Regulatory Affairs,
University of Szeged, Szeged, Hungary

P2/3 Preparation and characterization of fenofibrate-loaded
electrospun microfibers
SZABÓ, I. Z., CSATÁRI, T., SIPOS, E.
University of Medicine and Pharmacy Tîrgu Mures, Romania

P2/4 Investigation of continuous downstream processing of
drug-loaded electrospun polymer nanofibres
SZABÓ, E., DÉMUTH, B., NAGY, B.,
MAROSI, GY., NAGY, ZS. K.
Budapest University of Technology and Economics, Budapest,
Hungary

P2/5 Characterization of electrospun loratadine-PVP composite
nanofibers prepared by a 3D-printed electrospinning
apparatus
AMBRUS, R.1, AREEN, A.1, CSÓKA, I.1,
ÓVÁRI, GY.2, RADACSI, N.2
1Institute of Pharmaceutical Technology and Regulatory Affairs,
University of Szeged, Szeged, Hungary; 2Institute for Materials
and Processes, The School of Engineering, The University of
Edinburgh, Edinburgh, UK

P2/6 Optimization of spray-dried zidovudine-loaded chitosan
microparticles using experimental design approach
SZYMAŃSKA, E.1, FIEDORCZYK, K.1, JACYNA, J.2,
MARKUSZEWSKI, M. J.1, BASA, A.3, WINNICKA, K.1
1Department of Pharmaceutical Technology, Medical University
of Białystok, Poland; 2Department of Biopharmaceutics and
Pharmacodynamics, Medical University of Gdańsk, Poland;
3Institute of Chemistry, University of Białystok, Poland
**P2/7 Physicochemical characterisation and cyclodextrin complexation of baicalin**

JAKAB, G., MÁNDY, D., BOGDÁN, D., MAZÁK, K., BALOGH, E., MÁNDITY, I., ANTAL, I.

1Semmelweis University, Department of Pharmaceutics, Budapest, Hungary; 2Semmelweis University, Department of Organic Chemistry, Budapest, Hungary; 3Semmelweis University, Department of Pharmaceutical Chemistry, Budapest, Hungary

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**P2/8 Formulation and investigation of meloxicam-albumin nanoparticles prepared by coacervation method**

KATONA, G., CSÓKA, I., SZABÓ-RÉVÉSZ, P.

Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

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**P2/9 Optimization of gelatin/alginate complexe coacervation to encapsulate a hydrophobic drug**

MANCER, D., DAÒUD, K.

Faculty of Mechanical and Process Engineering, University of Science and Technology Houari Boumediene, Algiers, Algeria

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**P2/10 Formulation and investigation of amphiphilic graft co-polymer based polymer micelles**

SIPOS, B., SZABÓ-RÉVÉSZ, P., KATONA, G.

Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Hungary

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**P2/11 Design and Development of microcarriers for natural drug encapsulation: Statistical validation and optimization of polydispersity index and volume/surface parameters**

AGOUILLA, F., MOGRANI, H., MANCER, D., NASRALLAH, N.

1Laboratoire de Génie de la Réaction, Faculté de Génie Mécanique et de Génie des Procédés, Université des Sciences et de la Technologie Houari Boumediene, Algiers; 2Unité de Recherche en Analyses et Développement Technologique en Environnement (URADTE), Centre de Recherche Scientifique et Technique en Analyses Physico-Chimiques (CRAPC), Tipaza; 3Laboratoire de Phénomènes de Transfert, Faculté de Génie Mécanique et de Génie des Procédés, Université des Sciences et de la Technologie Houari Boumediene (USTHB), Algiers, Algeria
Nanostructured lipid carriers for Alzheimer’s disease treatment: Influence of solid/liquid lipid ratio on physico-chemical properties
KOSTOVSKA, M.¹, MARKOVA, E.¹, TANESKA, L.¹, SHALABALIJA, D.¹, MIHAIOVA, Lj.¹, GLAVASH DODOV, M.¹, VRANIC, E.², SIMONOSKA, C.¹
¹Institute of pharmaceutical technology, Center of pharmaceutical nanotechnology, Faculty of pharmacy, Ss. Cyril & Methodius University, Skopje, R. Macedonia; ²Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

Determination of Load-Efficieny of Vancomycin in Nanoparticles System
YÜNKÜL, F.¹, AKSU, N. B.², SEZER, A. D.¹
¹Marmara University, Turkey; ²Altinbas University, Turkey

P3/1 QbD approach to development of solid lipid microparticles as dry powders for inhalation
IGNJATOVIC, J.¹, CVIJIC, S.¹, GORACINOVA, K.², DOBRICIC, V.³, DJURIS J.¹
¹Department of Pharmaceutical Technology and Cosmetology, University of Belgrade, Belgrade, Serbia; ²Pharmaceutical Faculty, University Ss. Cyril and Methodius, Skopje, Macedonia; ³Qatar University, College of Pharmacy, Doha, Qatar

Characterization of biodegradable nanoparticles for pulmonary delivery of a flavonoid
PÁPAY, ZS. E.¹, BALOGH, E.¹, VÁGI, P.², KÓSA, A.², BÖDDI, B.², ANTAL, I.¹
¹Semmelweis University Department of Pharmaceutics, Budapest, Hungary; ²Eötvös Loránd University Faculty of Sciences Department of Plant Anatomy, Budapest, Hungary
P3/3 Development of novel formulated meloxicam potassium containing dry powder inhaler systems
BENKE, E.1, ZSEMBERY, Á.2, SZABÓ-RÉVÉSZ, P.1, AMBRUS, R.1
1 Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; 2 Department of Oral Biology, Semmelweis University, Budapest, Hungary

P3/4 Development of antibiotic dry powder inhalation system based on Quality by Design methodology
KEYHANEH, K., AMBRUS, R., CSÓKA, I.
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P3/5 Contribution to development of discriminative dissolution method for inhalation preparations
ELEZOVIĆ, A.1, CVIJIĆ, S.2, ELEZOVIĆ, A.3, PILIPOVIĆ, S.1, UZUNOVIĆ, A.1, PAROJČIĆ, J.2
1 The Control Laboratory of the Agency for Medicinal Products and Medical Devices of Bosnia and Herzegovina, Sarajevo, Bosnia and Herzegovina; 2 Department of Pharmaceutical Technology and Cosmetology, Faculty of Pharmacy, University of Belgrade, Belgrade, Serbia; 3 Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

P3/6 Physicochemical examination of co-milled levodopa containing nasal powders
KISS, T.1, ALAPI, T.2, VARGA, G.3, SZABÓ-RÉVÉSZ, P.1, KATONA, G.1
1 University of Szeged, Faculty of Pharmacy, Institute of Pharmaceutical Technology and Regulatory Affairs, Hungary; 2 University of Szeged, Faculty of Science and Informatics, Department of Inorganic and Analytical Chemistry, Hungary; 3 University of Szeged, Faculty of Science and Informatics, Department of Organic Chemistry, Hungary
P3/7 Formulation and administration parameters for the optimisation of nasal deposition pattern of sprayable in situ gelling fluticasone delivery system
NIŽIĆ, L. 1, PEPIĆ, I. 1, BELTRAME, V. S. 2, KUČUK, M. S. 2, HAFNER, A. 1
1University of Zagreb Faculty of Pharmacy and Biochemistry, Zagreb, Croatia; 2Jadran Galenski Laboratorij d.d., Rijeka, Croatia

P3/8 Preparation and characterization of methacrylate copolymer-based microparticles for intranasal application
BARTOS, CS., AMBRUS, R., SZABÓ-RÉVÉSZ, P.
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P3/9 In vitro and in vivo characterization of nasal powder containing nanonized lamotrigin
AMBRUS, R. 1, GIESZINGER, P. 1, SZABÓ-RÉVÉSZ, P. 1, SZTOJKOV-IVANOV, A. 2, DUCZA, E. 2, MÁRKI, Á. 2, GÁSPÁR, R. 2, KECSKEMÉTI, G. 3, JANÁKY, T. 3, BARTOS, CS. 1
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Hungary; 2Department of Pharmacodynamics and Biopharmacy, University of Szeged, Hungary; 3Department of Medical Chemistry, University of Szeged, Szeged, Hungary

P3/10 Self-emulsifying formulations of vancomycin for ocular delivery – a novel approach to administering moisture-labile water-soluble drugs
SYCH, A. 1, SZNITOWSKA, M. 1, GRZYBOWSKI, A. 2
1Department of Pharmaceutical Technology, Medical University of Gdańsk, Poland; 2Department of Ophthalmology, University of Warmia and Mazury, Olsztyn, Poland
P3/11 Predicting the biopharmaceutical properties of ibuprofen-loaded cationic nanoemulsion using 3D in vitro corneal model

JURIŠIĆ DUKOVSKI, B.¹, JURETIĆ, M.², BRAČKO, D.², FILIFOVIĆ-GRČIĆ, J.¹, LOVRIĆ, J.¹

¹University of Zagreb Faculty of Pharmacy and Biochemistry, Zagreb, Croatia; ²PLIVA Croatia Ltd., TEVA Group Member, Zagreb, Croatia

P3/12 Cyclodextrin-Modified Mucoadhesive Polymers as an Enhancer of Ophthalmic Drug Delivery

L. KISS, E.¹, SZILÁGYI, B. Á.², SZILÁGYI, A.², GYARMATI, B.², CSÁNYI, E.¹, BUDAI-SZÜCS, M.¹

¹Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; ²Department of Physical Chemistry and Materials Science, Budapest University of Technology and Economics, Budapest, Hungary

P3/13 Formulation of steroid containing eye drops with cyclodextrin derivatives and mucoadhesive preservative system

BÍRÓ, T.¹, HORVÁT, G.¹, BOCSIK, A.², GRÓF, I.², URBÁN, E.³, DE LI, M.², CSÁNYI, E.¹, SZABÓ-RÉVÉSZ, P.¹, CSÓKA, I.¹, AIGNER, Z.¹

¹Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; ²Biological Research Centre HAS, Institute of Biophysics, Szeged, Hungary; ³Department of Clinical Microbiology, University of Szeged, Szeged, Hungary

P3/14 Evaluation of mucoadhesive properties of ocular lubricants containing hydroxypropyl guar gum and chitosan

RAČIĆ, A.¹, KRAJIŠNIK, D.², ČALIJA, B.², SAVIĆ, S.², MILIĆ, J.²

¹University of Banja Luka – Faculty of Medicine, Department of Pharmacy, Banja Luka, Bosnia and Herzegovina; ²University of Belgrade – Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Belgrade, Serbia
P3/15  PEG-ylated parenteral nanoemulsions: employing the experimental design in selecting optimal formulation and critical process parameters

DJOKOVIC, J.¹, SAVIC, S.², MITROVIC, J.¹,
WATROBSKA-SWIETLIKOWSKA, D.³, SAVIC, S.¹
¹University of Belgrade – Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Belgrade, Serbia;
²DCP Hemigal, Leskovac, Serbia; ³Medical University of Gdansk - Department of Pharmaceutical Technology, Gdansk, Poland

Poster section – Buccal Delivery and Printing Technologies

Chairs: Małgorzata Sznitowska, Niklas Sandler

P4/1  Behaviour of medicated inks on porous substrates – The effect of viscosity and surface tension on printing parameters

SASS, A.¹, KELEMEN, A.², KÁDÁR, A.²,
REGDON, G. JR.¹, PINTYE-HÓDI, K.¹, SOVÁNY, T.¹
¹Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; ²Department of Applied Informatics, University of Szeged, Szeged, Hungary

P4/2  Biocompatibility examination of 3D printed implants manufactured by different base polymers and side chains

ARANY, P.¹, FEHÉR, P.¹, UJHELYI, Z.¹, RÓKA, E.¹,
FENYVESI, F.¹, VECSENYÉS, M.¹, PERRET, F.²,
COLEMAN, A.², BÁCSKAY, I.¹
¹Department of Pharmaceutical Technology, University of Debrecen, Debrecen; ²University of Claude Bernard, Lyon
P4/3  The 3D-FDM printability assessment in terms of pharmaceutical polymers/polymeric blends
ILIÉS, K.¹, KOVÁCS, N. K.², BALOGH, A.³, BORBÁS, E., FARKAS, B.³, CASIAN, T.¹, MAROSI, GY.³,
TOMUTĂ, I.¹, NAGY, ZS. K.³
¹Department of Pharmaceutical Technology and Biopharmacy, Faculty of Pharmacy, University of Medicine and Pharmacy „Iuliu Hatieganu”, Cluj-Napoca, Romania; ²Department of Polymer Engineering, Faculty of Mechanical Engineering, Budapest University of Technology and Economics, Budapest, Hungary; ³Department of Organic Chemistry and Technology, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics, Budapest, Hungary

P4/4  Optimization of printing process parameters for printlets fabricated by FDM printing
MADZAREVIC, M., KRKOBAVIC, M., IBRIC, S.
University of Belgrade - Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Belgrade, Serbia

P4/5  3D printing of tablets for the treatment of cardiac arrhythmias – from filament to tablet
GRETIĆ, M., MATIJAŠIĆ, G.
University of Zagreb, Faculty of Chemical Engineering and Technology, Zagreb, Croatia

P4/6  Effectiveness of a lipid-based subgingival system for the treatment of periodontal disease
LÉBER, A.¹, BUDAI-SZŰCS, M.¹, URBÁN, E.²,
BERKÓ, SZ.¹, KOVÁCS, A.¹, VÁLYI, P.³, CSÁNYI, E.¹
¹Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; ²Institute of Clinical Microbiology, University of Szeged, Szeged, Hungary; ³Department of Periodontology, University of Szeged, Szeged, Hungary
In vitro – in vivo characterization of nanoparticulate mucoadhesive polyherbal gel designed for the treatment of periodontitis

DINTE, E.¹, MUNTEAN, D.¹, BENEDEC, D.², VLASE, L.¹, ILEA, A.³, MICLAUS, V.⁴, BOSCA, B.⁵
¹Iuliu Hatieganu University of Medicine and Pharmacy, Faculty of Pharmacy, Department of Pharmaceutical Technology and Biopharmaceutics, Cluj-Napoca, Romania; ²Iuliu Hatieganu University of Medicine and Pharmacy, Faculty of Pharmacy, Department of Pharmacognosy, Cluj-Napoca, Romania; ³Iuliu Hatieganu University of Medicine and Pharmacy, Faculty of Dental Medicine, Department of Oral Rehabilitation, Oral Health and Dental Office Management, Cluj-Napoca, Romania; ⁴University of Agricultural Sciences and Veterinary Medicine, Faculty of Veterinary Medicine, Department of Cell Biology, Histology and Embriology, Cluj-Napoca, Romania; ⁵Iuliu Hatieganu University of Medicine and Pharmacy, Faculty of Medicine, Department of Histology, Cluj-Napoca, Romania

Preparation of mucoadhesive alginate films – comparison of solvent casting and freeze thaw method

SZEKALSKA, M., CHYŻY, A., WINNICKA, K.
Department of Pharmaceutical Technology, Medical University of Białystok, Białystok, Poland

Formulation of an innovative buccal mucoadhesive drug delivery system with sodium alginate polymer film

PAMLÉNYI, K., SOVÁNY, T., KRISTÓ, K., REGDON, G. JR., Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

Structural and thermoanalytical analysis of innovative, chitosan based mucoadhesive films

MÓDRA, SZ.¹, SOVÁNY, T.¹, SÜVEGH, K.², KRISTÓ, K.¹, REGDON, G. JR.¹
¹Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; ²Laboratory of Nuclear Chemistry, Eötvös Lóránd University, Budapest, Hungary
P4/11 Design, Development and Characterization of Chitosan Film as Effective Oral-Macromolecule Delivery System Using New Multifunctional Plasticizer
IBRAHIM, Y., REGDON, G. JR., SOVÁNY, T.
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P4/12 Quality By Design Approach for Optimizing The Formulation And Characterization of Prepared Buccal Films
AKSU, N. B.1, HÖKENEK, N.2, YEGEN, G.1, ÜSTÜNDAG OKUR, N.2
1University of Altinbas, School of Pharmacy, Department of Pharmaceutical Technology, Istanbul, Turkey; 2University of Istanbul Medipol, School of Pharmacy, Department of Pharmaceutical Technology, Istanbul, Turkey

P4/13 Oral thin films dissolution testing device
GRILC, B., PLANINŠEK, O.
Faculty of pharmacy, University of Ljubljana, Ljubljana, Slovenia

Poster section – Oral Controlled Delivery

Chairs: Edina Vranić, Szilárd Pál

P5/1 Exploring the usability of modified gelatin films for preparation of gastroresistant soft capsules
MACIEJEWSKI, B., SZNITOWSKA, M.
Department of Pharmaceutical Technology, Medical University of Gdańsk, Poland

P5/2 Development and characterization of modified-release capsules based on hot-melt technologies
VASVÁRI, G.1, HAIMHOFER, Á.1, BÁCSKAY, I.1, BÉNYEI, A.1, VÁRADI, J.1, SOVÁNY, T.2, REGDON, G. JR.2, VECSERNYÉS, M.1, FENYVESI, F.1
1Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary; 2Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary
P5/3 Enteric film coating of capsules with freeze-dried fecal supernatant in Clostridium difficile infection
KÁSA, P.¹, VARGA, A.², KOCSIS, B.³, NAGY, R.¹, PÉTERFI, Z.², PÁL, SZ.¹
¹University of Pécs, Faculty of Pharmacy, Institute of Pharmaceutical Technology and Biopharmacy, Pécs, Hungary; ²University of Pécs, Medical School, 1st Department of Internal Medicine - Department of Infectology, Pécs, Hungary; ³University of Pécs, Medical School, Department of Medical Microbiology and Immunology

P5/4 API – excipient interaction studies in solid matrix systems
BENKŐ, E., REGDON, G. JR., SOVÁNY, T.
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P5/5 Comparison of hydrophilic polymers functionality in formulation of mucoadhesive matrix tablets
KURČUBIĆ, I., JOKOVIĆ, S., JOVANOVIĆ, M., ĐURIŠ, J.
University of Belgrade, Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Belgrade, Serbia

P5/6 Formulation of a multiple oral dosage form containing BCS IV group API and natural polymers as excipients
ČIERNÁ, M.¹, MUČAJI, P.², STARÝCHOVÁ, L.³, ČUCHOROVÁ, M.¹, GARDAVSKÁ, K.¹
¹Comenius University, Faculty of Pharmacy, Department of Galenic Pharmacy, Bratislava, Slovak Republic; ²Comenius University, Faculty of Pharmacy, Department of Pharmacognosy and Botany, Bratislava, Slovak Republic; ³Saneca Pharmaceuticals, a.s., Hlohovec, Slovak Republic
P5/7 Bile acid microvesicules as pharmaceutical formulation for hydrophilic drug delivery
GOLČORBIN-KON, S.¹, PAVLOVIĆ, N.¹, ARAFAT, M.², VUKMIROVIĆ, S.³, LALIĆ-POPOVIĆ, M.¹, MILIJAŠEVIĆ, B.³, MIKOV, M.³
¹Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; ²College of Pharmacy, Al-Ain University of Science and Technology, Al-Ain, UAE; ³Department of Pharmacology, Toxicology and Clinical Pharmacology, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia

P5/8 The influence of sodium dodecyl sulfate on diclofenac sodium and paracetamol release from hydroxypropyl methylcellulose tablets
REDE, K., FELICIJAN, T., BOGATAJ, M.
Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia

P5/9 An investigation into drug release from high drug loaded granules prepared with poly(ethylene) oxide and carbomer
VASILJEVIĆ, I., TURKOVIĆ, E., DRAŠKOVIĆ, M., PAROJČIĆ, J.
Department of Pharmaceutical Technology and Cosmetology, Faculty of Pharmacy-University of Belgrade, Belgrade, Serbia

P5/10 The Effect of Ball Milling and Spray Drying on Phase Transition, Particle Size Reduction and Dissolution of Bicalutamide
SZAFRANIEC, J.¹,², ANTOSIK, A.¹, KNAPIK-KOWALCZUK, J.³,⁴, GAWLAK, K.², PALUCH, M.³,⁴, JACHOWICZ, R.¹
¹Department of Pharmaceutical Technology and Biopharmaceutics, Faculty of Pharmacy, Jagiellonian University Medical College, Krakow, Poland; ²Department of Physical Chemistry and Electrochemistry, Faculty of Chemistry, Jagiellonian University, Krakow, Poland; ³Division of Biophysics and Molecular Physics, Institute of Physics, University of Silesia, Katowice, Poland; ⁴Silesian Center for Education and Interdisciplinary Research, Chorzow, Poland
P5/11 Investigation of formulation variables influencing the drug release rate from immediate release lamotrigine tablets by experimental design
SVONJA-PAREZANOVIC, G., LALIC-POPOVIC, M., PAVLOVIC, N., SVRKOTA, B., STJEPANOVIC, A., GOLOCORBIN-KON, S.
Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Serbia

P5/12 Influence of the storage humidity conditions on dissolution profiles of brand and generic lamotrigine immediate release tablet formulations
SVONJA-PAREZANOVIC, G., LALIC-POPOVIC, M., PAVLOVIC, N., Todorovic, N., CANJI, J., GOLOCORBIN-KON, S.
Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Serbia

P5/13 The choice of vehicle appropriate for co-administration of paediatric sprinkle pellets formulation with diazepam
KOTLOWSKA, H.1, SZYMANSKA, M.2, SZNITOWSKA, M.1
1Department of Pharmaceutical Technology, Medical University of Gdask, Gdask, Poland; 2Student Chapter of ISPE, Department of Pharmaceutical Technology, Gdask, Poland

P5/14 An investigation into the influence of preparation method and carrier type on the characteristics of liquisolid systems
ALEKSIĆ, I., CVIJIĆ, S., KOVAČEVIĆ, M., BAŠIĆ, M., PAROJČIĆ, J.
University of Belgrade - Faculty of Pharmacy, Belgrade, Serbia

17.00 – 17.10 Coffee break
Delivery of Proteins and Biologicals 2. Section

Chairs: Albin Kristl, Erzsébet Csányi

17.10 – 17.40 Drug Delivery of micro-RNA
ZIMMER, A.
Karl-Franz University of Graz, Austria

17.40 – 18.00 The application of artificial neural networks for the development of topical flurbiprofen microemulsions
MESUT, B.¹, GÜRBÜZ, A.¹, ERDAL, M. S.¹, AKSU, B. M.², ÖZSOY, Y.¹, GÜNGÖR, S.¹
¹Istanbul University, Faculty of Pharmacy, Department of Pharmaceutical Technology, Istanbul, Turkey; ²Altınbaş University, Faculty of Pharmacy, Department of Pharmaceutical Technology, Istanbul, Turkey

18.00 – 18.20 Our experiences with freeze-dried fecal supernatant capsules in Clostridium difficile infection
VARGA, A., KOCSIS, B., SIPOS, D., VIGVÁRI, SZ., KÁSA, P., PÁL, SZ., PÉTERFI, Z.
University of Pécs, Pécs, Hungary

18.20 – 18.40 Antimicrobial and cytotoxic interactions between different pharmaceutical excipients in liquid preparations
NEMES, D.¹, MEZŐ, M.¹, POCZOK, N.¹, UJHELYI, Z.¹, FEHÉR, P.¹, BODNÁR, R.², NAGY, F.², VECSENYÉS, M.¹, BÁCSKAY, I.¹
¹Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Debrecen, Debrecen, Hungary; ²Department of Medical Microbiology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

18.40 – 19.00 Safe Handling Of Cytostatic Drugs
ZSÁK, P.
DuPont, De Nemours (Luxembourg) Sarl

20.00 Conference Dinner in the restaurant of Hotel Forrás
You can enjoy traditional Hungarian taste and music
22 September 2018 – Saturday

09.00 – 10.50 Particle Engineering 1. Section

Chairs: Peter Kleinebudde, Géza Regdon jr.

KN6
09.00 – 09.30 Particles design and solid dosage forms
PLANINSEK, O.
University of Ljubljana, Slovenia

OP-13
09.30 – 09.50 The impact of supercritical drying of microcrystalline cellulose on its tableting characteristics
POTPARA, J., IVANOVIC, J., MAKSIMOVIC, Z., IBRIC, S.
University of Belgrade, Serbia

OP-14
09.50 – 10.10 Processing of amorphous solid dispersions containing itraconazole
GALATA, D. L.1, DÉMUTH, B.1, BALOGH, A.1, VIGH, T.2, MENSCHE, J.2, VERRECK, G.2, MAROSI, GY.1, NAGY, ZS. K.1
1Department of Organic Chemistry and Technology, Budapest University of Technology and Economics, Hungary; 2Janssen Research and Development, Beerse, Belgium

OP-15
10.10 – 10.30 “One for All - All for One”: simultaneous control of polymorph outcome and particle engineering of caffeine-anthranilic acid cocrystal through polymer-assisted grinding
NHETA, E.1, ARMITAGE, R.1, RUPARELIA, K.1, JONES, W.2, HASA, D.1
1Leicester School of Pharmacy, De Montfort University, Leicester, UK; 2Department of Chemistry, University of Cambridge, UK
SP-3
10.30 – 10.50  Balancing Competing Requirements of Dose Form Robustness, Disintegration Time and Organoleptics when formulating ODTs with high doses of API
MACLEOD, G.,1, LECLERCQ, B.2
1SPI Pharma, Wilmington, DE, USA; 2Medelpharm, Beynost, France

10.50 – 11.00  Coffee break

11.00 – 12.00  Poster section II.

Poster section – Dermal and Transdermal Delivery 2.

Chairs: Mirjana Gašperlin, Szilvia Berkó

P6/1  Rheological characterization of topical emulsion systems co-stabilized with an exopolysaccharide – A levan case study
PANTELIĆ, I., GOLO, N., LUKIĆ, M., GOJGIĆ-CVJOVIĆ, G., ĐOKOVIĆ, J., SAVIC, S.
1Department of Pharmaceutical Technology and Cosmetology, University of Belgrade - Faculty of Pharmacy, Belgrade, Serbia; 2Department of Chemistry, University of Belgrade-Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia

P6/2  Halloysite-functionalized chitosan films for local delivery of antibiotics
ČALIJA, B., KRAJIŠNIK, D., MILAŠINOVIĆ, N., DAKOVIĆ, A., TRIFKOVIĆ, K., SAVIĆ, S., JELA MILIĆ, J.
1University of Belgrade - Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Belgrade, Serbia; 2University of Criminalistic and Police Studies, Department of Forensics, Belgrade, Serbia; 3Institute for the Technology of Nuclear and Other Mineral Raw Materials, Belgrade, Serbia; 4University of Belgrade - Faculty of Technology and Metallurgy, Department of Chemical Engineering, Belgrade, Serbia
P6/3  Investigation of DPPH radical scavenging ability of different antioxidants incorporated into fast inverted oil-in-water emulsion
MARTIĆ, R.¹, KRAJIŠNIK, D.¹, UŠJAK, L.², PETROVIĆ, S.², SAVIĆ, S.¹, MILIĆ, J.¹
¹Department of Pharmaceutical Technology and Cosmetology, University of Belgrade-Faculty of Pharmacy, Serbia;
²Department of Pharmacognosy, University of Belgrade-Faculty of Pharmacy, Serbia

P6/4  Adapalene loaded alkyl polyglucoside based topical microemulsions – in vitro drug release
BUBIC PAJIC, N.¹, NIKOLIC, I.², DOBRICIC, V.³, SAVIC, S.²
¹Department of Pharmaceutical Technology and Cosmetology, University of Banja Luka – Faculty of Medicine, Banja Luka, Bosnia and Herzegovina; ²Department of Pharmaceutical Technology and Cosmetology, University of Belgrade – Faculty of Pharmacy, Belgrade, Serbia; ³Department of Pharmaceutical Chemistry, University of Belgrade – Faculty of Pharmacy, Belgrade, Serbia

P6/5  Towards a deeper insight into levan’s skin hydration effect
LUKIC, M.¹, PANTELIC, I.¹, ILIC, T.¹, GOJGIĆ-C., G.², JAKOVLJEVIC, D.², SAVIC, S.¹
¹University of Belgrade–Faculty of Pharmacy, Belgrade, Serbia; ²University of Belgrade-Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia

P6/6  Investigation of the effect of zinc oxide on the barrier function on baby skin
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary
P6/7  Topical biocompatible fluconazole-loaded microemulsion-gels based on essential oils and sucrose esters: formulation, evaluation and in vitro skin permeation of drug
OLARIU, I.1, MUT, A.-M.1, CONEAC, G.1, VLAIA, V.1, LUPULEASA, D.2, SZABADAI, Z.3, ANGHEL, D. F.4, STANGA, G.4, VLAIA, L.1
1“Victor Babes” University of Medicine and Pharmacy, Timisoara; 2“Carol Davila” University of Medicine and Pharmacy, Bucharest; 3National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara; 4“Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest

P6/8  Influence of cholesterol oleogels on the in vitro release of poorly soluble drug
ČUCHOROVÁ, M.1, ŠPAGLOVÁ, M.1, STARÝCHOVÁ, L.2, ČIERNA, M.1, GARDAVSKÁ, K.1
1Comenius University in Bratislava, Faculty of Pharmacy, Department of Galenic Pharmacy, Bratislava, Slovak Republic; 2Saneca Pharmaceuticals a.s., Hlohovec, Slovak Republic

P6/9  The influence of chiral enhancers on stereoselectivity in transdermal permeation of flurbiprofen
VALENTOVÁ, J., ZÍTKOVÁ, M.
Faculty of Pharmacy, Comenius University in Bratislava, Slovakia

P6/10  Mechanism of in vitro release kinetic of meloxicam, tenoxicam and indomethacin from hypromellose matrices
TODORAN, N.1, ANTONOAEA, P.1, VLAD, R. A.1, RÉDAI, E.1, BÎRSAN, M.2, CIURBA, A.1
1Faculty of Pharmacy, University of Medicine and Pharmacy of Tîrgu Mures, Tîrgu Mures, Romania; 2Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy of Iasi, Iasi, Romania
P6/11 The influence of propylene glycol concentration as a modulator of the indomethacin permeation from dermal films
ANTONOAEA, P.1, TODORAN, N.1, VLAD, R. A.1, RÉDAI, E.1, BÎRSAN, M.2, CIURBA, A.1
1University of Medicine and Pharmacy of Tîrgu Mures, Romania; “Grigore T. Popa” University of Medicine and Pharmacy Iaşi, Romania

P6/12 Evaluation of miconazole nitrate in vitro permeation from dermal systems through synthetic vs. biological membranes
CIURBA, A.1, BÎRSAN, M.2, APOSTU, M.2, ANTONOAEA, P.1, VLAD, R. A.1, TODORAN, N.1
1Faculty of Pharmacy, University of Medicine and Pharmacy of Tîrgu Mures, Tîrgu Mures, Romania; 2Faculty of Pharmacy, “Grigore T. Popa” University of Medicine and Pharmacy of Iasi, Iasi, Romania

P6/13 Application of nanotechnology in formulation of tioconazole and melaleuca alternifolia essential oil for onychomycosis topical treatment
HORVÁTH, B., NAGY, S., PÁL, S., SZÉCHENYI, A.
Institute of Pharmaceutical Technology and Biopharmacy, University of Pécs, Pécs, Hungary

P6/14 Nystatin-Flucytosine Liposomes for Fungal Nail Infection Treatment
VUKMAN, N., SALEM, A., PÁL, S., NAGY, S., SZÉCHENYI, A.
Faculty of Pharmacy, Institute of Pharmaceutical Technology and Biopharmacy, University of Pécs, Pécs, Hungary

P6/15 Development and investigation of Papaverine hydrochloride containing nanostructured systems for the treatment of erectile dysfunction
ZSIKÓ, S.1, DEÁK, G.2, GÁCSI, A.1, KOVÁCS, A.1, CSÁNYI, E.1, BERKÓ, SZ.1
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; 2Department of Urology, University of Szeged, Szeged, Hungary
Poster section – Nanoparticles 2.

Chairs: Ioan Tomuta, Csilla Bartos

P7/1 Human respiratory epithelial cell culture models for pharmaceutical technology applications
GRÓF, I.1, SANTA MARIA, A. R.1, AMBRUS, R.2, 
SZABÓ-RÉVÉSZ, P.2, ZSEMBERY, Á.3, 
DELI, M.1, BOCSIK, A.1
1Institute of Biophysics, Biological Research Centre, Hungarian Academy of Sciences, Szeged, Hungary; 2Institute of Pharmaceutical Technology and Regulatory Affairs, Faculty of Pharmacy, University of Szeged, Szeged, Hungary; 3Department of Oral Biology, Semmelweis University, Budapest, Hungary

P7/2 Melatonin loaded polyanhydride nanoparticles for oromucosal application
KESER, S.1, JURETIĆ, M.2, FILIPOVIĆ-GRČIĆ, J.1, JUG, M.1
1Department of Pharmaceutical Technology, Faculty of Pharmacy and Biochemistry, University of Zagreb, Zagreb, Croatia; 2PLIVA Croatia Ltd, TEVA Group Member, Zagreb, Croatia

P7/3 Caco 2 cellular uptake of ligand modified PLGA-PEG nanoparticles
RUSESKA, I.1, GESKOVSKI, N.1, 
DIMCHEVSKA SAZDOVSKA, S.1, 
SCHACHNER-NEDHERER, A-L.2, 
ZIMMER, A.2, GORACINOVA, K.3.1
1Institute of Pharmaceutical Technology, Faculty of Pharmacy, University Ss Cyril and Methodius, Skopje, Macedonia; 2Institute of Pharmaceutical Sciences, Department of Pharmaceutical Technology & Biopharmacy, University of Graz, Graz, Austria; 3College of Pharmacy, Qatar University, Doha, Qatar
P7/4  X-Ray irradiated MWCNTs as drug carriers: characterization and release kinetics
ILIJEVA, R.1, DIMKOSKA, S.1, DIMOVSKA, N.1, KRSTEVSKA, A.1, GROZDANOV, A.2, VASILEVSKA NI KODINOVSKA, V.3, LUKARSKI, D.3, STOJKOVSKI, I.3, MLADENOVSKA, K.1
1Faculty of Pharmacy, University “Ss Cyril and Methodius”, Skopje, Macedonia; 2Faculty of Technology and Metallurgy, University “Ss Cyril and Methodius”, Skopje, Macedonia; 3Medical Faculty, University “Ss Cyril and Methodius”, Skopje, Macedonia

P7/5  Functionalized MWCNTs as etoposide carriers: characterization and release kinetics
ILIJEVA, R.1, DIMOVSKA, N.1, KRSTEVSKA, A.1, GROZDANOV, A.2, PETRUSHEVSKA, M.3, S.CRCAREVSKA, M.1, DIMKOSKA, S.1, MLADENOVSKA, K.1
1Faculty of Pharmacy, University „Ss. Cyril and Methodius”, Skopje, Macedonia; 2Faculty of Technology and Metallurgy, University „Ss. Cyril and Methodius”, Skopje, Macedonia; 3Medical Faculty, University „Ss. Cyril and Methodius”, Skopje, Macedonia

P7/6  Optimization of the production process and product quality of titanate nanotube-drug composites
RANJOUS, Y.1, REGDON, G. JR.1, KÓNYA, Z.2, SOVÁNY, T.1
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; 2Department of Applied and Environmental Chemistry, University of Szeged, Szeged, Hungary
P7/7 Preparation and characterization of cell culture controllable, marker incorporating liposomal formulations
NÉMETH, ZS.¹, KISS, L.², MALÉTH, J.³,
RAKONCZAY, Z.², HEGYI, P.⁴, SZABÓ-RÉVÉSZ, P.¹,
JÖJÁRT-LACZKOVICH, O.¹
¹Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; ²Department of Pathophysiology, University of Szeged, Szeged, Hungary; ³First Department of Medicine, University of Szeged, Szeged, Hungary; ⁴Medical School, Institute for Translational Medicine, University of Pécs, Pécs; MTA-SZTE Momentum Research Group, University of Szeged, Szeged, Hungary

P7/8 Co-delivery of curcumin and doxorubicin in PEGylated liposomes enhances their therapeutic potential against colon cancer
PORFIRE, A.¹, TEFAS, L.¹, SYLVESTER, B.¹,
LICARETE, E.²,³, RAUCA, V.²,³, LUPUT, L.²,³, PATRAS, L.²,³,
BANCIU, M.²,³, SESARMAN, A.²,³,¹
¹Department of Pharmaceutical Technology and Biopharmaceutics, University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania; ²Department of Molecular Biology and Biotechnology, Babes-Bolyai University, Cluj-Napoca, Romania; ³Molecular Biology Centre, Institute for Interdisciplinary Research in Bio-Nano-Sciences, Babes-Bolyai University, Cluj-Napoca, Romania

P7/9 Chitosan/sodium lauryl ether sulfate microcapsules as carriers for vitamin E: in vitro release study
MILINKOVIĆ, J.¹, ĐEKIĆ, L.¹,², PETROVIĆ, L.¹,
FRAJ, J.¹, ĆIRIĆ, A.²
¹University of Novi Sad, Faculty of Technology, Department of Biotechnology and Pharmaceutical Engineering, Serbia; ²University of Belgrade, Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Serbia
P7/10  Determination of the protein corona stability complex of nanoliposomes in physiological mediums
MIHAHOVA, L. J.1, SHALBALIJA, D.1, SIMONOSKA CRCAREVSKA, M.1, VRANIC, E.2, GLAVASH DODOV, M.1
1Institute of pharmaceutical technology, Center of pharmaceutical nanotechnology, Faculty of pharmacy, Ss. Cyril & Methodius University, Skopje, R. Macedonia; 2Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

P7/11  Low-energy nanoemulsions with antioxidant red raspberry seed oil and fruit extracts – Influence of extract type and its quality and different polyols on EPI nanoemulsion formation and stability
ANA, G.1, ĐOKOVIĆ, J.1, SAVIĆ, S. M.2, TASIĆ-KOSTOV, M.3, PAVLOVIĆ, D.3, SAVIĆ, S. D.1
1University of Belgrade – Faculty of Pharmacy, Department of Pharmaceutical Technology and Cosmetology, Belgrade, Serbia; 2DCP Hemigal, Leskovac, Serbia; 3Department of Pharmacy, Faculty of Medicine, University of Niš, Serbia

P7/12  Lecithin-based low-energy nanoemulsions with eucalyptol as a co-stabilizer: interfacial phenomena examination by electron paramagnetic resonance spectroscopy
NIKOLIC, I.1, MITSOU, E.2, PAPADIMITRIOU, V.2, LUNTER, D. J.3, XENAKIS, A.2, DANIELS, R.3, SAVIC, S.1
1Department of Pharmaceutical Technology and Cosmetology, University Belgrade, Belgrade, Serbia; 2Institute for Biology, Medicinal Chemistry and Biotechnology, National Hellenic Research Foundation, Athens, Greece; 3Institute of Pharmaceutical Technology, Eberhard Karls University, Tübingen, Germany
Poster section – Solid Dosage Forms

Chairs: Stane Srčič, Romána Zelkó

P8/1 Enhancing particles mixing in cubic mixer using by baffles
BOUHAOUCHE, A., MANCER, D., DAOUD K.
Universit of Sciences and Technology Houari Boumediene, Algiers, Algeria

P8/2 Measurement of the density distributions in ribbons containing paracetamol and various excipients by x-ray µCT and correlation to the minimum solid fraction
LACHMANN, M.1, WIEDEY, R.2, SRČIČ, S.1, DREU, R.1
1University of Ljubljana, Ljubljana, Slovenia; 2Heinrich Heine Universität Düsseldorf, Düsseldorf, Germany

P8/3 Co-processing by fluid-bed melt granulation for improving tableting properties of lactose monohydrate
MEDAREVIĆ, D., KRSTIĆ, S., LAZOVIĆ, A., DJURIŠ, J., IBRIĆ, S.
Department of Pharmaceutical Technology and Cosmetology, Faculty of Pharmacy, University of Belgrade, Belgrade, Serbia

P8/4 Self-organized criticality in granule flowability examinations
FARKAS, GY.1, PINTYE-HÓDI, K.2, PÁL, SZ.1
1Institute of Pharmaceutical Technology and Biopharmacy, University of Pécs, Pécs, Hungary; 2Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P8/5 Effect of magnesium stearate on the physicochemical properties of co-processed lactose using compaction simulator.
OZALP, Y., JIWA, N.
Near East University, Faculty of Pharmacy, Department of Pharmaceutical Technology, Lefkosa/TRNC., Turkey
P8/6  Use of Compaction Simulator to Determine the Effect of Filler on the Compactability Characteristics of Paracetamol as a Model Drug
ONAYO, M. M., JIWA, N., OZALP, Y.
Near East University, Faculty of Pharmacy, Department of Pharmaceutical Technology, Turkey

P8/7  Effect of magnesium aluminometasilicates on compaction properties of pharmaceutical formulations
KOMÍNOVÁ, P., TRAN, D. T., ZÁMOSTNÝ, P.
University of Chemistry and Technology Prague, Prague, Czech Republic

P8/8  Influence of the mechanical properties of dry binders on the tabletability
ARNDT, O-R., KLEINEBUDDE, P.
Institute of Pharmaceutics and Biopharmaceutics, Heinrich Heine University, Düsseldorf, Germany

P8/9  Evaluation of excipients and processing agents intended for the compression of pellets into tablets
SÁNTHA, K.,1, FÜLÖP, V.,1, JAKAB, G.,1, GORDON, P.,2, BALOGH, E.,1, ANTAL, I.1
1Department of Pharmaceutics, Semmelweis University, Budapest, Hungary; 2Department of Electronics Technology, Budapest University of Technology and Economics, Budapest, Hungary

P8/10 Effect of the compression speed on the mechanical properties of co-processed excipients for direct compression
MUDRIC, J., MEDAREVIC, D., IBRIC, S., DJURIS, J.
Department of Pharmaceutical Technology and Cosmetology, University of Belgrade-Faculty of Pharmacy, Belgrade, Serbia

P8/11 Influence of different type of tableting machine on process tableting co-processed excipient mannitol/maltodextrine
ARANĐELOVIĆ, A.,1, MILETIĆ, T.,2, IBRIĆ, S.1
1Faculty of Pharmacy, Belgrade, Serbia; 2Hemofarm A.D., Beogradski put bb., Vrsac, Serbia
P8/12 Comparison of Orodispersible Minitablets Based on galenIQ™721 For Pediatric Use
LURA, A.1, SUAREZ-GONZALES, J.3, BREITKREUTZ, J.1
1Heinrich Heine University Düsseldorf, Institute of Pharmaceutics and Biopharmaceutics, Düsseldorf, Germany; 2Departamento Ingeniería Química y Tecnología Farmacéutica, Universidad de La Laguna, La Laguna, Spain

P8/13 Formulation and characterization of lurasidone hydrochloride orally disintegrating tablets
BARBARIĆ, J., BRNADIĆ, G., FILAKOVAC, M., MALEKinušić, N., TOMLJANOVIĆ, I., ŽIŽEK, K.
University of Zagreb, Faculty of Chemical Engineering and Technology, Croatia

P8/14 Characterization of tableting properties for hot melt coated granules
MILANOVIC, A., BUJISIC, M., DREZGIC, K., DROBNJAK, J., ALEKSIC, I., CVIJJIC, S.
Department of Pharmaceutical Technology and Cosmetology, University of Belgrade-Faculty of Pharmacy, Belgrade, Serbia

P8/15 Evaluation of physicochemical and tableting properties of rutin-cyclodextrin complexes
PACZKOWSKA, M.1, BIALEK, K.2, MCDONAGH, A.2, CIELECKA-PIONTEK, J.1, TAJBER, L.2
1Department of Pharmaceutical Chemistry, Poznan University of Medical Sciences, Poland; 2School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin, University of Dublin, Ireland
Poster section – Quality by Design and in-silico modelling

Chairs: Svetlana Ibrić, Tamás Sovány

P9/1 In silico and experimental evaluation of solubility and lipophilicity of new succinimide derivatives
MILOSEVIC, N.1, JOVIC, A.1, MILANOVIC, M.1, LALIC-POPOVIC, M.1, PAVLOVIC, N.,1, USCUMLIC, G.2, BANJAC, N.3
1Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; 2Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia; 3Faculty of Agriculture, Food Technology and Biochemistry, University of Belgrade, Belgrade, Serbia

P9/2 Correlation of experimentally determined lipophilicity with in silico compartmental distribution of new succinimide derivatives
MILOSEVIC, N.1, MILIC, N.1, JOVIC, A.1, LALIC-POPOVIC, M.1, Todorovic, N.1, USCUMLIC, G.2, BANJAC, N.3
1Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Serbia; 2Faculty of Technology and Metallurgy, University of Belgrade, Serbia; 3Faculty of Agriculture, Food Technology and Biochemistry, University of Belgrade, Serbia

P9/3 Mechanistic interpretation of inhaled budesonide deposition and absorption in rats using in silico tools
IGNJATOVIC, J., DJURIS, J., IBRIC, S., PAROJČIĆ, J., CVIJIC, S.
Department of Pharmaceutical Technology and Cosmetology, University of Belgrade, Belgrade, Serbia

P9/4 In vitro and in silico aerodynamical evaluation of carrier-free porous inhalable particles
CHVATAL, A.1, PARTY, P.1, FARKAS, Á.2, BALÁSHÁZY, I.2, AMBRUS, R.1, SZABÓ-RÉVÉSZ, P.1, FATTAL, E.3, TSAPIS, N.3
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; 2Centre for Energy Research Hungarian Academy of Sciences, Budapest, Hungary; 3Institut Galien Paris-Sud, CNRS, Univ. Paris-Sud, Université Paris-Saclay, Châtenay-Malabry, France
P9/5  Application of a network of artificial neurons on a mixture of powder in a High Shear granulator
GHAMRI, W., DAOUD, K.
University of Sciences and Technology Houari Boumediene, Algeria

P9/6  Establishment of requirements for the target measurement uncertainty to validate procedures for the control over the process equipment cleanliness
LEONTIEV, D., GRYZODUB, O., VOLOVKY, N.
Ukrainian Scientific Pharmacopoeial Center for Quality of Medicines, Kharkiv, Ukraine

P9/7  Risk Assessment based nano-sized liposome formulation development
PALLAGI, E., JÓJÁRT-LACZKOVICH, O., NÉMETH, ZS., SZABO-RÉVÉSZ, P., CSÓKA, I.
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P9/8  Development of the approach for method transfer for assay of desloratadine in ficoated tablets
LEONTIEV, D.1, PETRUS, V.2, VOLOVKY, N.1, GRYZODUB, O.1
1Ukrainian Scientific Pharmacopoeial Center for Quality of Medicines, Kharkiv, Ukraine; 2National University of Pharmacy, Kharkiv, Ukraine

P9/9  Real-time feedback control of continuous pharmaceutical processes using Raman spectrometry and image analysis
MADARÁSZ, L., NAGY, B., DÉMUTH, B., FARKAS, A., GYÜRKÉS, M., MAROSI, GY., NAGY, ZS. K.
Department of Organic Chemistry and Technology, Budapest University of Technology and Economics, Budapest, Hungary

P9/10 Optimization of freeze-drying process by evaluation the role of time and temperature in lyophilization of biocompatible polymer hydrogels
SZERÖCZEL, D., LENGYEL, M., BALOGH, E., ANTAL, I.
Department of Pharmaceutics, Semmelweis University, Budapest, Hungary
P9/11 QSRR modeling of Liquid Chromatography separation of Ziprasidone compounds
NIKOLIC, K.1, CARAPIC, M.2, AGBABA, D.1
1Institute of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Belgrade, Belgrade, Serbia; 2Medicines and Medical Devices Agency of Serbia, Belgrade, Serbia

P9/12 Formulation strategy of anti-microbial peptide (AMP) delivery systems
MANTEGHI, R.1, SZAKONYI, G.2, PALLAGI, E.1, CSÓKA, I.1
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; 2Department of Pharmaceutical Analysis, Faculty of Pharmacy, University of Szeged, Szeged, Hungary

P9/13 Data mining of physicochemical, biopharmaceutical and pharmacokinetic properties of model drugs exhibiting low solubility and low permeability
GATARIĆ, B.1, PAROJČIĆ, J.2
1Department of Pharmaceutical Technology and Cosmetology, Faculty of Medicine - University of Banja Luka, Banja Luka, Bosnia and Herzegovina; 2Department of Pharmaceutical Technology and Cosmetology, Faculty of Pharmacy - University of Belgrade, Belgrade, Serbia

P9/14 Wurster Granulation PAT monitoring by NIR: calibration vs PCA trend approach
GELAIN, A.1, BURATTI, G.1, GENORINI, E.2, INVERNI, G.1
1Freund-Vector European Lab, Villasanta (MB) Italy; 2VIAVI Solutions, Vimercate (MB), Italy
Poster section – Preformulation and excipients

Chairs: Klára Pintye-Hódi, Gábor Katona

P10/1  Varying conditions of in vitro method for assessment of active substances permeability
ELEZOVIC, A.¹, HADZIABDIC, J.¹, RAHIC, O.¹,
ELEZOVIC, A.², REGDON, G. JR.³, VRANIC, E.¹
¹Department of Pharmaceutical Technology, University of Sarajevo, Sarajevo, Bosnia and Herzegovina; ²Control Laboratory of Agency for Quality Control of Medicines of Bosnia and Herzegovina, Sarajevo, Bosnia and Herzegovina; ³Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary

P10/2  Application of PAMPA gastrointestinal model to predict permeability of sumatriptan in free form and in system with cyclodextrin derivatives
PACZKOWSKA, M.¹, TAJBER, L.², CIELECKA-PIONTEK, J.¹
¹Department of Pharmaceutical Chemistry, Poznan University of Medical Sciences, Poland; ²School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin, University of Dublin, Ireland

P10/3  Enhanced tedizolid solubility and permeability due to its interactions with hydrophilic biopolymers
PACZKOWSKA, M., CIELECKA-PIONTEK, J.
Department of Pharmaceutical Chemistry, Poznan University of Medical Sciences, Poland

P10/4  In vitro dissolution-absorption study to characterize Itraconazole formulations: The effect of formulation additives, food and dose
BORBÁS, E.¹, VÖLGYI, G.², TAKÁCS-NOVÁK, K.²,
TSINMAN, K.³, TSINMAN, O.¹, SINKÓ, B.³, NAGY, ZS. K.¹
¹Budapest University of Technology and Economics, Budapest, Hungary; ²Semmelweis University, Budapest, Hungary; ³Pion Inc, Billerica, USA
P10/5 Solid dispersions of clopidogrel bisulfate: the influence of hydrophilic polymer type on dissolution rate
OSMANOVIĆ OMERDIĆ, E.1, ALAGIĆ-DŽAMBIĆ, L.1, PAŠIĆ-KULENOVIĆ, M.1, JAHIC, N.1, KRSTIĆ, M.3, VASILJEVIĆ, D.2
1Development and Registration Department, Bosnalijek d.d., Sarajevo, Bosnia and Herzegovina; 2Department of Pharmaceutical Technology and Cosmetology, Faculty of Pharmacy, University of Belgrade, Belgrade, Serbia; 3Julija Pharm, Belgrade, Serbia

P10/6 Thermodynamic solubility measurements with minimal consumption of tested substance
ŽAKELJ, S., VESELI, A., KRISTL, A.
Chair for Bipharmacy and Pharmacokinetics, Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia

P10/7 Pharmacokinetic properties of fluorescently and PET radiotracer labelled hydroxypropyl-beta-cyclodextrin
FENYVESI, F.1, HAJDÚ, I.1, TRENCSÉNYI, GY.1, VÁRADI, J.1, BÁCSKAY, I.1, VASVÁRI, G.1, FENYVESI, É.2, MALANGA, M.2, VECSENYÉS, M.1
1Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary; 2Cyclolab Ltd., Budapest, Hungary

P10/8 Biocompatibility investigation of pharmaceutical excipients
PETŐ, Á., NEMES, D., VECSENYÉS, M., FEHÉR, P., UJHELYI, Z., VÁRADI, J., FENYVESI, F., SINKA, D., BÁCSKAY, I.
Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary

P10/9 Study on the effect of multivalent cations and matrix formers applied for microencapsulation
LENGYEL, M.1, BALOGH, E.1, SZERŐCZEI, D.1, DOBÓ-NAGY, CS.2, ANTAL, I.1
1Department of Pharmaceutics, Semmelweis University Budapest, Hungary; 2Department of Oral Diagnostics, Semmelweis University, Budapest, Hungary
P10/10 Complexation of chrysin by β-cyclodextrin derivatives and their biological activities
VÁRADI, J.1, NGUYEN, T. L. P.1, HERMENEAN, A.2, BÁCSKAY, I.1, VASVÁRI, G.1, FEJES, T.1, VECSENYÉS, M.1, FENYVESI, F.1
1Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary; 2Department of Histology, Faculty of Medicine, 'Vasile Goldiș' Western University of Arad, Arad, Romania

P10/11 Does particle size distribution influence solid fat content of potential novel drug carriers?
KALIC, M.1, DIZDAR, M.1, JOVANOVIC LJESKOVIC, N.1, KRSTONOSIC, V.2, HADNADEV, M.3, WIKING, L.4, BEYER GREGERSEN, S.4, MILJKOVIC, T.5
1Faculty of Pharmacy, University Business Academy, Serbia; 2Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; 3Institute of Food Technology, University of Novi Sad, Novi Sad, Serbia; 4Department of Food Science, Aarhus University, Tjele, Denmark; 5Institute of Cardiovascular Diseases of Vojvodina, Faculty of Medicine, University of Novi Sad, Serbia

P10/12 Photostability of hydrophilic vitamins
RAKUŠA, Z. T., GROBIN, A., KRISTL, A., ROŠKAR, R.
Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia

P10/13 Combining mechanochemistry and spray congealing towards new praziquantel formulations
ALBERTINI, B.1, PERISSUTTI, B.2, BERTONI, S.1, ZANOLLA, D.2, FRANCESCHINIS, E.3, VOINOVIĆ, D.2, LOMBARDO, E.4, KEISER, J.4, PASSERINI, N.1
1Department of Pharmacy and Biotechnology, University of Bologna, Italy; 2Department of Chemical and Pharmaceutical Sciences, University of Trieste, Italy; 3Department of Pharmaceutical and Pharmacological Sciences, University of Padova, Italy; 4Helminth Drug Development Unit, Swiss Tropical and Public Health Institute, Basel, Switzerland
P10/14  Micellisation of Binary Mixture of Surfactants Sodium-Deoxycholate and Sodium-Decyl Sulfate in Water Solution: Thermodynamic Description
TODOROVIC, N., TEPAVCEVIC, V., POSA, M., PILIPOVIC, A., CANJI, J., LALIC-POPOVIC, M., PAVLOVIC, N.
Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia

Poster section – Regulatory Affairs

Chairs: Aleš Mrhar, Rita Ambrus

P11/1  Fighting against Falsified Pharmaceuticals by 2D Laser Coding Technology in Case of Using Naturally Colored Polymer Film Coating
LUDASI, K.1, JÓJÁRT-LACZKOVICH, O.1, SOVÁNY, T.1, HOPP, B.2, SMAUSZ, T.3, REGDON, G. JR.1
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged, Hungary; 2Department of Optics and Quantum Electronics, University of Szeged, Szeged, Hungary; 3MTA-SZTE Research Group on Photoacoustic Spectroscopy, University of Szeged, Szeged, Hungary

P11/2  Transport and biotransformation of gliclazide in probiotic bacteria
ĐANIĆ, M., STANIMIROV, B., PAVLOVIĆ, N., GOLOČORBIN-KON, S., MIKOV, M.
Faculty of Medicine, University of Novi Sad, Novi Sad

P11/3  Non-toxic bile acids as pharmaceutical excipients may alter pharmacological activity of antitumor drug vorinostat
PAVLOVIĆ, N.1, STANKOV, K.2, GOLOČORBIN-KON, S.1, LALIĆ-POPOVIĆ, M.1, STANIMIROV, B.2, ĐANIĆ, M.3, MIKOV, M.3
1Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; 2Department of Biochemistry, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; 3Department of Pharmacology, Toxicology and Clinical Pharmacology, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia
P11/4  Investigation of the endocytosis and its cellular effects of beta-cyclodextrin derivatives on intestinal epithelial cells
RUSZNYÁK, Á., MALANGA, M., FENYVESI, É., SZENTE, L., VÁRADI, J., BÁCSKAY, I., FEHÉR, P., UJHELYI, Z., VASVÁRI, G., VECSERNYÉS, M., FENYVESI, F.
1Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary; 2Cyclolab Ltd. Budapest, Hungary

P11/5  Liraglutide 3.0 mg for weight loss, Is it more effective in diabetic or non-diabetic patients? A systematic review and meta-analysis
ELSAYED AHMED, S., EBRAHEEM SAADA, A.
1Sherbin Central Hospital, Mansoura, Egypt; 2Dakhlia Health Administration

P11/6  Preference and adherence to once – monthly versus once weekly bisphosphonates in patients with osteoporosis: a systematic review and meta-analysis
ELSAYED AHMED, S., EBRAHEEM SAADA, A.
1Sherbin Central Hospital, Mansoura, Egypt; 2Dakhlia Health Administration

P11/7  Implementation of Patient Reported Outcome Measures (PROMs) in QbD based formulation development in ophthalmology
FEKETE, H., BÍRÓ, T., SOOS, J., PALLAGI, E., AIGNER, Z., CSÓKA, I.
1Institute of Pharmaceutical Technology and Regulatory Affairs, Faculty of Pharmacy, University of Szeged, Szeged, Hungary; 2Faculty of Medicine, University of Szeged, Szeged, Hungary

P11/8  Pharmacokinetic-pharmacodynamic model of sedation with fentanyl in critically ill children who are mechanically ventilated
KEREK KOS, M., GROSEK, S., GRABNAR, I.
1Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia; 2Department of Perinatology, University Medical Centre Ljubljana, Ljubljana, Slovenia
P11/9 ATP Bioluminescence for surface contamination control in hospital pharmacy premises
TRŠAN, M.1, SEME, K. 2, SRČIČ, S.3
1University Medical Centre Ljubljana, Ljubljana, Slovenia; 2Institute of Microbiology and Immunology, Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia; 3Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia

P11/10 Use of Antidepressants in Republic of Serbia from 2013 to 2015
MILIJASEVIC, B.1, VLAJANKOV, A.1, MARTIC, N.1, LALIC-POPOVIC, M.2, PAVLOVIC, N.2, TODOROVIC, N.2, CANJI, J.2
1Department of Pharmacology Toxicology and Clinical Pharmacology, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; 2Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia

P11/11 Use of Hypolipidemic Drugs in Serbia in The Period 2013 to 2015
MILIJASEVIC, B.1, SIMIC, M.1, LALIC-POPOVIC, M.2, PAVLOVIC, N.2, TODOROVIC, N.2, CANJI, J.2, GOLOCORBIN-KON, S.2
1Department of Pharmacology Toxicology and Clinical Pharmacology, Faculty of Medicine University of Novi Sad, Serbia; 2Department of Pharmacy, Faculty of Medicine, University of Novi Sad, Serbia

12.00 – 12.10 Coffee break
12.10 – 13.40  Continuous Processing and Process Analytical Technology Section

Chairs: Stane Srčič, Romána Zelkó

KN7
12.10 – 12.40  Continuous processing of solid dosage forms
VERVAET, C.
Gent University, Belgium

OP-16
12.40 – 13.00  Impact of particle morphology and multi-scale hierarchical structures on tabletability
KLEINEBUDDE, P., GROTE, S.
Institute of Pharmaceutics and Biopharmaceutics, Heinrich Heine University, Düsseldorf, Germany

OP-17
13.00 – 13.20  Near Infra-Red spectroscopy for content uniformity of powder blends- focus on calibration set development, orthogonality transfer and robustness testing
CASIAN, T.¹, IURIAN, S.¹, GAVAN, A.¹, REVNIC, C.², PORAV, S.³, PORFIRE, A.¹, VLASE, L.¹, TOMUTA, I.¹
¹Department of Pharmaceutical Technology and Biopharmacy, Faculty of Pharmacy, University of Medicine and Pharmacy „Iuliu Hatieganu”, Cluj-Napoca; ²Department of Mathematics and Computer Science, Faculty of Pharmacy, University of Medicine and Pharmacy „Iuliu Hatieganu”, Cluj-Napoca;
³National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania

OP-18
13.20 – 13.40  Non-destructive spectroscopic analysis and artificial intelligence for dissolution prediction of pharmaceutical tablets
NAGY, B., FARKAS, A., DULICHÁR, P., MAGYAR, K., NAGY, ZS. K., MAROSI, GY.
Budapest University of Technology and Economics, Budapest, Hungary
13.40 – 14.40 Lunch

14.40 – 16.10 Particle Engineering 2. Section

Chairs: Jelena Parojčić, Jelena Filipović-Grčić

KN8
14.40 – 15.10 Modifying the physicochemical properties of NSAIDs for nasal administration
SZABÓ-RÉVÉSZ, P.
Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Hungary

OP-19
15.10 – 15.30 Polymeric patches as a drug carrier for dermal delivery of dexamethasone and voriconazole – the effects of physicochemical and structural properties of the patch on the adhesiveness
MIKOLASZEK, B., KOZLOWSKA, E., SZCZEPANSKA, M., SZNITOWSKA, M.
Pharmaceutical Technology Department, Medical University of Gdansk, Poland

OP-20
15.30 – 15.50 Effect of different glidant types on flow properties of pharmaceutical excipients – A comparison of Neusilin® and Aerosil®
TRAN, D. T., KOMÍNOVÁ, P., ZÁMOSTNÝ, P.
University of Chemistry and Technology Prague, Prague, Czech Republic

OP-21
15.50 – 16.10 Pulsed laser ablation in liquid (PLAL) as a suitable particle engineering technique to modify the physicochemical properties of meloxicam
AMBRUS, R.1, SZABÓ-RÉVÉSZ, P.1, NAGY, E.2, PETÁK, F.2, SMAUSZ, T.2, HOPP, B.2
1Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Szeged; 2Department of Optics and Quantum Electronics, University of Szeged, Szeged, Hungary
16.10 – 16.30   Closing remarks

Poster Awards Ceremony

Géza Regdon jr.
President of the Scientific Committee

Tamás Sovány
Secretary of the Symposium

Ildikó Csóka
President of the Symposium

Aleš Mrhar
Co-President of the Symposium

Announcement of the next Symposium

Rok Dreu
Chair of Pharmaceutical Technology, University of Ljubljana