

CONFERENCE DAY 1 • 15 SEPTEMBER 2021

POSTER PROGRAMME

For posters an introductory presentation is scheduled followed by a dedicated poster session. Please meet the poster authors in their individual poster rooms virtually.

POSTER SESSION, PART I

Chair: Iordania Constantinou

15:30 Poster Introduction

16:00 Meet the Poster Authors

Processes for Biological APIs

- P I.1 Increase in the Translation Rate of Full Size Antibodies in CHO Cells
M. Heine¹, L. Gatzka¹, H. Ziehr¹
¹Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM)
- P I.2 Establishment of Microoxygen Profiling Measurements in Filamentous *Lentzea Aerocolonigenes* Pellets.
Z. Kozanecka^{1,2}, A. Dinius^{1,2}, D. Rasch¹, R. Krull^{1,2}
¹Institute of Biochemical Engineering, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig
- P I.3 Production of Polyprenylated Xanthone in Engineered Yeast.
R. R. Mögenburg^{1,2}, B. Liu¹, L. Beerhues^{1,2}
¹Institute of Pharmaceutical Biology, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig
- P I.4 Application of a Novel Capillary-Wave Micro-Bioreactor for Measurement of Reactive Oxygen Species.
K. Viebrock^{1,4}, S. Detels^{1,4}, L. J. Frey^{1,4}, D. Rasch^{1,4}, S. Meinen^{2,4}, D. Rabl³, T. Mayr³, A. Dietzel^{2,4}, R. Krull^{1,4}
¹Institute of Biochemical Engineering, TU Braunschweig, ²Institute of Microtechnology, TU Braunschweig, ³Institute of Analytical Chemistry and Food Chemistry, Graz University of Technology, ⁴Institute of Biochemical Engineering, TU Braunschweig

Continuous Processing & Miscellaneous Processes

- P I.5 Multi-Stage Liquid/Liquid Extraction with a Zaiput Apparatus.
C. Heiduk^{1,2}, I. Hohlen^{1,2}, S. Scholl^{1,2}
¹Institute for Chemical and Thermal Process Engineering, TU Braunschweig, ²Center for Pharmaceutical Engineering, TU Braunschweig
- P I.6 Quality by Design based Development of a Digital Twin for Development and Operation of Solid-Liquid Extraction Processes towards PAT and APC.
C. Jensch¹, Prof. Dr.-Ing. Jochen Strube¹
¹Clausthal University of Technology
- P I.7 Characterization of Polymerized Ionic Liquids-Based Hydrogels.
A. Mildner^{1,2}, F. M. Teuber^{1,2}, J. Großheilmann^{1,2}
¹Institute for Chemical and Thermal Process Engineering, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig
- P I.8 Bacteriophages – from an Old Idea to New Therapeutic Candidates
J. Korf, S. Wienecke, H. Ziehr
Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM), Braunschweig, Germany

- P I.9 Activity of Macrocidine Derivates against Bacterial and Fungal Biofilms.
*L. Treiber¹, C. Steinert¹, H. Zeng², H. Schrey², S. Jungwirth³, A. Shekhar³, M. Stadler²,
U. Bilitewski³, M. Erb-Brinkmann⁴, R. Schobert³*
*¹Department of Chemistry, University Bayreuth, ²Department of Microbial Drugs, Helmholtz
Centre for Infection Research GmbH, ³Compound Profiling and Screening, Helmholtz Centre
for Infection Research GmbH, ⁴Phytosolution Freiburg*

17:00 END OF DAY 1

CONFERENCE DAY 2 • 16 SEPTEMBER 2021

POSTER SESSION, PART II

Chair: Iordania Constantinou

15:30 Poster Introduction

16:00 Meet the Poster Authors

Solid & Liquid Preparations and Formulation

- P II.1 Multifunctional Use of Casein as Release System and Blocking Layer for Implant Coatings.
N. Meier¹, H. Menzel¹, ¹TU Braunschweig
- P II.2 Hydroxyethyl Starch Hydrogel Microparticles: A Potential Carrier for Intra-Articular Delivery of Proteins.
B. Elbardisy¹, S. Al-Fityan², A. Kiemer², H. Menzel¹
¹Institute for Technical Chemistry, TU Braunschweig, ²Department of Pharmacy, Saarland University
- P II.3 Attempt to Rationalize the Necessary Mechanical Strength Requirement for Pharmaceutical Tablets.
K. Vorländer^{1,2}, D. Puckhaber^{1,2}, A. Kwade^{1,2}, J. H. Finke^{1,2}
¹Institute for Particle Technology, Center for Pharmaceutical Engineering, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig

Microsystems

- P II.4 Nasal-Mucosa-On-Chip – An In vitro Model of the Human Nose for Drug Permeation Tests.
E.V. Koch¹, S. Bendas², S. Reichl², A. Dietzel¹
¹Institute of Microtechnology, TU Braunschweig, ²Department of Pharmaceutics and Biopharmaceutics, TU Braunschweig
- P II.5 Microfluidic System for Drug Permeation Studies with Dynamic Dilution Profiles and Automated Teer Measurement.
T. Lorenz^{1,2}, M. Kirschke^{1,3}, V. Ledwig^{1,3}, S. Reichl^{1,3}, A. Dietzel^{1,2}
¹Center for Pharmaceutical Engineering, TU Braunschweig, ²Institute of Microtechnology, TU Braunschweig, ³Institute of Pharmaceutical Technology and Biopharmaceutics, TU Braunschweig
- P II.6 Micro Electrical Impedance Tomography on Chip.
D. Metz^{1,2}, B. Matheis¹, I. Constantinou^{1,2}
¹Institute of Microtechnology, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig
- P II.7 All-Glass Neuroexaminer for Light-Sheet-Imaging of Zebrafish Brains.
D. Schrödter¹, J. W. von Trotha², R. W. Köster², A. Dietzel¹
¹Institute of Microtechnology, TU Braunschweig, ²Zoological Institute, TU Braunschweig
- P II.8 Two-Photon Polymerization (2PP) enables 3D Microsystems for Pharmatechnology.
E. Taiedinejad^{1,2}, P. Erfle^{1,2}, C. Bausch³, A. Dietzel^{1,2}
¹Institute of Microtechnology, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig, ³Fraunhofer Institute for Microtechnology and Microsystems
- P II.9 Biphasic Biocatalytic Testosterone Dehydrogenation in Microfluidic Droplets.
L. Xiang^{1,2}, J. Solarczek³, A. Schallmeyer³, I. Constantinou^{1,2}
¹Institute of Microtechnology, TU Braunschweig, ²Center of Pharmaceutical Engineering, TU Braunschweig, ³Institute for Biochemistry, Biotechnology and Bioinformatics

17:00 END OF DAY 2