



POSTER PRESENTATIONS

SESSION A: ENZYMATIC MICROREACTORS

- AP1 *Co-encapsulation of glucosidase and pectinase in microbeads and nanofibers in microbioreactors towards wine industry application*
Maria H. Ribeiro, Maria Emilia Rosa, Maria Luisa Machado
University of Lisbon, Portugal
- AP2 *Enzyme synthesis of cephalixin in aqueous two-phase systems*
Lucie Vobecká, Linda Tichá, Jakub Tuček, Aleksandra Atanasova, Karel Mařík, Zdeněk Slouka, Pavel Hasal, **Michal Příbyl**
University of Chemistry and Technology Prague, Czech Republic
- AP3 *Kinetic modelling of an enzyme cascade reaction for chiral amino alcohol synthesis*
Nihal Bayir, Frank Baganz
European University of Lefke, Turkey; University College London, United Kingdom
- AP4 *Multi-scale-optimization of a micro-bio-reactor for chiral reduction*
Philip Pietrek, Teresa Burgahn, Kersten S. Rabe, Christof M. Niemeyer, Roland Dittmeyer
Karlsruhe Institute of Technology, Institute for Micro Process Engineering; Karlsruhe Institute of Technology, Institute for Biological Interfaces, Germany
- AP5 *Immobilization and continuous-flow application of transaminases*
Emese Abaházi, László Nagy-Győr, Zsófia Molnár, Emese Farkas, Diána Balogh-Weiser, Csaba Paizs, **László Poppe**
Budapest University of Technology and Economics, Hungary; University of Cluj-Napoca, Romania
- AP6 *Scalability of Gallic Acid Biotransformation by Laccase*
Marina Tišma, Darijo Šibalić, Roberto Šimunović, Mirela Planinić, Ana Bucić-Kojić, Marco PC Marques, Nicolas Szita
University of J. J. Strossmayer in Osijek, Croatia; University College London, United Kingdom
- AP7 *Molecular Mechanics of Enzymes*
Jennifer Littlechild, Frank Vollmer
University of Exeter, United Kingdom

SESSION B: CELLS WITHIN MICROREACTORS

- BP1 *A Bioreactor for Basic Studies on the Miniaturization of Biosynthesis*
Anja Straube, Sebastian Köhring, Mike Stubenrauch, Holger Rothe, Klaus Liefeith, Hartmut Witte
Technical University of Ilmenau, Germany; Institute for Bioprocessing and Analytical
Measurement Techniques, Germany
- BP2 *Diffusiophoresis in microcavities: passive migration of blood cells and lipid vesicles induced by transient concentration gradients*
Saša Vrhovec, Bojan Božič, **Jure Derganc**
University of Ljubljana, Slovenia
- BP3 *Biocatalytic oxygenation driven by photosynthesis*
Anna Hoschek, **Rohan Karande**, Katja Bühler, Andreas Schmid, **Bruno Bühler**
Helmholtz Centre for Environmental Research, Germany
- BP4 *Immobilization of cells in a microreactor using copolymer hydrogel*
Tadej Menegatti, Polona Žnidaršič Plazl
University of Ljubljana, Slovenia
- BP5 *Pectinolytic, xylanolytic and cellulolytic potential of the mixed population during acidogenesis of orange juice processing wastewater in an anaerobic bioreactor system*
Ioanna Zerva, Nikolaos Remmas, Spyridon Ntougias
Democritus University of Thrace, Greece
- BP6 *Bacillus subtilis - a model bacterium to investigate mechanisms and consequences of microbial "sociality" at micrometer distances*
Mandić-Mulec Ines, Štefanič Polonca, Kraigher Barbara, Belcijan Katarina, Danevčič Tjaša, Špacapan Mihael, Dogša Iztok, Bolješić Maja, Kovačec Eva, Erega Andi, Polšak Alja, Katarina Šimunovič, Sonja Smole Možina
University of Ljubljana, Slovenia

SESSION C: ANALYTICAL MICRODEVICES

- CP1 *Optical ammonia sensor for continuous bioprocess monitoring*
Maximilian Maierhofer, Sergey M. Borisov, **Torsten Mayr**
Graz University of Technology, Austria
- CP2 *Inline monitoring of oxygen in organic solvents in flow reactors at high pressures*
Philipp Sulzer, Rene Lebl, **Torsten Mayr**
Research Center Pharmaceutical Engineering GmbH, Austria; Graz University of Technology, Austria; University of Graz; Austria
- CP3 *Analysis of cardiac troponin I using surface acoustic wave biosensors and accurate fluidic control*
Soo Suk Lee, Jiwon Kwak
Soonchunhyang University, Republic of Korea

SESSION D: BIOPROCESS INTENSIFICATION AND INTEGRATION

- DP1 *A flow approach to the production of cis-4-(tert-butyl)cyclohexyl from 4-(tert-butyl)cyclohexanone via a two-steps enzymatic synthesis Study of plastics for 3D printing of microreactors*
Francesca Tentori, Elisabetta Brenna, Michele Crotti, Giuseppe Pedrocchi-Fantoni, Maria Chiara Ghezzi, and Davide Tessaro
Polytechnic University of Milan, Italy; Institute of chemistry of molecular recognition, Italy
- DP2 *Packed-bed Flow Reactors and Integrated Cofactor Regeneration System to Achieve Redox Biocatalysis in Continuous Processing*
María Romero-Fernández, Francesca Paradisi
University of Nottingham, United Kingdom
- DP3 *Biodiesel production in micro systems – macro impact?*
Martin Gojun, Anita Šalić, Ana Jurinjak Tušek, Bruno Zelić
University of Zagreb, Croatia
- DP4 *Flow intensified biocatalytic production of esters and amides in water*
Martina Letizia Contente, Stefano Farris, Francesco Molinari, Lucia Tamborini, Francesca Paradisi
University of Nottingham, United Kingdom; University of Milan, Italy
- DP5 *Penicillin acylase kinetics and its effects on reaction and separation in a microfluidic reactor*
Linda Tichá, **Pavel Hasal**, Michal Příbyl
University of Chemistry and Technology, Prague
- DP6 *Manufacturing of micromixer by a custom-made stereolithographic DLP printer*
Joško Valentinčič, Miha Prijatelj, Marko Jerman, Andrej Lebar, Izidor Sabotin, Suzana Vinetič
University of Ljubljana, Slovenia
- DP7 *Purification of R-phycoerythrin from red macroalgae in a microfluidic system with integrated ultrafiltration module*
Mojca Seručnik, Živa Brečko, Filipa A. Vicente, João A. P. Coutinho, Sónia P. M. Ventura, Polona Žnidaršič-Plazl
University of Ljubljana, Slovenia; University of Aveiro, Portugal
- DP8 *Characterization of Extraction in Corning® AFR™-LF Module with Experimental and CFD Two-Phase Flow Evaluation*
Filip Strniša, Blaž Perič, Daniela Lavric, Igor Plazl, Polona Žnidaršič-Plazl
University of Ljubljana, Slovenia; Corning European Technology Center, France