



POSTER PRESENTATIONS

SESSION A: ENZYMATIC MICROREACTORS

- AP1 *Enzymatic hydrolysis of arabinoxylan by xylanase from Thermomyces lanuginosus in batch reactor and microreactors*
Marina Tišma, Darijo Šibalić, Anđela Zeko-Pivač, Anja Bošnjaković, Ana Bucić-Kojić, Mirela Planinić
Josip Juraj Strossmayer University of Osijek, Osijek
- AP2 *Biocatalysis for the synthesis of functionalized bio-based materials*
Federico Zappaterra, Anamaria Todea, Simone Sedran, Fioretta Asaro, Lucia Gardossi
University of Trieste, Italy
- AP3 *Laccase mediated functionalization of composite lignocellulosic biomass for enzyme immobilization*
Mariachiara Spennato, Anamaria Todea, Gilda Savonitto, Fioretta Asaro, Jan Kaspar, Lucia Gardossi
University of Trieste, Italy
- AP4 *Advanced morphological characterization of his-tagged immobilized enzymes by means of infrared microscopy*
Iulia-Ioana Rădoi, Lisa Vaccari, Diana Eva Bedolla Orozco, Alexey Volkov, Lucia Gardossi
University of Trieste, Italy; Elettra-Sincrotrone Trieste S.C.p.A., Italy; AREA Science Park, Italy; EnginZyme AB, Sweden
- AP5 *Designing new immobilized biocatalysts for the efficient synthesis of renewable and biodegradable poly(glycerolazelate)*
Anamaria Todea, Sara Fortuna, Fioretta Asaro, Stefano Tomada, Marco Cesugli, Fabio Hollan, and Lucia Gardossi
University of Trieste, Italy
- AP6 *Continuous flow redox biocatalysis for the sustainable production of biologically active compounds*
Lucia Tamborini, Francesca Annunziata, Martina L. Contente, Raffaella Gandolfi, Paola Conti and Andrea Pinto
University of Milan, Italy
- AP7 *Continuous transamination in microreactors with His-tagged enzymes immobilized on functionalized nonwoven nanofiber membranes*
Borut Šketa, James L. Galman, Marina Klemenčič, Nicholas J. Turner and Polona Žnidaršič Plazl
University of Ljubljana, Slovenia; The University of Manchester, United Kingdom

- AP8 *U-shape microreactor for biocatalysis with enzyme-coated magnetic nanoparticles*
Ali O. Imarah, Fausto M.W.G. Sliva, Ágnes Malta-Lakó, Evelin Santa-Bella, László Poppe
 Budapest University of Technology and Economics, Hungary; University of Babylon, Iraq;
 Babeş-Bolyai University of Cluj-Napoca, Romania.
- AP9 *Molecular Mechanics of Enzymes*
Jennifer Littlechild, Simona Frustaci, Misha Isupova Frank Vollmer
 Henry Wellcome Building for Biocatalysis, Department of Biosciences, Stocker Road, Exeter,
 UK; Living Systems Institute, Department of Physics, Physics, Stocker Road, Exeter, UK
- AP10 *COSMOtherm as an effective tool for selection of deep eutectic solvents for biocatalytic reactions*
 Mia Radovića, Manuela Panića, Karla Demira, Ivana Radojčić Redovnikovića, Thanos Andreoub, Robert Vianello, **Marina Cvjetko Bubaloa**
 University of Zagreb, Croatia; VIO AG Pharmaceuticals SA, Greece; Ruđer Bošković Institute, Croatia

SESSION B: CELLS WITHIN MICROSTRUCTURED DEVICES

- BP1 *3D-printed micro bubble column reactor with integrated microsensors for cultivation and biocatalytic applications*
Gábor Schultz, Lasse Jannis Frey, David Vorländer, Detlev Rasch, Torsten Mayr, Janina Bahnemann and Rainer Krull
 Technische Universität Braunschweig, Germany; Graz University of Technology, Austria;
 Leibniz University Hannover, Germany
- BP2 *Determining biomass in a capillary wave micro bioreactor using impedance spectroscopy*
 Sven Meinen, Kevin Viebrock, Rainer Krull, **Andreas Dietzel**
 Technische Universität Braunschweig, Germany
- BP3 *Immobilization of Bacillus subtilis spores in a magnetic field-assisted microreactor*
Mojca Seručnik, Samo Sotlar, Katarina Šimunović, Ines Mandić-Mulec, Polona Žnidaršič-Plazl
 University of Ljubljana, Faculty of Chemistry and Chemical Technology, Slovenia; University of Ljubljana, Biotechnical Faculty, Slovenia; University of Ljubljana, Chair of Microprocess Engineering and Technology - COMPETE, Slovenia
- BP4 *Development of a microfluidic system for Bacillus subtilis cultivation for riboflavin production*
Lan Julij Zdravec, Mojca Seručnik, Katarina Šimunović, Peter Panjan, Ines Mandić Mulec, Polona Žnidaršič Plazl
 University of Ljubljana, Faculty of Chemistry and Chemical Technology, Slovenia; University of Ljubljana, Biotechnical Faculty, Slovenia; University of Ljubljana, Chair of Microprocess Engineering and Technology - COMPETE, Slovenia
- BP5 *In vivo imaging of Listeria innocua biofilm growth in microfluidic device*
Tanja Zupan, Petra Čotar, Aleksandar Sebastijanovič, Nika Janež, Janez Štrancar, Tadej Kokalj, Jerica Sabotič
 Jozef Stefan Institute, Slovenia; Institute of Metals and Technology, Slovenia; University of Ljubljana, Slovenia

SESSION C: ANALYSIS WITHIN MICROSTRUCTURED DEVICES

- CP1 *Oxygen, pH and intrinsic fluorescence monitoring of the green algae Chlorella Sorokiniana microfluidic culturing*
Dominik Rabl, Stefanie Fuchs, Anders Ø. Tjell, Torsten Mayr
Graz University of Technology, Austria
- CP2 *Iron Overload Treatment and Diagnosis in Microfluidic Devices via the Immobilization of Desferrioxamine B chelator on Polymeric Hydrogels and Surfaces*
Jad George Touma, Jaturavit Pantakitcharoenkul, **Goran Nadezda Jovanovic**, Matthew Young
Coblyn
Oregon State University, SAD

SESSION D: PROCESS INTENSIFICATION AND INTEGRATION

- DP1 *Intensification of protein extraction in a microextractor - purification of lignocellulose-degrading enzymes produced during fungal-based solid-state fermentation on food industry by-products*
Anita Šalića, Ana-Marija Dukarić, Martin Gojun, Ana Jurinjak Tušek, Mirela Planinić, Marina Tišma, Bruno Zelić
University of Zagreb, Croatia; Josip Juraj Strossmayer University of Osijek, Croatia; University North, Croatia
- DP2 *Application of Artificial Neural Network (ANN) modeling for efficient assessment of average Feret diameter of oil-in-water emulsions prepared using continuously operated microfluidic device*
Filip Grgić, Maja Benković, Davor Valinger, Tamara Jurina, Jasenka Gajdoš Kljusurić, **Ana Jurinjak Tušek**
University of Zagreb, Croatia
- DP3 *A lattice-Boltzmann approach to inertial microfluidics*
Anže Hubman, Igor Plazl, Tomaz Urbic
University of Ljubljana, Slovenia
- DP4 *Microkinetic modelling of oxidation of glucose to glucaric acid: comparison between monometallic and bimetallic gold catalysts*
Žan Lavrič, Janvit Teržan, Anja Sedminek, Ana Kroflič, Blaž Likozar, Miha Grilc
National Institute of Chemistry, Slovenia; Jožef Stefan Institute, Slovenia