



**6th International Conference on
Biocatalysis in Non-Conventional Media (BNCM 2021)**

Thursday, May 6th 2021

INTRODUCTION

SESSION I - Biocatalysis in Non-Conventional Media

	<i>Exploring the potential of (photo)biocatalytic reactions in non-conventional media</i> Selin Kara (Aarhus University, Denmark)
	<i>Enzymatic development of lipoaminoacids in non-conventional media</i> Maria H. Ribeiro (Universidade Lisboa, Portugal)
	<i>Enzymatic synthesis of fatty acid derivatives in organic solvents and oil-water emulsions</i> Tom A. Ewing (Wageningen University & Research, The Netherlands)
	<i>Enzymatic halocyclization of allenic alcohols – Multi-catalytic one-pot processes in micellar medium</i> Janne M. Naapuri (Aalto University, Finland)
	<i>Biocatalysis for waste glycerol valorization as glycerol carbonate, glycidol and polyglycidol</i> Madalina Tudorache (University of Bucharest, Romania)

COFFEE BREAK

SESSION II - BNCM: From Lab to Industrial Scale

	<i>Aqueous to almost water-free biocatalytic process to oxy-functionalised products using aldolases, hydratases and oxidoreductases</i> Martin Schürmann (InnoSyn BV, Geleen, The Netherlands)
	<i>Design of a control system for pushing the equilibrium and on-line measurement of enzyme activity in a solvent free transesterification reaction</i> Ariana Causevic (Lund University and ZAAK AB, Sweden)
	<i>Simulation of thermophysical properties of deep eutectic solvents</i> Jürgen Pleiss (University of Stuttgart, Germany)

LUNCH BREAK

	<i>Natural deep eutectic solvents as non-conventional media for oxidative biocatalysts</i> Gonzalo de Gonzalo (Universidad de Sevilla, Spain)
	<i>Limiting factors and optimization of glycolipid synthesis in deep eutectic solvents</i> Rebecca Hollenbach (Karlsruher Institute of Technology, Germany)
	<i>Whole-cell biocatalysis within deep eutectic solvents</i> Marina Cvjetko Bubalo (University of Zagreb, Croatia)
	<i>Enzymatic decarboxylation in deep eutectic solvents: from stability engineering to application in continuous flow</i> Robert Kourist (Graz University of Technology, Austria)
	<i>Biotransformation in DES as neat reactant</i> Andreas Liese (Hamburg University of Technology, Germany)

POSTER SESSION

Friday, May 7th 2021

SESSION III - Multiphase Biocatalytic Systems

	<i>Design and fabrication of multi-functional heterogeneous biocatalysts for cell-free biosynthesis of amines and alcohols</i> Fernando Lopez Gallego (CIC biomaGUNE, San Sebastian, Spain)
	<i>Water activity as parameter to identify lipases</i> Ulf Hanefeld (Technische Universiteit Delft, The Netherlands)
	<i>Comparing protein engineering approaches to improve lipase stability in methanol</i> Ayelet Fishman (Technion-Israel Institute of Technology, Israel)
	<i>How to engineer enzymes for catalysis in non-conventional media: insights from combined molecular dynamics simulation and directed evolution study</i> Mehdi D. Davari (RWTH Aachen University, Germany)

COFFEE BREAK

	<i>Insight into effects of polar co-solvents on Candida antarctica lipase B</i> Marco Mangiagalli (University of Milano-Bicocca, Italy)
	<i>Single- and multi-step enzymatic transformations in micro-aqueous reaction environment</i> Jan-Dirk Spöring (Forschungszentrum Jülich, Germany, and RWTH Aachen University, Germany)
	<i>Polymeric emulsion for efficient biocatalysis in organic solvents</i> Changzhu Wu (University of Southern Denmark, Denmark)
	<i>Immobilization of Aspergillus sp. laccase on Fe-BTC and ZIF-zni metal organic frameworks</i> Cristina Carucci (University of Cagliari, Italy)

LUNCH BREAK

	<i>High performance synthetic resins for immobilised lipase applications in solvent free systems</i> Alvaro Cruz-Izquierdo (Puro-lite, United Kingdom)
	<i>Enzymatic synthesis of novel biobased aliphatic-aromatic copolyesters</i> Carmen G. Boeriu (Wageningen Food & Biobased Research, The Netherlands)
	<i>Enzymatic synthesis and degradation of bio-based polyesters: non-conventional biocatalysis at the service of circularity</i> Lucia Gardossi (Università di Trieste, Italy)

POSTER SESSION

Saturday, May 8th 2021

SESSION IV - Flow-Based Bioprocesses

	<i>Process intensification for enzymatic transformations in flow</i> Bernd Nidetzky (Graz University of Technology, Austria)
	<i>Probing batch and continuous flow reactions in organic solvents: Granulicella tundricula hydroxynitrile lyase (GtHNL)</i> José Coloma (Delft University of Technology, The Netherlands, and Universidad Laica Eloy Alfaro de Manabí, Ecuador)
	<i>Mycobacterium smegmatis acyltransferase as a versatile catalyst for flow-biobased intensified processes</i> Martina L. Contente (University of Milano, Italy)
	<i>Enzymatic synthesis of UDCA in continuous flow: challenges and solutions</i> Fabio Tonin (Delft University of Technology, The Netherlands)

COFFEE BREAK

	<i>Enzymatic microreactors utilizing ionic liquids and organic solvents</i> Polona Žnidaršič-Plazl (University of Ljubljana, Slovenia)
	<i>A green strategy for the continuous flow synthesis of L-pipecolic acid</i> Ana I. Benítez Mateos (University of Bern, Switzerland, and University of Nottingham, United Kingdom)
	<i>Continuous-flow biocatalytic process for the synthesis of the best stereoisomers of the commercial fragrances leather cyclohexanol (4-isopropylcyclohexanol) and woody acetate (4-(tert-butyl)cyclohexyl acetate)</i> Francesca Tentori (Politecnico di Milano, Italy)

FINAL REMARKS & ACKNOWLEDGEMENTS