

5th Symposium on Biotransformations for Pharmaceutical and Cosmetic Industry

June 13-15, 2022, Kraków-Częstochowa Upland

**Conference Framework Programme:** 

14:00-14:30   Lunch     14:00-14:30   Opening ceremony     15:00-15:15   Opening ceremony     15:00-15:15   Prof. Ryszard Ostaszewski     15:15-16:00   Prof. Ulf Hanefeld     15:15-16:00   Prof. Ulf Hanefeld     15:15-16:00   Prof. Ulf Hanefeld     15:15-16:00   Prof. Ulf Hanefeld     16:00-16:15   Prof. Katarzyna Szymańska     16:00-16:15   Prof. Kyzard Ostaszewski     16:00-16:15   Prof. Kyzard Ostaszewski     16:00-16:15   Prof. Ryszard Ostaszewski     16:15-16:30   Dr. Agnieszka Wojtkiewicz     Application of 3-ketosteroid Δ <sup>1</sup> -dehydrogenases from Storolibactrium denitrificans in a synthesis of pharmaceuticals and cosmetic components     Jerzy Haber Institute of Cratalysis and Surface Chemistry, PAS, Kraków, Poland     16:30-17:00   Coffee break     17:00-17:45   Prof. Ryszard Ostaszewski     17:00-17:45   Prof. Ryszard Ostaszewski     17:45-18:00   Prof. Ryszard Ostaszewski <th colspan="6">Monday, June 13<sup>th</sup>, 2022</th>	Monday, June 13 <sup>th</sup> , 2022					
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15:15-16:00Prof. Ulf HanefeldFlow chemisty to clean up production TU Delft, the Netherlands16:00-16:15Prof. Katarzyna SzymańskaConstituentia Constituentia Cascade Silesian University of Technology, Gliwice, Poland16:00-16:15Dr. Agnieszka WojtkiewiczApplication of 3-ketosteroid Δ <sup>1</sup> -dehydrogenases from Sterolibacterium denitrificans in a synthesis of pharmaceuticals and cosmetic components Jerzy Haber Institute of Catalysis and Surface Chemistry, PAS, Kraków, Poland16:15-16:30Dr. Agnieszka WojtkiewiczApplication of 3-ketosteroid Δ <sup>1</sup> -dehydrogenases from Sterolibacterium denitrificans in a synthesis of pharmaceuticals and cosmetic components Jerzy Haber Institute of Catalysis and Surface Chemistry, PAS, Kraków, Poland16:30-17:00Monte Sterolibacterium denitrificans in a Synthesis of pharmaceuticals and cosmetic Lerzy Haber Institute of Catalysis and Surface Chemistry, PAS, Kraków, Poland17:00-17:45Prof. Ryszard OstaszewskiChemistry Edition of Lecitas Ulf and the communication Unstitute of Organic Chemistry Polish Academy of Sciences, Warsaw, Poland17:00-17:45Prof. Witold GladkowskiThe application of Lecitas Ulf and the arcemic alcohols with 4-arylbut-3-en-2-ol system Wroclaw University of Environmental and Life Science, Wroclaw, Poland18:00-18:15Dr. Anna BrodzkaEnzymatic kinetic resolution of Tacomunication Unstitute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland Oral Communication18:15-18:30Dominika StradomskaSilesian University of Technology, Gliwice, Poland			Chairman: Prof. Ryszard Ostaszewski			
16:00-16:15Prof. Katarzyna SzymańskaEngineering of continuous enzymatic cascade Silesian University of Technology, Gliwice, Poland Oral Communication Oral Communication16:30-17:0016:30-17:0017:00-17:45Prof. Ryszard Ostaszewski17:00-17:45Prof. Ryszard Ostaszewski17:00-17:45Prof. Ryszard Ostaszewski17:00-17:45Prof. Witold Gladkowski17:45-18:00Prof. Witold Gladkowski18:00-18:15Dr. Anna Brodzka18:15-18:30Dominika Stradomska18:15-18:30Dominika Stradomska18:15-18:30Dominika Stradomska	15:15-16:00	Prof. Ulf Hanefeld	Flow chemisty to clean up production			
16:15-16:30Dr. Agnieszka WojtkiewiczApplication of 3-ketosteroid Δ¹-dehydrogenases from Sterolibacterium denitrificans in a synthesis of pharmaceuticals and cosmetic components Jerzy Haber Institute of Catalysis and Surface Chemistry, PAS, Kraków, Poland16:30-17:00Coffee break17:00-17:45Prof. Ryszard OstaszewskiPlenary Lecture Promiscuous future of biocatalysis (?) Institute of Organic Chemistry Polish Academy of Sciences, Warsaw, Poland17:45-18:00Prof. Witold GładkowskiThe application of Lecitase Ultra for the resolution of racemic al cohols with 4-arylbut-3-en-2-ol system Wiroclaw University of Environmental and Life Science, Wrocław, Poland18:00-18:15Dr. Anna BrodzkaComponication Chemistry, Polish Academy of Sciences, Warsaw, Poland18:15-18:30Dominika StradomskaStradomska18:15-18:30Dominika StradomskaStradomska18:15-18:30Dominika StradomskaStilesian University of Technology, Gliwice, Poland	16:00-16:15	Prof. Katarzyna Szymańska	Engineering of continuous enzymatic cascade			
Chairman: Prof. Edmond Magner     Institute of Denary Lecture     Prof. Ryszard Ostaszewski   Prof. Ryszard Ostaszewski     17:00-17:45   Prof. Ryszard Ostaszewski     17:45-18:00   Prof. Witold Gładkowski     17:45-18:00   Prof. Witold Gładkowski     18:00-18:15   Dr. Anna Brodzka     18:15-18:30   Dominika Stradomska     18:15-18:30   Dominika Stradomska	16:15-16:30	Dr. Agnieszka Wojtkiewicz	Application of 3-ketosteroid $\Delta^1$ -dehydrogenases from Sterolibacterium denitrificans in a synthesis of pharmaceuticals and cosmetic components			
Prof. Ryszard OstaszewskiProf. Ryszaw, PolandOral Communication Oral Communication Oral CommunicationOral Communication Oral Communication Oral Communication Oral CommunicationOral Communication Oral Communication Silesian University of Technology, Gliwice, PolandOral Ryszaw, Poland	16:30-17:00		Coffee break			
17:00-17:45Prof. Ryszard OstaszewskiProf. Ryszard OstaszewskiProf. Ryszard Ostaszewski17:45-18:00Prof. Witold GładkowskiThe application of Lecitase Ultra for the resolution of racemic alcohols with 4-arylbut-3-en-2-ol system Wrocław University of Environmental and Life Science, Wrocław, Poland18:00-18:15Dr. Anna BrodzkaOral Communication Wrocław University of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland18:15-18:30Dominika StradomskaOrganic Chemistry, Polish Academy of Sciences, Warsaw, Poland18:15-18:30Dominika StradomskaOrganic Kinetic resolution of amines Silesian University of Technology, Gliwice, Poland			Chairman: Prof. Edmond Magner			
17:45-18:00   Prof. Witold Gładkowski   The application of Lecitase Ultra for the resolution of racemic alcohols with 4-arylbut-3-en-2-ol system Wrocław University of Environmental and Life Science, Wrocław, Poland Oral Communication     18:00-18:15   Dr. Anna Brodzka   Enzymatic kinetic resolution of 3-arylglycidates Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland Oral Communication     18:15-18:30   Dominika Stradomska   Opinika Stradomska	17:00-17:45	Prof. Ryszard Ostaszewski	Promiscuous future of biocatalysis (?)			
18:00-18:15   Dr. Anna Brodzka   Enzymatic kinetic resolution of 3-arylglycidates     18:00-18:15   Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland     18:15-18:30   Dominika Stradomska   Oral Communication     18:15-18:30   Dominika Stradomska   Silesian University of Technology, Gliwice, Poland	17:45-18:00	Prof. Witold Gładkowski	The application of Lecitase Ultra for the resolution of racemic alcohols with 4-arylbut-3-en-2-ol system			
18:15-18:30   Dominika Stradomska   Dynamic kinetic resolution of amines     Silesian University of Technology, Gliwice, Poland   Silesian University of Technology, Gliwice, Poland	18:00-18:15	Dr. Anna Brodzka	Enzymatic kinetic resolution of 3-arylglycidates			
19:00-22:00 Grill dinner	18:15-18:30	Dominika Stradomska	Dynamic kinetic resolution of amines			
	19:00-22:00		Grill dinner			

		Tuesday, June 14 <sup>th</sup> , 2022
		Chairman: Prof. Ulf Hanefeld
9:00-9:45	Prof. Edmond Magner	Plenary Lecture Electrochemical immobilisation of enzymes for biocatalysis University of Limerick, Limerick, Ireland
9:45-10:15	Prof. Jakub Zdarta	Invited Lecture Removal of micropollutants by immobilized enzymes: How far to practical application? Poznan University of Technology, Poznan, Poland
10:15-10:30	Pror. Maciej Guzik	Oral Communication Polyhydroxyalkanoates – a source of biomolecules for synthesis of advanced chemicals and materials Jerzy Haber Institute of Catalysis and Surface Chemistry PAS, Kraków, Poland
10:30-10:45	Oliwia Degórska	Oral Communication Application of hydrolases in the synthesis of active pharmaceutical ingredients Poznan University of Technology, Poznan, Poland
10:45-11:00	Dr. Maciej Pudełko	Oral Communication Chemical synthesis of PROTACs – a fast developing tool in medicinal chemistry Selvita S.A., Kraków, Poland
11:00-11:30		Coffee break
		Chairman: Prof. Ewa Żymańczyk-Duda
11:30-12:15	Prof. Maciej Szaleniec	Plenary Lecture Oxidoreductases from anaerobic bacteria – from fundamental catalytic studies to industrial application Jerzy Haber Institute of Catalysis and Surface Chemistry PAS, Kraków, Poland
12:15-12:45	Prof. Dirk Tishler	Invited Lecture Sweet vanillin from hot pepper by enzyme driven oxidation Ruhr-Universität Bochum, Germany
12:45-13:00	Prof. Małgorzata Brzezińska-Rodak	Oral Communication <b>Biocatalysis in the synthesis of high added value compounds</b> Wrocław University of Science and Technology, Wrocław, Poland
13:00-13:15	Dr. Mirosław Danch	Oral Communication <b>Company presentation</b> ABL&E-JASCO Polska Sp. z o.o., Kraków, Poland
13:30-14:00		Lunch
		Chairman: Prof. Dirk Tischler
15:00-15:45	Prof. Anna Chrobok	Plenary Lecture Designing of the novel biocatalysts for fine chemical synthesis Silesian University of Technology, Gliwice, Poland
15:45-16:15	Prof. Sławomir Boncel	Invited Lecture Hybridization of nanocarbons with biopolymers – perspectives of biomedical applications Silesian University of Technology, Gliwice, Poland
16:15-16:45		Coffee break
16:45-18:00		Poster session
19:00-		Conference dinner

Wednesday, June 15 <sup>th</sup> , 2022							
Chairman: Prof. Anna Chrobok							
9:00-9:45	Prof. Filip Boratyński	Plenary Lecture Microbial approach to produce industrially important fragrance compounds Wrocław University of Environmental and Life Sciences, Wrocław, Poland					
9:45-10:00	Dr. Jarosław Popłoński	Oral Communication Decoration and functionalisation of flavonoids by FMO and glycosyltransferases Wrocław University of Environmental and Life Sciences, Wrocław, Poland					
10:00-10:15	Agata Matera	Oral Communication Coimmobilized glycosylation cascade for efficient flavonoid functionalization Wrocław University of Environmental and Life Sciences, Wrocław, Poland					
10:15-10:30	Gabriela Pacek	Oral Communication <b>New BSS mutants allow the synthesis of novel benzylsuccinate analogues</b> Jerzy Haber Institute of Catalysis and Surface Chemistry, PAS, Cracow, Poland					
10:30-11:00		Coffee break					
		Chairman: Prof. Maciej Szaleniec					
11:00-11:15	Prof. Dominik Koszelewski	Oral Communication Screening for amidoxime reductases in plant roots and Saccharomyces cerevisiae Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland					
11:15-11:30	Dr. Piotr Latos	Oral Communication SiO2-ionic liquid systems as a matrix for the immobilization of the Candida antarctica lipase B (CALB) Silesian University of Technology, Gliwice, Poland					
11:30-11:45	Tomasz Walica	Oral Communication Basket stationary bed reactor "StatBioChem" for heterogeneous catalysis Silesian University of Technology, Gliwice, Poland					
11:45-12:00	Agata Wawoczny	Oral Communication Stationary basket reactor for efficient pretreatment of biomass before chemoenzymatic transformation Silesian University of Technology, Gliwice, Poland					
12:00-12:15		Closing remarks					
12:30-13:00		Lunch					