

2nd BioSC Forum



AGENDA | SYMPOSIUM

November 2 nd , 2015 Maternushaus, Köln Maternussaal		
0. Kick off		
09:00	Welcome and introduction	<i>Prof. Ulrich Schurr</i>
I. Conversion of renewable resources to materials and bulk chemicals <i>Session chair: Prof. Walter Leitner, Institute of Technical and Macromolecular Chemistry (ITMC), RWTH Aachen University</i>		
09:15	Key note: Creating a circular bio-based economy in Europe: challenges and opportunities	<i>Dr. Hendrik Waegeman Bio Base Europe Pilot Plant Ghent</i>
09:45	EnZIP – Enzymatic cell wall modification in plants for the improved biomass utilization	<i>Dr. Jens Gruber</i>
10:05	MisQual – Genotype and environment as driving factors for quality of lignocelluloses from Miscanthus as raw material for industry	<i>Dr. Thorsten Kraska</i>
10:20	BEProdMod – Incremental multi-scale and multi-disciplinary modelling of processes in Bioeconomy	<i>Prof. Wolfgang Wiechert</i>
10:40	Coffee Break	
11:00	BIOExpresSPro – Bacterial protein production for the sustainable molecular conversion of plant raw materials	<i>Dr. Achim Heck</i>
11:20	UstiOpt – Defining optimum growth conditions for <i>Ustilago maydis</i> to increase the production of recombinant proteins	<i>Dr. Kerstin Schipper</i>
11:35	Elevator pitch – Short presentations of the posters	
11:50	BioBreak – Enzymes for biomass breakdown GLUFACT – Gluconobacter-Factory: Strains and processes for stereoselective oxidative conversion of renewable carbon sources to industrial products MoniCon – Establishing online-methodology to monitor growth of single species in fungal consortia OrCaCel – OrganoCat plant & pulping combinations for the full valorization of lignocellulose from perennial plants from marginal land PectiLyse – Activation of intrinsic enzymes for degradation of plant biomass side-streams ROXENSE – Redox sensing and engineering for optimization of biocatalysis VariSurf – Production of glycolipid variants for industrial application by smart genetic engineering	<i>Dr. Andreas Knapp</i> <i>Dr. Stephanie Bringer</i> <i>Christoph Scheeren</i> <i>Dr. Holger Klose</i> <i>Dr. Elena Geiser</i> <i>Dr. Nick Wierckx</i> <i>Dr. Stephan Thies</i>
12:30	Final discussion Prof. Michael Feldbrügge , Dr. Hendrik Waegeman , Prof. Walter Leitner , Prof. Wolfgang Wiechert Moderator: Dr. Heike Slusarczyk	
13:00	Lunch Break	

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II. Alternative production pathways for bio-based fine chemicals and secondary metabolites <i>Session chair: Prof. Vlada Urlacher, Institute of Biochemistry, University of Düsseldorf</i>		
14:00	Talks	Key note: Natural Product Biotechnology – rethinking secondary natural product pathways for bio-based production of fine chemicals and drugs <i>Prof. Oliver Kayser Technical Biochemistry TU Dortmund</i>
14:30		P-ENG – Efficient phosphate recovery from agro waste streams by enzyme, strain, and process engineering <i>Prof. Lars Blank</i>
14:50		PNP-Express – Discovery and microbial production of natural products from plants <i>Dr. Thomas Drepper</i>
15:10		TPOT – A proof of concept for an <i>E. coli</i> hydroxylation platform with efficient terpene/terpenoid translocation through the outer membrane <i>Dr. Anna Joelle Ruff/ Prof. Ulrich Schwaneberg</i>
15:30		Coffee Break
16:00	Elevator pitch – Short presentations of the posters	
16:15	Poster session	BioSAF – Carotenoid cleaving enzymes for efficient biosynthesis of Saffron <i>Dr. Anna Joelle Ruff/ Prof. Ulrich Schwaneberg</i>
		CatIBs – Catalytically active inclusion bodies: New carrier-free enzyme immobilisates for biocatalysis <i>Dr. Ulrich Krauß</i>
		DiPro – Dirigent proteins in bioeconomy <i>Dr. Thomas Classen</i>
		FlowCom – Everything in flow – New compartments for cascade reactions <i>Dr. Stefan Reinicke</i>
		InducTomE – Induction of secondary metabolites in tomato by-products for extraction and economic evaluation of the model process <i>Dr. Annika Wiese- Klinkenberg</i>
		MoRe-Plants – Towards alkaloids: Monooxygenases from plants in reaction cascades <i>Dr. Patrick Bongen</i>
		SPREAD – Evaluation and development of energy plant <i>Silphium perfoliatum</i> L. as a source of renewable raw materials <i>Dr. Elena Pestsova</i>
17:15	Final discussion Prof. Oliver Kayser , Prof. Ulrich Schwaneberg , Prof. Vlada Urlacher , Prof. Jörg Pietruszka Moderator: Dr. Heike Slusarczyk	
III. Awarding ceremony <i>Moderator: Prof. Georg Groth, Institute of Biochemical Plant Physiology, University of Düsseldorf</i>		
18:00	Honoring of the winners of the PhD-Competence and Supervision award 2015	
18:30	Networking and get-together	

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Permanent poster session		
11:30	Poster session	Elevator pitch – Short presentations of the posters, November 2nd
11:45		MisCas – Cascade Utilization of Miscanthus to increase resource efficiency <i>Felix Winzer/ Dr. Thorsten Kraska</i>
		BioSCEdu – Bioeconomy Educational Programmes <i>Dr. Jennifer Pahlke</i>
		S2B – Assessing Science to Business (S2B) Technology Transfer in the emerging Bioeconomy <i>Laura Borge del Rey</i>
	Aquatic photosystems in BioEconomy <i>Prof. Andreas Weber</i>	

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November 3 rd , 2015 Maternushaus, Köln Dreikönigssaal		
IV. Innovations for the sustainable production of food and feed <i>Session chair: Prof. Georg Noga, INRES-Horticulture, University of Bonn</i>		
09:00		Key note: Food security – A global challenge with demand for integrated bioeconomy solutions <i>Prof. Ulrich Schurr IBG-2: Plant Sciences Forschungszentrum Jülich</i>
09:30	Talks	C4-PSH – C4 plant selective herbicides: A new approach to combat C4 weeds in arable crops <i>Prof. Georg Groth</i>
09:50		Econ-BioSC – Biomass flows and technological innovation in the bioeconomy: A global scenario analysis <i>Dr. Nina Preschitschek</i>
10:05		LIPANO – Glucosinolate break-down products as modifiers of soil fungal lipids, protein profiles and allelopathy: Impacts on nodulation, mycorrhiza and growth of <i>Fabaceae</i> <i>Dr. Meike Siebers</i>
10:25		GreenGel – Biofunctional nanogel-based fertilizers for controlled nutrition of plants <i>Dr. Felix Jakob/ Prof. Ulrich Schwaneberg</i>
10:40	Coffee break	
11:00	Elevator pitch – Short presentations of the posters	
11:10	Poster session	AlgalFertilizer – Algae delivering waste phosphorus to soil and crops <i>Dr. Ladislav Nedbal</i> BiFuProts – Bifunctional fusion proteins for plant protection <i>Dr. Felix Jakob/ Prof. Ulrich Schwaneberg</i> EtMeD – Development of an ethylene measuring device for ethylene receptor characterization of plants <i>Dr. Tino Schlepütz</i> NovoSurf – Identification of novel natural microbial surfactants <i>Dr. Sylvia Schleker</i> PhytaPhoS – Optimizing the phosphorus cycle in the sugar beet production process by phytase supplement <i>Dr. Ute Arnold</i> PlaMint – Investigate plant-microbe interactions to improve plant health and productivity <i>Dr. Vera Göhre</i> PrimACs – Priming-active compounds for plant protection <i>Dr. André Müller/ Prof. Uwe Conrath</i> RIPE – Ripening delay of climacteric fruits by peptides <i>Dr. Leticia Novaes</i>
11:45	Final discussion Prof. Ulrich Schurr, Prof. Georg Noga, Prof. Uwe Conrath, Dr. Peter Nagler (Evonik GmbH) Moderator: Dr. Heike Slusarczyk	
V. Closing session		
12:15		Final remarks <i>Prof. Ulrich Schurr</i>
End of symposium		
12:30		Lunch break
13:00		Start of BioSC training “Interdisciplinary project preparation and proposal writing – From idea to proposal”

AGENDA | TRAINING

November, 3 rd 2015 Maternushaus, Köln Tagungsraum Dreikönigssaal		
Interdisciplinary project preparation and proposal writing – From idea to proposal		
I.	Introduction <i>Moderator: Dr. Wolfgang Adamczak</i>	
13:00	Introduction of participants	<i>All</i>
13:15	Proposal and application basics	<i>Dr. Wolfgang Adamczak</i>
13:30	How to write a successful proposal?	<i>Dr. Wolfgang Adamczak</i>
II.	Best practice example BOOST FUND project “InducTomE” <i>Moderator: Dr. Annika Wiese-Klinkenberg, IBG-2: Plant Sciences, Forschungszentrum Jülich</i>	
14:15	Project presentation “InducTomE - Induction of secondary metabolites in tomato by-products for extraction and economic evaluation of the model process”	<i>Dr. Annika Wiese-Klinkenberg</i>
14:30	Report of experiences Preparation, writing, application	<i>Dr. Annika Wiese-Klinkenberg, Dr. Mauricio Hunsche, Dr. Laura Carraresi, Andreas Bednarz</i>
15:00	Coffee Break	
III.	Practical work experience <i>Moderator: Dr. Wolfgang Adamczak</i>	
15:15	Joint development of an interdisciplinary project and proposal Introduction and grouping	<i>Dr. Wolfgang Adamczak</i>
15:30	Group work	<i>All</i>
17:30	Working as an expert	<i>All</i>
18:00	Feedback from participants	<i>All</i>
End of training		