

3rd International Biosurfactants Conference

RWTH Aachen University

Wednesday, 10.09.2025

09:00 - 10:00 Coffee & registration Super-C building, Generali and Ford hall, 6 th floor	
10:00 - 10:15	Welcome address HKW building, lecture hall HKW2, 3 rd floor Lars M. Blank , RWTH Aachen, Germany
10:15 - 11:00	<u>KEYNOTE 1: Ibrahim M. Banat</u> - GLYCOLIPIDS – THE SILVER BULLET?

Session 1: New strains – new molecules

Chair: Lars M. Blank

11:00 - 11:20	Marla Trindade - Diversifying aminolipid production through genetic engineering to deliver biotechnological solutions
11:20 - 11:40	Björn Sandrock - Two gene clusters are required for mannosylerythritol lipid biosynthesis in <i>Sporisorium reilianum</i>
11:40 - 12:00	Jiaxin Cui - Biosynthesis, function and biotechnological application of the glycine-glucolipid in the marine bacterium <i>Alcanivorax borkumensis</i>
12:00 - 12:20	Carmine Buonocore - Unlocking the production of new rhamnolipids mixtures through pathway engineering and heterologous expression in <i>Pseudomonas putida</i>
12:30 - 13:30 Lunch break (Super-C)	
13:30 - 14:15	<u>KEYNOTE 2: Susanne Zibek</u> - Why do mannosylerythritol lipids (MEL) and cellobiose lipids (CL) make us curious?

Session 2: Strain Engineering

Chair: Eric Deziel

14:20 - 14:40	Rebecca Jacqueline Hollenbach - Innovative process strategies for competitive enzymatic glycolipid synthesis
14:40 - 15:00	Marie Dielentheis-Frenken - Engineering the polyextremotolerant fungus <i>Aureobasidium pullulans</i> for high-titer polyol lipid production
15:00 - 15:20	Min Jiang - Integrated high-throughput screening and nitric oxide-driven regulation enhance rhamnolipid production in <i>Pseudomonas aeruginosa</i>
15:20 - 15:40	Loïc Mues - Effect of regulator knock-out such as CodY on surfactin production is strongly dependent of oxygen transfer rate
16:00 - 16:40 Coffee break (Super-C) 16:10 – 16:30 “Meet the company” - Evonik (Super-C)	

Session 3: Process Development

Chair: Till Tiso

16:40 - 17:00	Nuno Faria - Development of a scalable Platform for mannosylerythritol lipid production from renewable resources
17:00 - 17:20	Carina Michel - Continuous fermentation design for the production of biosurfactants from sustainable carbon sources
17:20 - 17:40	Jose Bueno-Mancebo - Expanding the potential of thermophilic microorganisms for sustainable biosurfactant production in solid-state fermentation
17:40 - 18:00	Elvio Henrique Benatto Perino - Fed-batch bioreactor cultivation of <i>Bacillus subtilis</i> using vegetable juice as an alternative carbon source for lipopeptides production: A shift towards a circular bioeconomy
18:00 - 22:00 Poster party with finger food and drinks (Super-C)	

Thursday, 11.09.2025

08:00 - 09:00 Coffee & networking (Super-C)	
09:00 - 09:45	KEYNOTE 3: Rudolf Hausmann - Current progress for biomanufacturing surfactin, rhamnolipid and a novel glycolipid biosurfactant
09:45 - 10:30	KEYNOTE 4: Inge van Bogaert - The strength of omics analysis: from transport mechanisms in <i>S. bombicola</i> to cellobiose biosynthetic pathways
10:30 - 11:10 Coffee break (Super-C) 10:40 – 11:00 “Meet the company” - Stepan (Super-C)	

Session 4: Downstream processing and analytics

Chair: Rudolf Hausmann

11:10 - 11:30	Philipp Otzen - Structure elucidation of polyol lipids using HPLC-HRMS and MS/MS molecular networking
11:30 - 11:50	Xanel Vecino - Dialysis-based recovery of biosurfactants from corn steep water: from lab to pilot scale
11:50 - 12:10	James Winterburn - What've we got here? Sophorolipid Identification and quantification
12:10 - 12:30	Robbie Pott - Recovery of mannosylerythritol lipids using alcohol/salt aqueous two-phase extraction
12:30 - 13:30 Lunch break (Super-C)	
13:30 - 14:15	KEYNOTE 5: Catherine Mulligan - Environmental Applications of Biosurfactants

Session 5: Applications

Chair: Marla Trindade

14:20 - 14:40	Leonie Asfora Sarubbo - Industrial applications for biosurfactants
14:40 - 15:00	Laura Beatriz Romero de Zeron - Separation and characterization of biosurfactant from vermicompost tea
15:00 - 15:20	Thuy-Linh Phi - Opportunities of biosurfactants in the field of nanocellulose science
15:20 - 15:40	Matthew Twigg - Two birds, one stone: the antimicrobial enhancing and microbiome protective bioactivities of glycolipid-type biosurfactants.
15:40 - 16:00	Conference group photo
16:00 - 16:30 Coffee break	

17:00 - 18:30 City tour
18:00 - 19:00 Pre-dinner networking
19:00 - 23:00 Conference dinner - ForumM Aachen

Friday, 12.09.2025

08:00 - 09:00 Coffee & networking (Super-C)	
09:00 - 09:45	KEYNOTE 6: Márcia Nitschke - Biosurfactants in food chain: opportunities and challenges.

Session 6: Industrial perspectives

Chair: Sophie Roelants

09:50 - 10:20	Niki Baccile & Jochen Kleinen - On the importance of colloid science to develop biosurfactants-based products
10:20 - 10:40	Ben Michael Dolman - Achieving cost performance improvement using biosurfactants through engineering application science and collaboration
10:40 - 11:00	Peter Schmiedel - Unexpected self-assembly of the biosurfactant mannosylerythritol lipid and conventional anionic surfactant
11:00 - 11:40 Coffee break (Super-C) 11:10 - 11:30 "Meet the company" - Procter & Gamble (Super-C)	
11:40 - 12:00	Ulrich Schwaneberg - Lessons learned on protein engineering for laundry formulations
12:00 - 12:45	KEYNOTE 7 (BioSC Lecture): Wim Soetaert - The rocky path from research to commercialization of biosurfactants.
12:45 - 13:00	Closing remarks