



# IEA IETS Task 17

## Membrane processes in biorefineries

Online Workshop

September 18<sup>th</sup> 2024 from 08:00 - 17:00 (UTC+2)

Time	Title	Presenter	Affiliation
08:00 - 08:15	IEA Task 17 Austria Welcome Words, Goals and Targets	Christoph Höfer; Marlene Kienberger	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria; Institute of Chemical Engineering and Environmental Technology, TU-Graz, Austria
08:15 - 09:00	Membranes in Biorefineries - Integration of membrane separation processes in biorefineries - State of the art and future perspectives (Keynote)	Frank Lipnizki	Department of Process and Life Science Engineering, Membrane Group, Lund University, Sweden
09:00 - 09:30	Advances in engineering with membranes and biocatalysis for sustainable biorefineries (Keynote)	Lidietta Giorno	National Research Council - Institute on Membrane Technology (CNR-ITM), Italy
Coffee Break (10min)			
09:40 - 10:00	Membrane Distillation in Biorefineries: Advancements and Prospective Role (Talk)	Aamer Ali	Department of Energy, Aalborg University, Denmark
10:05 - 10:25	Bioactive polymer membranes for enhanced protein recovery from microalgae (Talk)	Agnes Schulze	Leibniz Institute of Surface Engineering (IOM), Germany
10:30 - 10:50	Biobased support layer for lignosulfonate isolation and fractionation (Talk)	Paul Demmelmayr and Marlene Kienberger	Institute of Chemical Engineering and Environmental Technology, TU-Graz, Austria
Coffee Break (10min)			
11:00 - 11:30	Organic solvent nanofiltration - Technology and Opportunities in biomaterials processing (Keynote)	Jens Dreimann	Evonik Operations GmbH, Germany
11:35 - 11:55	Modeling tools for evaluating in-situ product removal by membrane contactor technology: lactic acid fermentation and microalgae cultivation cases (Talk)	Alan Perez	Process engineering and technology, Institute for Chemistry and Bioanalytics, School of Life Sciences, University of Applied Sciences and Arts Northwestern Switzerland FHNW, Switzerland
Lunch Break (1h)			

13:00 - 13:30	Membrane contactors: A platform technology for the production of greener platform chemicals – and beyond (Keynote)	Wolfgang Riedl	Process engineering and technology, Institute for Chemistry and Bioanalytics, School of Life Sciences, University of Applied Sciences and Arts Northwestern Switzerland FHNW, Switzerland
13:35 - 13:55	Ammonia recovery from industrial waste streams with DCMD und VMD (Talk)	Christoph Höfer	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria
14:00 - 14:20	Membrane technology for biosurfactant downstream processing (Talk)	Xanel Vecino	Chemical Engineering Department, School of Industrial Engineering – CINTECX, University of Vigo, Spain
14:25 - 14:45	Membrane technology applied for recovering valuable compounds from anaerobic fermentation broths. (Talk)	Jorge Garcia	AINIA, Spain
Coffee Break (15min)			
15:00 - 15:05	Introduction to the Workshop format and the contribution to the guideline	Christoph Höfer	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria
15:05 - 16:00	Volatile recovery from waste streams (Workshop 1)	Christoph Höfer	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria
15:05 - 16:00	Novel membrane module configurations to overcome existing process bottlenecks (Workshop 2)	Bettina Muster-Slawitsch	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria
15:05 - 16:00	TBD (Workshop 3)	Marlene Kienberger	Institute of Chemical Engineering and Environmental Technology, TU-Graz, Austria
Coffee Break (10min)			
16:10 - 16:20	Presentation of Outcome of Workshop 1	Christoph Höfer	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria
16:20 - 16:30	Presentation of Outcome of Workshop 2	Bettina Muster-Slawitsch	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria
16:40 - 16:50	Presentation of Outcome of Workshop 3	Marlene Kienberger	Institute of Chemical Engineering and Environmental Technology, TU-Graz, Austria
17:00	Writing organization of Workshop outcome and Farewell	Christoph Höfer / Marlene Kienberger	Department Technology Development, AEE - Institute for Sustainable Technologies, Austria / Institute of Chemical Engineering and Environmental Technology, TU-Graz, Austria

### **Online Registration:**

<https://www.aee-intec.at/iea-iets-task-17-membranes-in-biorefineries-v487>



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