

Webinar series on biological carbon capture and utilization (BCCU)

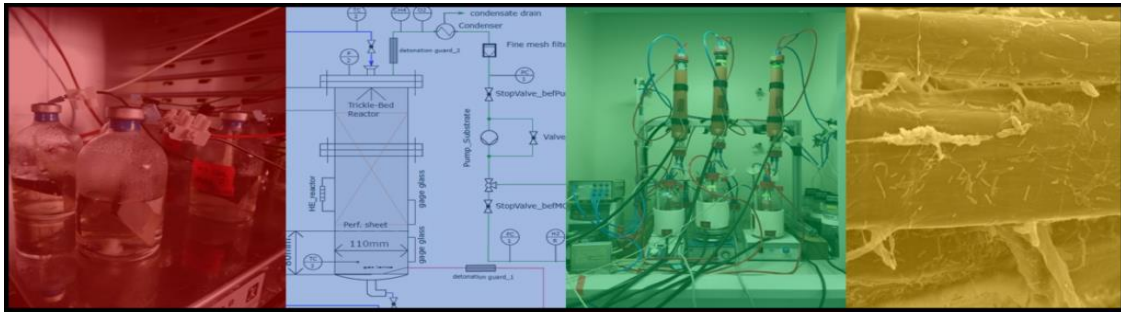
Program of topic 1: Enzymatic carbon capture

20.04.2021, 13:00-16:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Günther Bochmann	Keynote
13:30-14:00	Doris Ribitsch	
14:00 -14:25	Franziska Steger	Characterization of three different carbonic anhydrases for CO ₂ sequestration applications
14:25-14:50	Fabian M. Schwarz	Capture and storage of hydrogen and carbon dioxide by enzymatic hydrogenation of CO ₂ to formic acid
14:50-15:15	Maria Elena Russo	Immobilization of carbonic anhydrase for CO ₂ capture and utilization
15:15-16:00	Short presentations and discussion	

Per speaker: 15-20 min presentation + 5 min discussion

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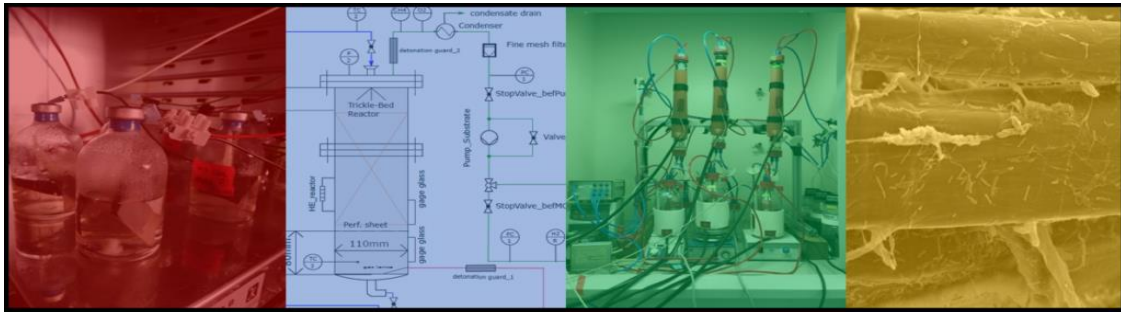
Webinar series on biological carbon capture and utilization (BCCU)
 Program of topic 2: Microbial acetate production from CO₂

27.04.2021, 13:00-16:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Volker Müller	Keynote
13:30-13:55	Lorenzo Cristiani	CO ₂ reduction into acetate under hydrogenophilic and bioelectrochemical conditions
13:55-14:20	Stefan Pflügl	Blending industrial blast furnace gas with H ₂ enables <i>Acetobacterium woodii</i> to efficiently co-utilize CO, CO ₂ and H ₂
14:20-14:45	Laura Rovira Alsina/ Meritxell Romans-Casas	Chain elongation lifespan: linking thermodynamics with fermentative CO ₂ reduction pathways under different operating conditions
14:45-15:10	Alexander Mook	Autotrophic lactate production using engineered <i>A. woodii</i> strains and quantification via fluorescence-based methods
15:10-16:00	Short presentations and discussion	

Per speaker: 15-20 min presentation + 5 min discussion

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Webinar series on biological carbon capture and utilization (BCCU)
 Program of topic 3: Microbial electrosynthesis and solvent
 production from CO₂

04.05.2021, 13:00-16:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Sebastià Puig	Keynote
13:30-13:55	Carla Fernández Blanco	Carbon dioxide and syngas bioconversion to ethanol, acetic acid and medium chain fatty acids
13:55-14:20	Josef Horvath	Developing a small scale system for microbial electrosynthesis
14:20-14:45	Igor Vassilev	Characterization of fluidized vs. fixed granular activated carbon beds as cathodes for microbial electrosynthesis of carboxylates from CO ₂
14:45-15:10	Werner Fuchs	Biohydrogen formation from organic wastes utilizing electro-active bacteria
15:10-15:35	Camille Petrognani	Production of isobutyric acid from methanol by <i>Clostridium luticellarii</i>
15:35-16:00	Short presentations and discussion	

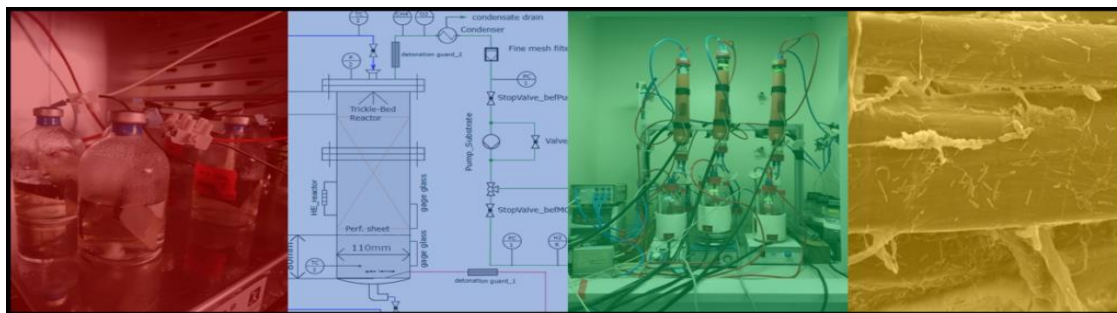
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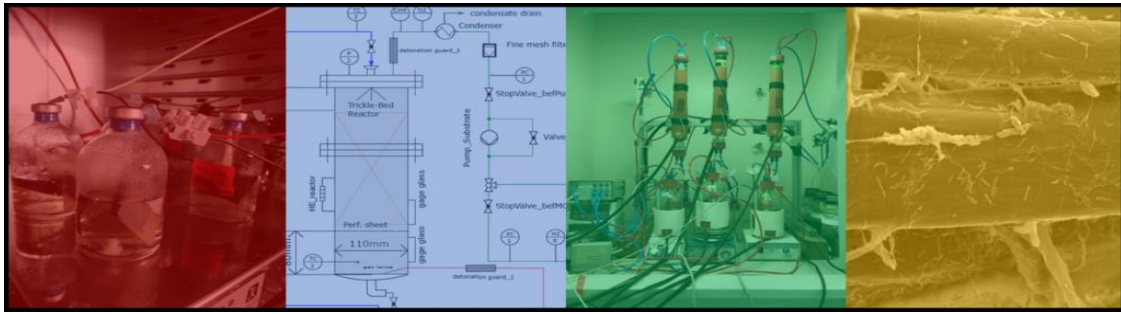
Webinar series on biological carbon capture and utilization (BCCU)
 Program of topic 4: Microbial methane production from CO₂

11.05.2021, 13:00-16:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Simon Rittmann	Keynote
13:30-13:55	George Cheng	Microbial community development during methanisation of syngas in a mesophilic trickling bed reactor
13:55-14:20	Michał Sposób	Ex-situ biomethanation in trickle bed reactor - counter-current and concurrent configurations comparison
14:20-14:45	Wolfgang Merkle	Characterisation and optimisation of ex-situ biological methanation process
14:45-15:10	Marco Zeppilli	Bioelectromethanogenesis for biogas upgrading in different microbial electrolysis cell configurations
15:10-15:35	Eva Neuhauser	Verification of methanogenesis at simulated reservoir conditions using steel mill gases as substrate
15:35-16:00	Short presentations and discussion	

Per speaker: 15-20 min presentation + 5 min discussion

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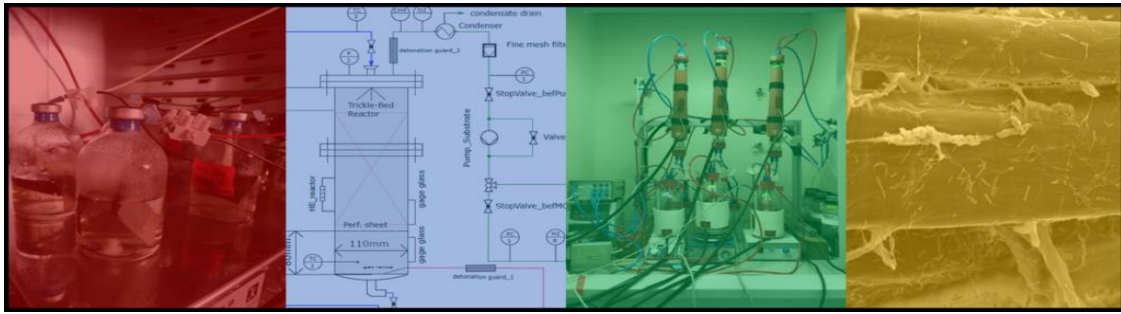
Webinar series on biological carbon capture and utilization (BCCU)
 Program of topic 5: Process engineering and modelling

18.05.2021, 13:00-16:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Irini Angelidaki	Keynote
13:30-13:40	Nikola Hanišáková	Underground gas reservoir: the rich source of methanogenic archaea
13:40-14:05	Marceli Marzynski	Operation of a continuous anaerobic trickle-bed reactor for microbial acetate production
14:05-14:30	Nadine Loibl	Investigation of acetogenic mixed culture in a trickle-bed set- up
14:30-14:55	Tobias Böhm	Influence of hydrogen partial pressure on methane production with mixed culture in a trickle-bed set-up
14:55-15:20	Lydia Rachbauer	Deconstruction and conversion of marine seaweed by a kyphosids` gut microbiome
15:20-16:00	Short presentations and discussion	

Per speaker: 15-20 min presentation + 5 min discussion

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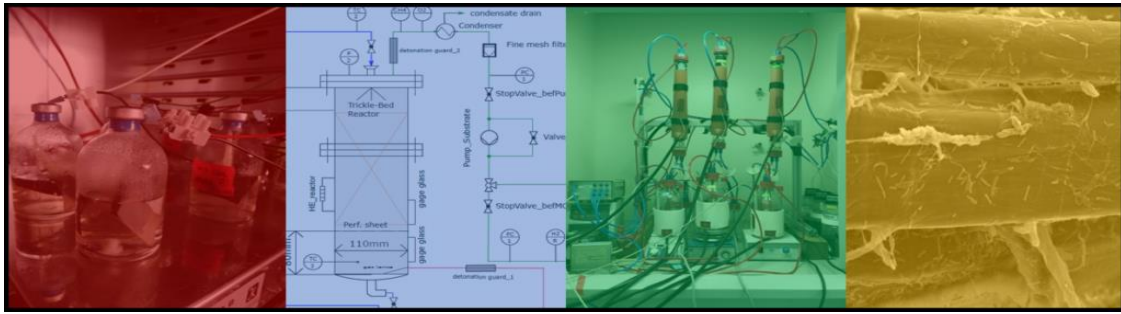
Webinar series on biological carbon capture and utilization (BCCU)
 Program of topic 6: Process engineering and modelling

25.05.2021, 13:00-16:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Michael Harasek	Keynote
13:30-13:55	Barbara Weiß	Evaluation and upscaling of a lab scale homoacetogenesis process with trickling bed reactor using fluid dynamic calculations and process simulation
13:55-14:20	Elena Holl	Development of an innovative process chain generating resource efficient biofuel based on methane
14:20-14:45	Arianna Vizzarro	(B)eating methane through biological oxidation: an overlook on <i>Methylocella tundrae</i> potential role in methanol production
14:45-15:10	Antti Nyysölä	Production of microbial biomass for food applications by gas fermentation of Knallgas bacteria
15:10-16:00	Short presentations and discussion	

Per speaker: 15-20 min presentation + 5 min discussion

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Webinar series on biological carbon capture and utilization (BCCU)

Program of topic 7: Life cycle assessment

01.06.2021, 13:00-15:00 CET

TIME	SPEAKER	TITLE OF PRESENTATION
13:00-13:30	Joana Portugal Pereira	Keynote
13:30-13:55	Iris Kral	Life cycle assessment of biogas systems
13:55-14:20	Gerfried Jungmeier	LCA of e-fuels for transportation services – methodological issues and examples
14:20-14:45	Kari-Anne Lyng	Life cycle assessment of CO ₂ from upgrading of biogas in greenhouse tomato production
14:45-15:00	Günther Bochmann	Closing address

Per speaker: 15-20 min presentation + 5 min discussion

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