

C₁ONTACT2024

“C₁ fermentatiOn: receNT Advancements, Challenges & outlook”

Date: Thursday, Aug. 29, 2024 -Friday, Aug. 30, 2024

(Hybrid event)

Time: 10:00-17:00

Venue: **MS Teams**



Join now (https://teams.microsoft.com/l/meetup-join/19%3ameeting_MjM2ZjZlY2liZTI4MS00YTRlLW11ZmMlOTk3OGUzOTIxNzlm%40thread_v2/0?context=%7b%22Tid%22%3a%228edcbede-7d8f-4a02-ba9b-8050c084e215%22%2c%22Oid%22%3a%22fc9cf057-359f-459d-8ac2-b05b30229258%22%7d), meeting ID: 333 298 776 556 Code: fHbuij

and **IFA Tulln** (Konrad-Lorenz-Straße 20, 3430 Tulln an der Donau, Austria)

Costs: Free for speakers; 60 Euro incl. VAT for non-presenting attendees

End of August, we will convene for a 2-day-seminar on the fermentation of C₁ compounds. We have 19 speakers plus 1 panel discussion, see here the programme:

Programme Day 1 (Aug. 29), HYBRID (IFA TULLN and MS TEAMS)

10:00-10:10	Opening (registration will start at 9:30)
10:10-10:30	Petri Tervasmäki , Food out of thin air - from lab to commercial scale
10:30-10:50	Koen Quataert , Bringing bio-CCU to scale: demonstrating gas fermentation in an industrial environment
10:50-11:20	Anand Ghosalkar , Opportunities and Challenges of utilizing Biogas (C ₁ /methane) as feedstock for value added products
11:20-11:40	Cristian Torri , Production of Isopropyl Alcohol with Microbial Mixed Culture (MMC) supported on polystyrene/biochar composite
11:40-12:00	Ning Yang , Multiscale CFD Modelling of Multiphase Reactors
12:00-13:00	Lunch break
13:00-13:20	Qiang Fei , Bioconversion of methane for long-chain value-added products
13:20-13:40	Xiaoping Guan , Hydrodynamics and mixing in U-loop bioreactor
13:40-14:00	Raúl Muñoz Torre , Limitations and breakthroughs in biological gas treatment/processing
14:00-14:20	Zixi Gao , Methane-derived biomacromolecules synthesis and scale-up production
14:20-15:00	Tea and coffee break
15:00-15:20	Qianzi Hou , Biological conversion of methane to Polymers using metabolic engineering
15:20-15:40	Chenyue Zhang , Efficient biomanufacturing process design and economic environment research
15:40-16:00	Mateusz Lezyk , Production of polyhydroxyalkanoate (PHA) copolymers from methane and valerate using mixed microbial cultures
16:00-17:00	Tea and coffee, networking (end 17:00)

Programme Day 2 (Aug. 30), afternoon (Online: MS TEAMS ONLY)

14:00-14:20	Christian Torri , Mixed Culture Fermentation of C1 on biochar/polystyrene composites: performances with H ₂ /CO ₂ and raw syngas
14:20-14:40	Maximilian Lackner , Pumping of mixed flows in loop fermenters using a rim driven thruster for enhanced k _L a values
14:40-15:00	Kianoush Khosravi , PHB production from CO ₂ of Emission gas: strengths and weaknesses.
15:00-15:20	Fatemeh Ahmadi , Methanotrophs as versatile hosts for gas fermentation?
15:20-15:30	Break
15:30-15:50	Shuqi Guo , Bioconversion of methane and nitrogen fixation by methanotrophic bacteria
15:50-16:10	Jingchang Zhang , GPU-Accelerated Lattice Boltzmann Simulation of Stirred Tanks
16:10-16:30	Adel Al-Taweel , The challenge of achieving elevated interphase mass transfer rates in bio-fermentation operations
Panel discussion:	
16:30-16:50	Current challenges and solutions in C1 fermentation, outlook and R&D needs
16:50 -17:00	Closing remarks (end 17:00)

Registration for the symposium is open **till Aug. 23, 2024 (latest)** via the following google forms: <https://forms.gle/RLDqRBYuxMkuKG4R7>

Participants will receive an invoice after the event. Same costs for each participant, no discounts for partial participation, students, special memberships or multiple attendees per organization. Cancellation policy: Free until 5 days before the event, 100% payment afterwards. The extended abstracts of this symposium will be published in a special issue of [Applied Food Biotechnology \(sbmu.ac.ir\)](http://Applied Food Biotechnology (sbmu.ac.ir))

Direct any questions to:

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Looking forward to your attendance!

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