Poster programme ISAM2025

ID	Presenting author	Affiliation	Title
P01	Raphaëlle Péguilhan	DTU Lyngby	Syntrophies are steering the anaerobic microcosm
P03	Sungyun Jung	Pukyong National University	Improving anaerobic digestion of phenol wastewater under varying ammonia stress through magnetite addition and bioaugmentation
P04	Wenyu Gu	EPFL	Functional convergence in anaerobic digestion communities driven by substrate and pH selection
P05	Thien Truc Thanh Ngo	Pukyong National University	The effect of pH on thermophilic anaerobic fermentation of polyhydroxybutyrate: solubilization, VFAs production and underlying anaerobic microbiology
P06	Joonyeob Lee	Pukyong National University	Microbial communities for anaerobic digestion of phenolic compounds
P07	Thea Andersen	NMBU	Microbial community adaptation to marine aquaculture sludge in biogas reactors
P08	Veronika Flad	Bavarian State Research Center for Agriculture	Molecular monitoring of phytopathogens and the biogas microbiome during the co-digestion of reed canary grass and potato pulp under meso- and thermophilic conditions
P09	Martyna Paul	Institute of Biochemistry and Biophysics, PAS	Impact of seasonal and substrate variability on anaerobic digestion of sugar beet molasses in single- and two-stage systems
P10	Zihan Dai	Research Center Jülich	Illuminating Limnochordia taxa in biogas microbiomes through genomic and proteomic lens
P11	Lijana Fanedl	University of Ljubljana	Biogas potential of acid whey residues and microbiome dynamics during anaerobic digestion
P12	Maria Chiara Valerin	University of Padua	Development of microbial consortia for biohydrogen and biomethane production from complex by-products
P13	Minsu Song	Pukyong National University	Optimizing coagulant combinations and dosages for sustainable sludge treatment: trade-offs between sludge settling and anaerobic digestion
P14	Magdalena Nagler	University of Innsbruck	Temp4AD – A high-resolution temperature assay to fire up anaerobic digestion
P15	Marko Blagojevic	University of Ljubljana	Impact of hydrodynamic cavitation treatment on solubilisation, structural breakdown and methane production of waste activated sludge
P18	Kevin Hoffstadt	FH Aachen University of Applied Sciences	Hydrogenotrophic methanation in a plug flow reactor

P19	Chiara Magrini	Politecnico di Torino	Integrating anaerobic fermentation with urban mining: a novel indirect bioleaching strategy for metal extraction from EoL mobile phone PCBs
P20	Konstantinos Papasakellariou	DTU Lyngby	Deciphering the anaerobic microbiome for constructing robust microbial consortia to produce medium-chain fatty acids
P21	Mourice Wölbeling	Merseburg University of Applied Sciences	Development of a cascading biorefinery concept for medium-chain fatty acid production from sugar beet pulp
P22	Madan Junghare	Vasantdada Sugar Institute	Fungal-assisted saccharification of pre-treated sugarcane bagasse for efficient lactic acid fermentation
P23	Claudio Lucca Kalbermatten	Zurich University of Applied Sciences	Applying recombinant enzymes from anaerobic fungi for improved biogas production from lignocellulosic biomass
P25	Laura Maria Marte	University of Innsbruck	Exploring the enzymatic potential of anaerobic gut fungi (Neocallimastigomycota) - A tailored DNS assay
P26	Marlen Zschätzsch	TU Dresden	Isolation and characterization of cellulolytic microbes from the intestinal tract of the Eurasian beaver (*Castor fiber*)
P27	Anna A. Schönherz	Aarhus University	The dynamics of single stranded, positive sense RNA bacteriophages in the rumen virome
P28	Alen Radolič	University of Ljubljana	Evaluation of different artificial saliva formulations as buffering media for in vitro rumen simulation
P29	Friederike Neuheuser	UFZ	Effect of plant protection products on the metaproteome and metabolome of human gut microbiome
P30	Gorazd Avguštin	University of Ljubljana	Gut microbiome shifts as the results of the Helicobacter pylori antibiotic eradication
P31	Wenxuan He	Bremen University	Effect of hydrogen availability on the microbial community in anaerobic marine sediments
P32	Auwalu Bala	UFZ	Hydrocarbon degradation potential of aquifer microbial communities at different electron acceptor conditions and temperatures
P33	Leyang Yang	Institute of Urban Environment, CAS	Distribution of N_2O-reducing bacteria with urbanization gradients and their emission reduction potential
P34	Jasmin Bernhardt	University of Münster	Unraveling chloromethane conversion in the acetogen *Acetobacterium dehalogenans*
P35	Lucy Ross-Blevis	University of Toronto	Expression of novel reductive dehalogenases from a dichloroaniline-contaminated site
P36	Nadine Hellmold	UFZ	Purification and structural insights into the organohalide respiratory complex of *Dehalococcoides mccartyi* strain CBDB1

P37	Xiyan Zhang	Aarhus University	New insights into anaerobic alkane oxidation in archaea revealed by metabolomics and physiological analyses
P38	Purnima Gabhrani	Aarhus University	Unraveling archaeal alkane oxidation: understanding the interspecies energetic interactions
P39	Madison Barney	ETH Zürich	Methane-cycling microbial communities and biogeochemistry in Swiss peatlands
P40	Zeynep Dogru	University of Münster	Investigating the gene regulation and physiology of methoxydotrophic archaea
P41	Marcell Nikolausz	UFZ	When anaerobes are unwanted: survival and activity of methanogens in a process developed for aerobic hydrogen-oxidizing bacteria
P42	Kelly Chan-Yam	University of Toronto	Methane emissions from a pulp and paper mill landfill
P43	Raphaëlle Péguilhan	DTU Lyngby	An insight into *Methanosarcina* substrate affinity and gene expression modulation for methane production in bioreactors
P44	Wajeeha Mehak	UFZ	Characterizing archaeal methyltransferases utilizing methanol as a substrate for circular biocatalysis
P45	Ivonne Nijenhuis	UFZ	Development of an information and eLearning portal for stable isotope applications
P46	Nikola Hanišáková	Masaryk University	The Laboratory of Anaerobic Microorganisms
P47	Tomas Temešinko	Charles University	Pyruvate:ferredoxin oxidoreductase (PFOR): a key metabolic enzyme in the anaerobic eukaryote *Giardia intestinalis*
P48	Sumbul Iqbal	Anhalt University of Applied Sciences	Comparative cultivation of *Methanobacterium formicicum* and mixed culture of *Methanobacterium formicicum* & *Methanosarcina barkeri* in phosphate buffer medium (50 mM) using formate, acetate, and H_2/CO_2 as substrates under controlled anaerobic conditions
P49	Maša Ošlak	National Institute of Chemistry Ljubljana	High-throughput microbiome activity kinetics in response to chemical challenges
P50	Danieli F. C. Marin	São Paulo State University	Bioplastics as renewable feedstock for biohydrogen: a thermophilic dark fermentation approach
P51	Barbara Rühle	University of Ulm	Investigation of biofilm forming capabilities of the acetogen *Eubacterium callanderi* 'Marburg'
P52	Dirk Benndorf	Anhalt University of Applied Sciences	Microbial interactions in a high-performance tubular foam-bed reactor for biomethanation
P53	Zoltán Bagi	University of Szeged	Biomethane from syngas by mixed anaerobic community
P54	Samuel Farmer	Leipzig University	Utilizing *Methanothermobacter thermautotrophicus* ΔH as an expression host for recombinant enzymes
P55	Alvaro S. Neto	University of Borås	Methane-free biohydrogen conversion from syngas fermentation: effect of pH and sludge concentration

P56	Christian Schöne	Leipzig University	Developing a syngas fermentation process with *Clostridium ljungdahlii* for cyanophycin production
P57	Franziska Küchle	Leipzig University	Engineering *Clostridium ljungdahlii* for sustainable acetone production
P58	Maximilian Flaiz	Wageningen University & Research	Expanding the genetic toolbox for *Acetobacterium wieringae*
P59	Valeria Agostino	Istituto Italiano di Tecnologia	*Clostridium carboxidivorans*: a key player in next-generation biorefineries