Day 1 – September 13th, 2023 (Norwegian University of Life Sciences)		
11:00-14:00	Laboratory and field demonstrations	
14:00-15:00	Registration	
	Opening Session (15:30-16:45)	
15:30	Welcome address	Dr. Linda Bergaust (NMBU)
15:45	**Opening Lecture** (35 + 10)	Prof. Lars Bakken (NMBU)
16:30	Flash poster presentations (2 min)	
16:45	**Coffee break (25 min)**	
	Session 1 (17:10-18:30) ***The Nitrogen cycle at ecosystem level***	
17:10	**Einat Segev** (WIS) *Aerobic bacteria produce nitric oxide through denitrification and promote algal population collapse* (15 + 5)	
17:30	**Shengjie Li** (MPIMM) *Microorganisms associated with individual particles and their role in nitrogen loss in the Peruvian oxygen minimum zone* (12 + 3)	
17:45	**Keynote lecture** (35 + 10) *Land-CRAFT: Bridging N cycles - from sites to landscapes* Prof. Klaus Butterbach-Bahl (AU)	
19:00	**Kickoff with food and drinks**	
Day 2 – September 14th, 2023 (Oslo Science Park)		
	Session 2 (09:00-10:20) ***Aquatic systems and sediments***	
09:00	**Keynote lecture** (35 + 10) *Sandy sediments and their microbial inhabitants; biocatalytic filters in the Anthropocene* Dr. Hannah Marchant (MPIMM)	
09:45	**Siqi Wu** (MPIMM) *Urea and cyanate oxidation rates and kinetics in a eutrophic coastal ecosystem - the Pearl River Estuary* (8 + 2)	
09:55	**Ricky Mwanake** (KIT) *Significant positive effects of elevated in-stream pCO_2 on N_2O concentrations in global rivers with low DOC:NO_3 ratios* (8 + 2)	
10:05	**Beate Kraft** (SDU) *Physiology of ammonia-oxidizing archaea under oxygen depletion (15 + 5)*	
10:25	**Coffee break (20 min)**	
	Session 3 (10:45-11:55) ***Microbial N-transformations in soil***	
10:45	**Louise Sennett** (NMBU) *Determining how oxygen legacy affects the trajectories of denitrifier function and structure in soil* (12 + 3)	
11:00	**Aurelién Saghai** (SLU) *Phyloecology of* nrfA-*ammonifiers and their relative importance with denitrifiers in global terrestrial biomes* (8 + 2)	
11:10	**Eduardo Vázquez** (UPM) *Asymbiotic N_2 fixation is less sensitive to temperature than carbon mineralization in boreal forest soils along a latitudinal gradient* (8 + 2)	

11:20	**Michaela Reay** (UOB) *Moisture effects on microbial protein biosynthesis: new insights from compound-specific 15N-stable isotope probing* (8 + 2)
11:30	**Maire Holtz** (ZALF) *Rhizosphere carbon priming: a plant mechanism to enhance soil nitrogen accessibility?* (8 + 2)
11:40	**Simon Lewin** (ZALF) *Reduced synthetic N-fertilization of cereals causes host plant-mediated shifts of N-cycling guild abundances and their response to crop productivity (12 + 3)*
11:55	**Lunch and poster session (1 h 20 min)**
	Session 4 (13:15-14:05) ***Microbial N-transformations and field emissions***
13:15	**Elisabeth Gautefall Hiis** (NMBU) *Microbial agents for N_2O mitigation - the importance of ecological fitness* (12 + 3)
13:30	**Elizabeth Wangari** (KIT) *Identifying landscape hot and cold spots of soil GHG fluxes by combining field measurements and remote sensing information (8 + 2)*
13:40	**Petra Pjevac** (U Vienna) *Effect of nitrification inhibitors on aerobic N_2O production and off-target microbial activity in agricultural soils* (8 + 2)
13:50	**Sigrid Trier Kjær** (NMBU) *Will off-season nitrous oxide emissions cancel out the potential carbon gain by cover crops? A Norwegian field study* (12 + 3)
14:05	**Coffee break (20 min)**
	Session 5 (14:25-15:50) **Environmental biotechnology**
14:25	**Keynote lecture (35 + 10)** *N_2O emissions from wastewater treatment systems* Prof. Mark van Loosdrecht (TU Delft)
15:10	**Marte Maråk** (NMBU) *Optimizing Denitrification-Driven High Cell-Density Cultivation for Sustainable Single-Cell Protein Production: Challenges and Prospects (15 + 5)*
15:30	**Ramon Ganigué** (UGent) *Exploring the limits of thermophilic anaerobic ammonium oxidation* (15 + 5)
15:50	**Light snack and beverage** **End of scientific programme, day 2**
Social events	1. 16:30 Historic River Walk (meet-up at Nydalen) 2. 17:00 Opera tour (meet-up at Opera house)
20:00	**Conference dinner at Solsiden Restaurant (https://solsiden.no/)**

Day 3 – September 15th, 2023 (Oslo Science Park)	
Session 6 (09:00-15:55) ***Enzymology and physiology of the nitrogen cycle***	
09:00	**Keynote lecture (35 + 10)** *Copper Delivery and Metal Site Assembly in Nitrous Oxide Reductase* Prof. Oliver Einsle (Uni Freiburg)
09:45	**Lin Zhang** (Uni Freiburg) *Architecture of the NADH:ferredoxin oxidoreductase RNF that drives Biological Nitrogen Fixation* (8 + 2)
10:00	**Sara Zipfel** (Uni Freiburg) Molecular interplay of an assembly machinery for nitrous oxide reductase (12 + 3)
10:15	**Coffee break (15 min)**
10:30	**Keynote lecture (35 + 10)** *Growth of complete ammonia oxidizers on guanidine: From physiology to structural biology and environmental applications* Prof. Michael Wagner (U Vienna)
11:15	**Petra Pjevac** (CMESS) *Formate oxidation by* Nitrospira inopinata *indicates the limitations of genome-based metabolic modelling* (8 + 2)
11:25	**Bram Vekeman** (MPIMM) *Versatile anaerobic ammonium-oxidizing bacteria can use alternative carbon and nitrogen sources for growth and energy conservation* (15 + 5)
11:45	**Lunch and poster session (1 h 15 min)**
13:00	**Keynote lecture (35 + 10)** *Pathways and regulatory factors involved in NO and N_2O emissions by nitrogen-fixing endosymbiotic bacteria* Prof. Maria Delgado (CSIC)
13:45	**Socorro Mesa Banqueri** (CSIC) *Heme is involved in the NO-mediated regulation by* Bradyrhizobium diazoefficiens *NnrR transcription factor* (12 + 3)
14:00	**Serena Rinaldo** (UNIROMA1) *L-arginine sensing reprograms the energy metabolism of* P. putida (12 + 3)
14:15	Information about the completed FEMSLE N-cycle special issue (5 min)
14:20	**Victor Luque-Almagro** (UCO) *Effect of iron deficiency on denitrification* (8 + 2)
14:30	**Coffee break (10 min)**
14:40	**David Richardson** (UEA) *Exploring protein-protein interactions for catalytic electron transfer and redox balancing during assimilatory nitrate reduction* (15 + 5)
15:00	**Thomas Leigh** (UEA) *sRNA-11 regulates the growth of the bacterial denitrifier* Paracoccus denitrificans (8 + 2)
15:10	**Jose Maria Miralles-Robledillo** (UA) *Changes in iron metabolism connected to haloarchaeal denitrification* (8 + 2)
15:20	**Martin Menestreau** (NMBU) *TBA* (8 + 2)
15:30	**Michele Laureni** (TU Delft) *Aerobic heterotrophic denitrification as N_2O source in mixed communities* (8 + 2)
15:40	**Sukhwan Yoon** (KAIST) *Hydrogenotrophic DNRA in two Camplyobacterota bacteria isolated from activated sludge* (12 + 3)

15:55	**Coffee break (15 min)**	
	Closing session (16:10-17:10)	
16:10	**Closing lecture** (35 + 10) *Errors in Nitrogen Cycle dogma: chemistry, biochemistry and biological relevance* Prof. Jeffrey Cole (UBir)	
16:55	**Concluding remarks**	Prof. David Richardson (UEA)
17:15	**End of meeting**	