

NRR2026 | Keynote Speakers

18-05-2026	09:30	10:30	
	<i>Jurg Keller</i>	AU	University of Queensland
	<i>Amanda Lake</i>	UK	Jacobs
18-05-2026	13:30	14:15	
	<i>Mark van Loosdrecht</i>	NL	TU Delft
19-05-2026	09:00	10:00	
	<i>Per Nielsen</i>	DK	Aalborg University
	<i>Leon Korving</i>	NL	Wetsus
19-05-2026	13:00	14:30	
	<i>Adriano Joss</i>	CH	Eawag
	<i>Haydée De Clippeir</i>	US	DC Water
	<i>Ameet Pinto</i>	US	Georgia Tech
20-05-2026	09:00	10:00	
	<i>Imre Takács</i>	FR	Dynamita
	<i>Doris van Halem</i>	NL	TU Delft

NRR2026 | Oral Presentations

S01 Nitrogen | Anammox

S01.01	<i>Mingsheng Jia</i>	BE	Novel thermophilic anammox: from ecophysiology to potential application
S01.02	<i>Yimeng Li</i>	AU	Title: Establishing a Robust One-stage PN/A Process in MABR through Precision Oxygen-deficient Aeration Regime
S01.03	<i>Chukuan Jiang</i>	HK	Simultaneous sulfur- and organic-driven partial denitrification and anammox process for sustainable wastewater treatment
S01.04	<i>Sheyla Chero-Osorio</i>	PE	Single-stage Ion Exchange-Partial Nitritation/Anammox for Mainstream Municipal Wastewater Treatment
S01.05	<i>Chuansheng Wang</i>	SG	Achieving Simultaneous Nitrification and Denitrification Coupled with Anammox (SNDA) in Membrane-Aerated Biofilm Reactor for Low Carbon/Nitrogen Wastewater Treatment
S01.06	<i>Stephanie Klaus</i>	US	Full-Scale Mainstream Anammox: Lessons Learned for Design and Operation of PdNA and PNA
S01.07 (pitcl)	<i>Yujie Chen</i>	JP	Rapid and Economical Start-Up of a HAP-PDA System Achieving Operational Stability and High Anammox Contribution
S01.08 (pitcl)	<i>Shuyu Xu</i>	CN	High-quality reclaimed water and resource recovery from municipal wastewater using high-rate activated sludge, reverse osmosis, and mainstream anammox: A pilot scale study

S02 Phosphorous | Biological Processes

S02.01	<i>Adrian Oehmen</i>	AU	A novel approach for phosphorus removal and recovery using entrapped polyphosphate accumulating organisms
S02.02	<i>Xinyu Shi</i>	AU	Linking Side-stream HRT and S2EBPR System Resilience under Influent Dynamics.
S02.03	<i>Maria Piculell</i>	SE	Biological phosphorus and nitrogen removal in a novel moving bed biofilm system with alternating flow direction - effect of influent type
S02.04	<i>Lilian McIntosh</i>	US	Why does low DO favor biological phosphorus removal? Oxygen inhibition of PAOs is an important part of the story
S02.05	<i>Chuheng Xie</i>	CN	A Novel Bio-LOHAS Process: Regulating DGAOs-DPAOs Interactions and Carbon Allocation through Strategic Low-DO Aeration for Low C/N Wastewater Treatment
S02.06	<i>Xuanyu Lu</i>	HK	Exploring the feasibility of high rate enhanced biological phosphorus removal system driven by diverse carbon source
S02.07 (pitcl)	<i>Kangning Xu</i>	CN	Dual Role of Organic Matter in Feammox-driven Nitrogen and Phosphate Removal
S02.08 (pitcl)	<i>Francisco Rubio Rincon</i>	NL	Rethinking the PhoStrip Process

S03 Carbon | Microbial Bioproducts

S03.01	<i>Tim Van Winckel</i>	BE	The carbon flywheel: high-rate assimilation for nitrous oxide-free mainstream nitrogen removal and recovery
S03.02	<i>Jeanette Madsen</i>	DK	Advancing resource recovery potential: Development of a Resource Maturity Index (RMI) for pushing existing barriers
S03.03	<i>Samara Geraldo</i>	BR	Characterization of EPS from full scale WWTP with aerobic granular sludge technology
S03.04	<i>Nouran Bahgat</i>	BE	Phosphorus speciation and its impact on the functional properties of Extracellular Polymeric Substances recovered from Aerobic Granular Sludge
S03.05	<i>Marie Riisgaard-Jensen</i>	DK	Temporal dynamics of microbial communities and extracellular polymeric substances in raw and extracted activated sludge
S03.06	<i>Maite Pijuan</i>	ES	Effect of pH and Nitrogen Source on EPS Biosynthesis and Metabolism in Mixed Aerobic Methanotrophs
S03.07 (pitcl)	<i>Carlo Espinoza</i>	CL	Immobilization of extracellular polymeric substances (EPS) from wastewater sludge for metal biosorption: impact of immobilization method on adsorption-desorption performance and reusability
S03.08 (pitcl)	<i>Juho Uz Kurt Kaljunen</i>	FI	NPHarvest Nutrient Catcher Demo startup experiences and performance

S04 Nitrogen | (De)nitrification

S04.01	<i>Marijn Timmer</i>	BE	Novel MABR-MBR combination with simultaneous nitrification/denitrification for efficient water treatment and reuse
S04.02	<i>Ana Soares</i>	UK	Mitigation of Nitrous Oxide during Nitrification with Immobilised Microorganisms
S04.03	<i>Min Zheng</i>	AU	Acidophilic Ammonia Oxidation: Principles and Emerging Roles in Environmental Biotechnology
S04.04	<i>Xinjie Gao</i>	CN	Achieving Ultra-Low Effluent Nitrogen via an Anaerobic/Oxic/Anoxic (AOA) Process in a Pilot-Scale System for Municipal Wastewater Treatment
S04.05	<i>César Hueliñir</i>	CL	INTEGRATING NITRIFICATION AND MIXOTROPHIC DENITRIFICATION IN A SINGLE REACTOR: INSIGHTS FROM PERFORMANCE AND MICROBIAL COMMUNITY ANALYSIS IN SBR AND SBBR
S04.06	<i>Suzanne van der Poel</i>	NL	Delayed nitrification reveals hidden NO ₂ ⁻ and Mn ²⁺ interaction in drinking water biofilters
S04.07 (pitcl)	<i>Zhiyao Wang</i>	CN	Stratification of Anammox Granules: Balancing Nitrogen Removal Rate and Efficiency
S04.08 (pitcl)	<i>Sheng Chang</i>	CA	Simultaneous nitrification and denitrification of high C/N wastewater via heterotrophic nitrification and aerobic denitrification

S05 Phosphorous | Chemical Processes

S05.01	<i>Alba Ceballos-Escalera</i>	ES	Towards the upscaling of an electrochemical crystallizer for efficient phosphorus recovery as struvite from wastewater sludge
S05.02	<i>Hafiz Zargham Bin Imran</i>	KR	Magnetic biochar for vivianite-based phosphorus recovery from anaerobic digesters - effect of iron precursors and pyrolysis temperature
S05.03	<i>Lobna Amin</i>	FI	Iron Dynamics in Wastewater Treatment Plants for Vivianite Formation: Enhancing Iron Oxidation Kinetic with Experimental and Full-Scale Data
S05.04	<i>Roland Cusick</i>	US	LEVERAGING CRYSTALLIZATION KINETICS AND DATA-DRIVEN MODELING TO LINK LAB-SCALE INSIGHTS TO FULL-SCALE PHOSPHORUS RECOVERY PERFORMANCE AT WATER RESOURCE RECOVERY FACILITIES
S05.05	<i>Pim de Jager</i>	NL	Pilot study: high-performance phosphorus removal from WWTP effluents using the BioPhree® technology
S05.06	<i>Muhammad Ali</i>	UK	Phosphate recovery from digestate: biological and chemical approaches for sustainable nutrient recycling
S05.07 (pitcl)	<i>Neri Nathan</i>	US	Demonstration of Biofilm-Only and Hybrid MABR Configurations for Advanced Nitrogen and Phosphorus Removal in Lagoon Wastewater Systems
S05.08 (pitcl)	<i>Pabel Cervantes-Avilés</i>	MX	From Waste to Value: Hydroxyapatite Recovery Enables Sustainable Treatment of Maize Lime-Cooking Wastewater

S06 Carbon | Specialty Products

S06.01	<i>Domenico Santoro</i>	CA	High-Rate Anaerobic Digestion with Integrated Ammonia Recovery: Advancing Nutrient Management and Energy Production through the IntensiCarb™ Technology
S06.02	<i>Alba Pedrouso</i>	ES	Enhancing macroalgae valorization via two-Stage PPB Process
S06.03	<i>Ruizhe Zhang</i>	CN	Myco-Engineered Valorization of Garden Waste: A Fungal Pretreatment Paradigm for Concurrent Recovery of Phosphorus and Carbon Resource
S06.04	<i>Marco Pesenti</i>	IT	Strategic valorization of sludge from decentralized systems via fermentative processes
S06.05	<i>Lu Kong</i>	AU	Engineering Granular Sludge Reactor Resilience: Leveraging Emergency Shutdown as a Control Strategy for Enhanced Performance and NOB Inhibition in High-Rate Centrate Treatment
S06.06	<i>Nicolas Goycochea</i>	UY	TOWARD CIRCULAR NUTRIENT MANAGEMENT: LIFE CYCLE AND TECHNO-ECONOMIC ASSESSMENT OF STRUVITE PRODUCTION FROM SLAUGHTERHOUSE SLUDGE
S06.07 (pitcl)	<i>Felipe Macchioli</i>	BR	Analysis of the Potential of Aerobic Granular Sludge Biorefineries as an Alternative to Landfills in Brazil: Life Cycle Assessment
S06.08 (pitcl)	<i>Sarah Lee</i>	NL	An investigation into how purple non-sulfur bacteria (PNSB) fatten up

S07 Nitrogen | Recovery

S07.01	<i>Yiran Wan</i>	US	Nitrogen recovery potential through cyanophycin production in a partial denitrification/anammox and phosphorus removal bioreactor
S07.02	<i>Maarten Schaafsma</i>	NL	Chemical Free Nitrogen Recovery: an innovative, chemical free technology for ammonium removal and recovery from reject water at municipal sludge digesters.
S07.03	<i>Siegfried Vlaeminck</i>	BE	To remove or to recover, is that the nitrogen dilemma?
S07.04	<i>Yubo Wang</i>	NL	Nutrient Removal Through Accumulation--- Extending from Phosphorous to Ammonium
S07.05	<i>Busra Cicekalan</i>	TR	Ion Exchange-Based Ammonium Recovery from Permeate of An Anaerobic Membrane Bioreactor Co-Digesting Waste Activated Sludge and Dairy Industry Wastewater
S07.06	<i>Jouke Boorsma</i>	NL	Lessons Learned from More Than a Decade of Full-Scale Struvite Recovery in the Netherlands: A Difficult Road, but a No-Regret Measure.
S07.07 (pitcl <i>Silvia Bentancur</i>)		UY	RECOVERY OF NITROGEN FROM SWINE WASTEWATER THROUGH GAS-PERMEABLE MEMBRANE TECHNOLOGY
S07.08 (pitcl <i>Josue Gonzalez-Camejo</i>)		ES	SEASONAL OUTDOOR OPERATION OF AN OPEN MICROALGAL POND TO RECOVER NUTRIENTS FROM WASTEWATER AND DIGESTATE STREAMS

S08 Phosphorous | Alternative Recovery Routes

S08.01	<i>Thandie Marata</i>	FI	Recycling Solid Waste to Capture Phosphorus and Nitrogen: Optimization, Performance, and Mechanism
S08.02	<i>EUGENIO MARÍN MARÍN</i>	ES	Optimizing phosphorus recovery through struvite crystallization: pilot-scale implementation in relevant environment
S08.03	<i>Takayuki Kakuda</i>	JP	Recovery of high-purity phosphate from eutrophic lake sediments by microwave digestion/phosphate adsorption membrane filtration
S08.04	<i>Mohamed Takhim</i>	BE	RubiPhos®: a technology for recovering phosphate and other valuable nutrients from sustainable secondary sources, successfully demonstrated at pilot scale and currently moving to industrial deployment
S08.05	<i>Maria Castrillo</i>	ES	Advancing phosphorus removal through machine learning: insights from full-scale wastewater treatment practice
S08.06	<i>Yizhu Sun</i>	JP	Stable Biological Phosphorus Removal and Maximized COD Recovery by a Novel High-Rate A/O-MBR Process
S08.07 (pitcl <i>Riley Doyle</i>)		CA	Addressing the woes of summer bio-P performance deterioration: Experimenting with DO setpoints at a full-scale plant
S08.08 (pitcl <i>Paula Carrera Fernandez</i>)		ES	Regional Pathways for Nutrient Balance and Resource Optimisation: Holistic and Zero-Pollution Solutions from the GREENHOOD Project

S09 Physicochemical Recovery

S09.01	<i>Dominika Sobotka</i>	PL	Optimizing Vivianite Formation for Simultaneous Phosphorus and Iron Recovery Using Response Surface Modeling
S09.02	<i>Işık Kabaşlı</i>	TR	Nutrient recovery from source-separated human urine through sequential precipitation of struvite, K-struvite, and vivianite
S09.03	<i>Mark Powders</i>	UK	Low-energy chemical-free thermal stripping to recover quality ammonia for the water sector
S09.04	<i>Ziqing Wu</i>	HK	Ferric chloride-facilitated acidic fermentation: a multi-functional strategy for sewage sludge valorization
S09.05	<i>Anwar Alsanea</i>	US	Elemental sulfur recovery from high-sulfide-bearing wastewater using the oxygen-based membrane biofilm reactor
S09.06	<i>Ruoyao Yuan</i>	AU	Enhancing Domestic Wastewater Management through Direct Anaerobic Energy Recovery and Autotrophic Denitrification
S09.07 (pitcl <i>Beatriz C. Diniz</i>)		NL	Anaerobic digestion under alkaline conditions: process performance and implications for ammonia recovery
S09.08 (pitcl <i>Yağmur Kaçmaz</i>)		TR	Elucidating Iron-pH Interactions for Phosphorus Recovery Efficiency as Vivianite Production in Activated Sludge Systems

S10 N2O | Full-scale Experiences

S10.01	<i>Kees Roest</i>	NL	Evaluating Liquid- and Gas-Phase Nitrous Oxide Measurements in Full-Scale Wastewater Treatment Systems
S10.02	<i>Mikkel Andersen</i>	DK	Comparison between liquid and offgas N2O emissions measured at multiple full-scale wastewater treatment plants
S10.03	<i>Maria Valtari</i>	FI	Nitrous oxide mitigation with chemical feeding strategies at full-scale WWTP
S10.04	<i>Lennert Dockx</i>	BE	Revealing nitrous oxide emission dynamics related to the treatment of domestic wastewater in Flanders: combined lab-scale and full-scale investigation
S10.05	<i>Michel Mulders</i>	NL	Three-year full-scale research reveals 45% N2O emission reduction in aerobic granular sludge treatment
S10.06	<i>Jia Xin Yong</i>	MY	N2O Emissions and Nitrifying Microbial Communities in Tropical Wastewater Treatment Plants
S10.07 (pitcl)	<i>Songqing Huang</i>	CN	N ₂ O in Full-Scale CANON Treating High-Ammonia Wastewater: Year-Long Monitoring, Isotope Evidence, and Carbon Footprint Analysis
S10.08 (pitcl)	<i>Alexandra Deeke</i>	NL	The Dutch acceleration program on nitrous oxide- a nationwide approach for mitigation of GHG's

S11 Process Intensification | Biofilms

S11.01	<i>Jan Dries</i>	BE	Smart Granules: sensor-based dynamic control of aerobic granular sludge treatment of industrial wastewater
S11.02	<i>Jelle Langedijk</i>	NL	Linking spatial fluorescence microscopy to mass transfer and nutrient removal in aerobic granular sludge
S11.03	<i>Neslican Uz Kurt Kaljunen</i>	FI	How Integrated Fixed-Film Activated Sludge Improves the Carbon Usage and Energy Balance of Municipal Wastewater Treatment Plants for Nutrient Removal
S11.04	<i>Baicang Liu</i>	CN	Nitrogen, phosphorous and carbon Bio-inspired removal and recovery solutions
S11.05	<i>Eugenio Giraldo</i>	US	First of its kind densified sludge selector and migrating carrier upgrade for biological nutrient removal
S11.06	<i>Dan Freedman</i>	NL	Continuous-Flow Densified Activated Sludge: Granule Mass Fraction Control Decouples aSRT, Sustaining Low-aSRT Nitrification at Full-Scale
S11.07 (pitcl)	<i>ÖZLEM KARAHAN ÖZGÜN</i>	TR	Optimization of carbon and nutrients recovery in an innovative water resource recovery plant configuration
S11.08 (pitcl)	<i>Khoa Nam Ngo</i>	US	Decoupling COD and Phosphorus Release while Mitigating Odor in Primary Sludge Fermenter through feed dilution

S12 Full-scale | Nitrogen Removal

S12.01	<i>Chengpeng Lee</i>	US	Mainstream Partial-Denitrification Anammox (PdNA) Startup: From Pilot-Scale Success to Full-Scale Implementation
S12.02	<i>Oriol Carbó</i>	ES	Towards energy neutral WWTPs: piloting HRAS, partial nitrification AGS and anammox
S12.03	<i>Wendell Khunjar</i>	US	Integrating Partial Denitrification–Anammox and Biological Selection-Driven Densification in a Full-Scale Continuous-Flow Facility Under Stringent Nitrogen Limits
S12.04	<i>Zhufang Wang</i>	UK	Impact of disturbed partial nitrification-anammox process on whole-process nitrogen removal and greenhouse gas emissions
S12.05	<i>Marc Spiller</i>	BE	Where are the low hanging fruits to reduce air emissions? Greenhouse gas and ammonia emissions of the Flemish wastewater system
S12.06	<i>Giuseppe Guglielmi</i>	IT	MABR for enhanced nitrification and total nitrogen removal: full-scale implementation at the Sjölanda WWTP
S12.07 (pitcl)	<i>Katie Printz</i>	US	Full-Scale Validation and Mechanistic Insights of Mobile Organic Biofilm (MOB) for Enhanced Nitrification
S12.08 (pitcl)	<i>Sakib Ahmad</i>	US	Improving Secondary Treatment Performance and Capacity with inDENSE: Insights from a Pilot-Scale Study

S13 N2O | Mechanistic Insights

S13.01	<i>Oona Kinnunen</i>	FI	Long-term nitrous oxide emissions and microbial community dynamics: Links to operational conditions at full-scale wastewater treatment plant
S13.02	<i>Nina Roothans</i>	NL	Long-term multi-meta-omics resolves the ecophysiological controls of seasonal N2O emissions during wastewater treatment
S13.03	<i>Laurence Strubbe</i>	CH	Operational evidence to switch on and off N2O production pathways
S13.04	<i>Akihiko Terada</i>	JP	Mechanisms of N2O production and nitrification activity in a membrane-aerated biofilm revealed by N2C microprofiling and 15N tracer analysis
S13.05	<i>Alessandro Alberti</i>	IT	OXYGEN PENETRATION DEPTH AS A TOOL TO PREDICT NITROUS OXIDE EMISSIONS FROM GRANULAR PARTIAL NITRITATION WASTEWATER TREATMENT SYSTEMS
S13.06	<i>Fabrizio Sabba</i>	US	From Microbes to Carbon Footprint: Linking Low-DO Nitrifier Adaptation with Greenhouse Gas Impacts in Full-Scale WRRFs
S13.07 (pitcl)	<i>Gnanaraj Augustine</i>	US	Machine Learning Based Prediction of Nitrous Oxide Emissions in Biological Wastewater Treatment using Multi-Decadal Datasets
S13.08 (pitcl)	<i>Alexandra Deeke</i>	NL	Low specific N2O emission from full-scale single stage granular sludge-based partial-nitrification-anammox reactors - Two case studies

S14 Process Intensification | Product Recovery

S14.01	<i>Lan Yu</i>	CN	Structural Evolution of Partial Denitrification- Hydroxyapatite (PD-HAP) Granules Enables Stable Nitrite Accumulation and High-Purity Phosphorus Recovery
S14.02	<i>Haydée De Clippeleir</i>	US	Lessons on Accelerating Fermentation: Hydrolysis and Kinetic Enhancements with Phosphorus Management
S14.03	<i>Jinsong Wang</i>	NL	Enrichment of polyhydroxyalkanoates (PHA) accumulating bacteria through uncoupled feeding of carbon and nitrogen
S14.04	<i>Yizhou Xing</i>	NL	When Growth Means Getting Bigger: Engineering Bioprocess Conditions for Concurrent PHA Storage and Selective Microbial Growth in Waste Activated Sludge
S14.05	<i>Albie Gan</i>	AU	LONG CHAIN LENGTH POLYHYDROXYALKANOATES AND THEIR IMPACT ON SIDESTREAM ENHANCED BIOLOGICAL PHOSPHORUS REMOVAL
S14.06	<i>Yuwei Huang</i>	CN	Sustaining phosphorus removal and recovery from wastewater effluent: The role of neutralization in iron oxide adsorbent regeneration
S14.07 (pitcl)	<i>Yuang Li</i>	US	One Step Closer to Intensification: Understanding Flocculent Settling in clarifiers via Image Analysis
S14.08 (pitcl)	<i>Miriam Tena</i>	ES	Enhanced Sludge Stabilization and Pathogen Reduction via Temperature-Phased Anaerobic Digestion (TPAD)

S15 Full-scale | Advanced Treatments

S15.01	<i>Yanyang Zhang</i>	CH	Pilot-Scale Phosphorus Polishing and Recovery from Municipal Wastewater Using Nano-Metal Oxides Confined in Millimeter-sized Polymeric Hosts: Performance, Impacts of Water Matrix and Sustainability
S15.02	<i>Dag Lorick</i>	SE	VARIABILITY IN SLUDGE BIOCHAR CHARACTERISTICS WHEN PYROLYSING SLUDGE FROM DIFFERENT WASTEWATER TREATMENT PLANTS AT DIFFERENT PYROLYSIS TEMPERATURE
1.03	<i>Merijn Picavet</i>	NL	Closing the Nitrogen Loop: Ammonia Recovery from Digestate and Centrate of THP Sludge Digestion Using AMFER® Technology
S15.04	<i>Kees Roest</i>	US	Circular fertilisers from sanitation, urban wastewater, and agri-food industry process water
S15.05	<i>Núria Zamorano-López</i>	ES	LIFE PRISTINE: an innovative solution for water reclamation towards new EU Urban Wastewater Directive challenges
S15.06	<i>Thomas Prot</i>	NL	Robust magnetic vivianite recovery from digested sewage sludge: Evaluating resilience to sludge dry matter and particle size variations
S15.07 (pitcl)	<i>Sylvain Donnaz</i>	CA	Studying the Impact of Densification Activated Sludge on Ultrafiltration Membrane Bioreactor at Full-scale
S15.08 (pitcl)	<i>Min Ye</i>	CN	Strategic allocation of organic matter to enhance denitrification coupled with anaerobic digestion and anammox for advanced nitrogen removal from food waste digestate

S16 N2O | Mechanistic Insights_2

S16.01	<i>Mohammad Azari</i>	DE	Nitrous Oxide Emission Dynamics from Various Partial Denitrification and Anammox (PD/A) Systems
S16.02	<i>Koko Kawaura</i>	AU	Mitigation of greenhouse gas emissions by immobilised nitrous oxide reducer <i>Dechloromonas denitrifica</i> using various entrapment matrices
S16.03	<i>Leon Downing</i>	US	Impact of carbon sources and dosing ratios on denitrification, nitrite accumulation and N2O dynamics in low DO BNR process
S16.04	<i>Benyamin Chahkandi</i>	PL	Mechanistic Modelling of N2O Dynamics in Aerobic Granular Sludge Sequencing Batch Reactors
S16.05	<i>Anna Katrine Vangsgaard</i>	DK	N2O removal by end-of-pipe treatment through catalytic abatement - a pilot scale study

S17 Process intensification | Novel Configurations

S17.01	<i>Tao Zhang</i>	BE	COMBINING OZONATION AND POWDERED ACTIVATED CARBON ADSORPTION FOR ORGANIC MICROPOLLUTANTS REMOVAL IN MUNICIPAL WASTEWATER TREATMENT PLANTS: SINGLE VERSUS TWO-REACTOR SYSTEMS
S17.02	<i>Dominika Derwis</i>	PL	The impact of sulfur transformations on nitrogen removal processes in systems with granular sludge
S17.03	<i>Manon Bechger</i>	NL	Removal of micropollutants and nutrients from municipal wastewater with ozone and granular activated carbon filtration at the wastewater treatment plant Horstermeer
S17.04	<i>Jiaxuan Huang</i>	CN	Enhanced Biological Nutrient Removal via Return Sludge Side-Stream Fermentation: Process Optimization and Mechanistic insight
S17.05	<i>Qingtao Liu</i>	CN	Strategic Feeding of Sludge Fermentation Liquid Achieves Sustained High-Rate Nitrite Accumulation by Redirecting Electron Flow: Insights into Microbial Selection and Metabolic Niche Differentiation in Denitrifiers

S18 Membrane-based Systems

S18.01	<i>Julian Sandino</i>	DK	It Started with a Beer: A Utilities Path to Implementing a Novel Disruptive Nutrient Removal Technology
S18.02	<i>Antonio Mineo</i>	IT	IFAS-MPBR for advanced wastewater treatment: performances and design guidelines toward Directive 3019/2024 compliance
S18.03	<i>Dongdong Xu</i>	AU	INTENSIFYING NITROGEN REMOVAL CAPACITY OF MEMBRANE BIOFILM REACTOR COUPLING N-DAMO AND ANAMMOX PROCESSES BY DOSING SIGNALING MOLECULES
S18.04	<i>Giorgio Mannina</i>	IT	Carbon and nutrient removal by dynamic membrane bioreactors including water reuse: an experimental study on optimisation of operational parameters
S18.05	<i>Mariska Ronteltap</i>	NL	Meeting the European Guidelines on Urban Wastewater Treatment and Water Framework Directive standards in a 2030 WWTP.

S19 Nitrogen | Novel Technologies

S19.01	<i>Bohan Yu</i>	BE	The mystery of sulfamox phenomenon in wastewater treatment – elementary reaction VS. complex reaction
S19.02	<i>Mengqi Zhu</i>	CH	Densified activated sludge: opportunities for the intensification of nutrient removal
S19.03	<i>Weiyi Wang</i>	JP	Three-dimensional structured carriers enhance the performance of hybrid anammox reactor: Start-up kinetics and granule–biofilm interactions
S19.04	<i>Ren Yong</i>	CN	Light Intensity Modulates Algal-Bacterial Granules: A Metagenomic View into Microbial Community Assembly, Algae-Bacterium-Virus Interplay, and Wastewater Treatment Performance
S19.05	<i>Anuska Mosquera</i>	ES	Impact of inorganic carbon availability on urea hydrolysis and partial nitrification for autotrophic nitrogen removal
S19.06	<i>Dario R. Shaw</i>	SA	Development of a partial nitrification-marine anaerobic ammonium oxidation (anammox) granular system for mainstream saline wastewater treatment
S19.07 (pitcl <i>Haixin Duan</i>)		BE	Labor-scale continuous-flow aerobic granular sludge system treating real industry wastewater: granulation mechanism and microbial succession
S19.08 (pitcl <i>Qingxian Su</i>)		CN	Coupled Biotic-Abiotic Dinitrogen Gas Production during Heterotrophic Nitrification by <i>Alcaligenes faecalis</i>

S20 Process intensification | Novel Configurations_2

S20.01	<i>Ling-Hang Li</i>	NL	Roles of Granules and Flocs in Nutrient Removal in Aerobic Granular Sludge Systems
S20.02	<i>Faruk Can</i>	IE	Investigation of nutrient recovery and transformation of cow manure into liquid organic fertiliser
S20.03	<i>Mark de Blois</i>	SE	Evaluation of Änggholmens new WWTP – Wastewater from fish processing industries as carbon source for denitrification
S20.04	<i>Yan Lu</i>	AU	Leveraging emerging C/N/S cycling to simultaneously remove dissolved methane, ammonium and sulfide anaerobically treated domestic wastewater
4.05	<i>Jaap Vogelaar</i>	NL	Paques: Anammox full scale
S20.06	<i>Johannes Reiter</i>	DE	Bacterial community shift and AOB adaptation to challenging process conditions: A case study on the nitrification of liquid pig slurry
S20.07 (pitcl <i>Vidisha Kasyap</i>)		US	Advancing Biological Nutrient Removal through Pure Oxygen Aeration, and Granule Formation-kinetics and microbial ecology
S20.08 (pitcl <i>Peter Baumann</i>)		DE	Impact of nutrient removal requirements under EU Directive 2024/3019 on large WWTP's in Baden-Wuerttemberg (Germany)

S21 GHG | The Broader Footprint

S21.01	<i>Yanjun Shao</i>	CN	High-Resolution Identification of CH ₄ Production and Emission Hotspots in Full-Scale Wastewater Treatment Plants
S21.02	<i>Milla Sieranen</i>	FI	FULL GREENHOUSE GAS EMISSION INVENTORY FROM AN ENHANCED NUTRIENT REMOVAL PLANT OVER LONG-TERM MONITORING CAMPAIGN
S21.03	<i>Haoran Duan</i>	AU	A System Level Redefinition of Net Zero in the Wastewater Industry
S21.04	<i>Sebastiaan van Veen</i>	NL	Determining the Environmental Impact of Nitrogen Side Stream Treatment and Recovery
S21.05	<i>Inge De Bo</i>	BE	Estimation of gaseous emissions from manure treatment facilities
S21.06	<i>Hanson Appiah-Twum</i>	BE	What are the trade-offs of meeting the updated Urban Wastewater Treatment Directive?
S21.07 (pitcl <i>Marthe de Graaff</i>)		NL	Greenhouse gas emissions from industrial wastewater treatment plants – results of measurement campaign and mitigation measures
S21.08 (pitcl <i>Xinyi Zhou</i>)		JP	Nitrous Oxide Emission and Nitrogen Transformation in Microaerobic Activated Sludge Process Treating Fermentation Wastewater

S22 Modelling | Process Optimization

S22.01	<i>Pieter Vlasschaert</i>	BE	Accelerating Decarbonization: Predictive Digital Twins for N2O Hotspot Identification and Mitigation in Water Reclamation Plants.
S22.02	<i>Mathieu Sperandio</i>	FR	Modelling control strategies of nitrifying biological aerated filter for mitigating N2O emission
S22.03	<i>Mudi Zhai</i>	AU	WaterRAG: An Agentic RAG to Support Water Industry Transitions to Net-Zero
S22.04	<i>Xu Zou</i>	HK	Rethinking waste management: Separate or integrated food waste and wastewater streams for global cities
S22.05	<i>Doğa Binay</i>	FI	Real-Time Monitoring of COD Fractionation to Support Greenhouse Gas Mitigation: A Digital Twin Approach at Viikinmäki WWTP
S22.06	<i>Wouter Maenhout</i>	BE	Digital Twins for Nitrogen Removal: Integrating Hybrid Modelling, MPC, Soft Sensor, and Day-Ahead Pricing in Utility Operations
S22.07 (pitcl <i>Otto Icke</i>		NL	Enhancing Effluent Quality, Reducing Emissions, and Saving Energy through Advanced Process Control in Wastewater Treatment
S22.08 (pitcl <i>Pengyu Li</i>		0	Environmentally Friendly and Sustainable Regulation of Wastewater Treatment Processes through the Integration of Mechanistic and Machine Learning Models

S23 Phototrophic Systems

S23.01	<i>Zilin Tian</i>	UK	Filamentous Microalgae and Multi-Community Dynamics and Nutrient Removal in Microalgae–Bacteria Reactors
S23.02	<i>Tânia Vasconcelos Fernandes</i>	NL	Photogranular technology: the role of microbial versatility in photogranules for optimized nitrogen and phosphorus recovery from wastewater
S23.03	<i>Elena Ficara</i>	IT	Combining autotrophic and heterotrophic microalgae culturing for the upcycling of nutrients in the liquid fraction of digestate
S23.04	<i>Emine Kayahan</i>	NL	Can Photogranules Breathe for Themselves? Modelling Oxygen Balance in Photogranules for Wastewater Treatment
S23.05	<i>Zhengang Xia</i>	SG	Intensified nitrogen removal and recovery from aquaculture wastewater under elevated salinity by integrating microalgal-bacterial consortia and membrane-aerated biofilm: A self-adaptation and synergistic interaction enhancement
S23.06	<i>Grazia Policastro</i>	IT	Start-up of a continuous tubular photobioreactor for the integration of anaerobic digestion with mixed culture microalgal cultivation
S23.07 (pitcl <i>Andrea Turolla</i>		IT	Model-based optimization towards scale-up of purple phototrophic bacteria mixed cultures
S23.08 (pitcl <i>EUGENIO MARÍN MARÍN</i>		ES	DEMONSTRATION-SCALE IMPLEMENTATION OF ANPHORA® FOR NUTRIENT RECOVERY IN MUNICIPAL WASTEWATER TREATMENT

S24 Bioelectrochemical Systems

S24.01	<i>Sebastià Puig</i>	ES	Power-to-Protein: Turning nutrient recovery into climate-resilient nutrition
S24.02	<i>Yu Luo</i>	CN	Near-field transient cavitation enables ultra-low-energy anaerobic mesh bioreactors for COD removal and methane recovery
S24.03	<i>Simona Pruiti</i>	NL	New insights into electrochemical phosphate removal and recovery
S24.04	<i>Wen Zhang</i>	US	Ammonia Recovery from Wastewater containing Nitrate and Ammonia using Integrated Electrochemical Membrane Flow Reactor
1.05	<i>David Fernández-Domínguez</i>	ES	Operational insights from the passive electrostimulation of an industrial ELSAR® reactor treating brewery wastewater
S24.06	<i>Han Zhang</i>	CN	Simultaneous removal of ammonia nitrogen, sulfamethoxazole, and antibiotic resistance genes in self-corrosion microelectrolysis-enhanced counter-diffusion biofilm system
S24.07 (pitcl <i>Irene Swaters</i>		US	Tube-in-tube Donnan dialysis reactors for sustainable nutrient recovery
S24.08 (pitcl <i>McKenzie Burns</i>		US	Bioelectrochemical approaches to nutrient recovery from high strength organic wastes

S25 Modelling | Mechanistic Insights

S25.01	<i>Tianwei Hao</i>	HK	Integrating transcriptomic data with metabolic model unravels the electron transfer mechanisms of <i>Methanosarcina barkeri</i>
S25.02	<i>Marit Verheijen</i>	NL	Predicting metabolic strategies and yield in mixed-substrate growth: a thermodynamics-based screening tool
S25.03	<i>Shuting Wang</i>	AU	Insights on Nitrous Oxide Representative Monitoring Locations from CFD-ASM-N ₂ O Simulation
S25.04	<i>Tanush Wadhawan</i>	FR	Modelling Partial-denitrification Anammox Process – Design and Operational Considerations
S25.05	<i>Daniel Peña-Torres</i>	FI	Multi-objective optimisation model applied to nutrient recovery pathways from digestate
S25.06	<i>Tobias Kaiser</i>	DE	Modelling the recovery from sloughing events in membrane aerated biofilm reactors – existence of multiple post-sloughing steady states
S25.07 (pitcl)	<i>Wim Audenaert</i>	BE	Accelerating the Adoption of Advanced Water Treatment: A Model-Centric Framework for Ozonation Reactor Design, De-risking, and Digital Twin Operation.
S25.08 (pitcl)	<i>Tugce Katipoglu-Yazan</i>	TR	Microbial Transition State (MTS) Approach for Modelling Acute Diclofenac Impact on Enriched Nitrificatio Systems, Insights from Metatranscriptomic Analyses

S26 Microbial Ecology

S26.01	<i>Ruizhe Pei</i>	AT	Hidden vitamin dependencies among nitrifiers in WWTPs
S26.02	<i>Iu Kong</i>	AU	Irreversible NOB Inhibition through Selective Gene Regulation under Complete Starvation Stress: Mechanistic Insights and Pilot-Scale Validation
S26.03	<i>Zijun Meng</i>	US	Partial DNRA as a Nitrite Provision Strategy for <i>Ca. Brocadia sapporoensis</i> in Low-DO Biofilm System.
S26.04	<i>Morten Dueholm</i>	DK	Using Genomic Tools to Explore the Exopolysaccharide Potential of Wastewater Bacteria for Sustainable Biomaterials
S26.05	<i>Claudia Etchebehere</i>	UY	Metagenomic insights from EBPR communities enriched from an industrial wastewater treatment reactor biomass
S26.06	<i>Maartje A.H.J. van Kessel</i>	NL	Unlocking the potential of comammox <i>Nitrospira</i> for sustainable wastewater treatment
S26.07 (pitcl)	<i>Dongdong Xu</i>	AU	MECHANICAL RESISTANCE OF HIGHER EPS CONTENTS IN LARGER GRANULES RESTRICTS ANAMMOX BACTERIAL GROWTH
S26.08 (pitcl)	<i>Hermes Bolivar Torres</i>	DE	Comparing and contrasting microbial taxonomy and function in two secondary wastewater treatment procedures

S27 Decentralized Systems

S27.01	<i>Johannes Jermakka</i>	FI	EU urban wastewater directive can act as a driving force for nutrient recycling through source-separation
S27.02	<i>Sudhir Pillay</i>	SA	Two Decades of Resource Recovery Sanitation: Case Studies from South Africa's Transition from Dry Sanitation to Water Efficient and Reuse Systems
S27.03	<i>Widya Iswarani</i>	NL	Ammonia and acid recovery from urine using two-phase bipolar membrane electrodialysis
S27.04	<i>Sharmistha Debnath</i>	BD	A Comparative Analysis of Greenhouse Gas Emissions from Non-Sewered Sanitation in Bangladesh
S27.05	<i>Njabulo Thela</i>	SA	From Proof of Concept to Proof of Scale: urine to fertilizer using reverse osmosis at pilot-scale
S27.06	<i>Tibo Roelants</i>	BE	Septic tanks as an overlooked source of methane emissions
S27.07 (pitcl)	<i>Tianlong Zheng</i>	O	Construction of Flexible Treatment Processes and Application for Decentralized Domestic Sewage Aimed Resource Reuse
S27.08 (pitcl)	<i>Haresh Dash</i>	IE	Techno-economic Analysis of N Recovery from Urine at a Multi-university Scale

NRR2026 | Poster Presentations

P01 Nitrogen, Phosphorous & Carbon

P01.01	<i>Xinying Zhang</i>	CN	Combined Stress of Antibiotics and Heavy Metals on Anammox: Responses and Recovery
P01.02	<i>Rahul Gautam</i>	FI	Ammonium-nitrogen recovery from digested sewage sludge reject waters by integrating a bioelectrochemical system and a membrane contactor
P01.03	<i>Olga Zajac</i>	PL	How aeration strategies shape nitrifiers activity and abundance: comparison of pure and hybrid moving bed technologies
P01.04	<i>Simon Bengtsson</i>	SE	A biofilm nitrification process combining post-treatment and treatment for rain weather peak flows
P01.05	<i>Xiaojing Zhang</i>	CN	Impact of Endocrine Disrupting Chemicals on Autotrophic Nitrogen Removal: Interactions, Transformation and Resulting Ecotoxicity
P01.06	<i>Weizhe XIA</i>	JP	An Innovative Partial-Denitrification–Anammox System for Efficient Mainstream Wastewater Treatment
P01.07	<i>César Huiliñir</i>	CL	IMPACT OF AERATION RATE AND NATURAL ZEOLITE ON NITRIFICATION PERFORMANCE, OXYGEN TRANSFER, AND MICROPOLLUTANT (IBP, DCF) REMOVAL IN SEQUENCING BATCH REACTORS
P01.08	<i>Luana Cruz</i>	BR	Operational Insights into Nitrogen Removal under Different Aeration Regimes in Aerobic Granular Sludge Reactors
P01.09	<i>Ruixin WU</i>	JP	Characterization and mechanisms of granular sludge flotation in a partial denitrification-anammox EGSB reactor under different nitrogen loading rates
P01.10	<i>Siyuan Zhai</i>	CN	Multiple electron-driven sulfamethoxazole (SMX) removal and nitrogen resource recovery from pharmaceutical wastewaters in a microbial electrochemical system (MES)
P01.11	<i>Jiashun Cao</i>	CN	Mechanisms of nitrogen removal in a pilot-scale anaerobic-swing-anoxic-oxic (ASAO) process with Ammonia vs NO _x (AvN) control system for treating low C/N municipal wastewater
P01.12	<i>Nabin Bogati</i>	IE	Comparison of Different Types of Electrodes in Single-Chamber Electro-Anammox Bioreactors for Better Diffusion and Extracellular Electron Transport
P01.13	<i>J Fan</i>	CN	High-rate nitrite production by stable denitrification granular sludge in a reinforced-mixing up-flow system: shift in spatiotemporal characteristics of functional bacteria and metagenomic mechanisms
P01.14	<i>Tomohide Watanabe</i>	JP	Effect of Overall Mass Permeability of an Electrode Assembly on Power Generation and Nitrogen Removal in Microbial fuel cell
P01.15	<i>Bin Liu</i>	CN	Temperature-resilient superior nutrients removal performances by coupling partial nitrification/anammox and iron-based denitrification with granular formation
P01.16	<i>Patricia Gutierrez</i>	BE	Beyond the CowToilet: stabilizing and biologically removing nitrogen from cow urine with a Rotating Biological Contactor
P01.17	<i>Paula van den Brink</i>	NL	BIOANODES FOR N ₂ O-FREE AMMONIUM CONVERSION
P01.18	<i>Emanuele Marino</i>	IT	LONG-TERM HYDROGENOTROPHIC DENITRIFICATION OF HIGH-NITRATE SYNTHETIC AND REAL WATER IN DUAL-RECIRCULATION UASB REACTORS.
P01.19	<i>Ronghua Xu</i>	CN	Combination of Sequencing Batch Operation and A/O Process to Achieve Partial Mainstream Anammox: Pilot-scale Demonstration and Microbial Ecological Mechanism
P01.20	<i>Shi Yuanyuan</i>	CN	Optimization of sludge retention time for rapid start-up and stable operation of high-rate partial nitrification in a continuous flow reactor treating municipal wastewater
P01.21	<i>Nur Adlin</i>	JP	Sponge Biofilm System for Nitrogen Recovery and Water Reuse in Tropical Closed RAS
P01.22	<i>Huanhuan Hu</i>	IE	Surface vacancy structure of iron sulfide critical to denitrification: A pivotal mechanism in nitrogen transformation

P01.23	<i>Edward Apraku</i>	US	Toward a Circular Nitrogen Bioeconomy: Integrating Biological and Physicochemical Approaches for Cyanophycin Recovery.
P01.24	<i>Lei Miao</i>	CN	Autotrophic biological nitrogen removal in algal-bacterial symbiosis system: formation and structure of integrated algae/partial-nitrification/anammox biofilm
P01.25	<i>Anjie LI</i>	CN	Simultaneous Urea Hydrolysis and Nitrification of Fresh Urine by Aerobic Granular Sludge for Efficient Ammonium Nitrate Recovery
P01.26	<i>Vitor Vilar</i>	PT	Advanced Treatment of Sidestream Digestate with NETmix Ozonation and Struvite Crystallization: A Dual Path Approach for Nutrient Recovery and Micropollutant Removal
P01.27	<i>Chuheng Xie</i>	CN	A Novel Biological Low Oxygen and High Activated Sludge concentration (Bio-LOHAS) Process for Low C/N Wastewater Treatment
P01.28	<i>Shiqiang (Nick) Zou</i>	US	Electrooxidation of Glyphosate and AMPA on Boron-Doped Diamond: Pathways for Phosphorus Mineralization and Nutrient Management
P01.29	<i>Guangze Guo</i>	DE	Advanced energy and phosphorus recovery of organic sludge by the integration of a high-solid AnMBR or hydroxyapatite-based PNA process
P01.30	<i>Shehani Maheepala</i>	JP	Unveiling nutrient removal performance and microbial community adaptation to effluent recirculation in Down-flow Hanging Sponge (DHS) reactors treating industrial wastewater
P01.31	<i>Luiza Sena</i>	PT	Continuous crystallisation of struvite from anaerobic digestion centrate in a Planar Oscillatory Flow Crystalliser: kinetic study and lab-scale optimisation
P01.32	<i>Siti Rozaimah Sheikh Abdullah</i>	MY	RECOVERING NUTRIENTS FROM AQUACULTURE EFFLUENT USING <i>Wolffia arrhiza</i> AS POTENTIAL FISH FEE
P01.33	<i>Meihui Tang</i>	CN	FeCl ₃ -Integrated PD/A process for municipal wastewater treatment: enabling synergistic nitrogen and phosphorus removal under carbon-limited and short-HRT conditions
P01.34	<i>Vitor Vilar</i>	PT	Magnesium Recovery from Desalination Brine for Sustainable Struvite Production in Wastewater Treatment Plants
P01.35	<i>Zhaoxu Peng</i>	CN	Utilization of gasified sludge slag as biofilm carriers to improve nutrients removal in wastewater treatment
P01.36	<i>Katarzyna Sytek-Szmeichel</i>	PL	Wastewater from houseboats as an emerging technological challenge for protecting lake water quality
P01.37	<i>Sandile Msimango</i>	SA	Synergistic Integration of Anaerobic, Nitrification and Sulphide-driven ANAMMOX (AnNSA) process for Domestic Wastewater Treatment
P01.38	<i>Öykü Yeşilbaş</i>	TR	Effect of Phosphorus Recovery with Iron Salts on PHA Storage Behaviour in Mixed Microbial Cultures
P01.39	<i>Francisco Rubio Rincon</i>	NL	Effect of temperature and cellulose on aerobic granular sludge
P01.40	<i>Keiichi KUBOTA</i>	JP	Effect of Anode Density on Sediment Remediation and Electrical Generation Performance by Sediment Microbial Fuel Cell
P01.41	<i>Reynel Martínez Castellanos</i>	ES	Performance of MBBR Technology for Organic Matter and Ammonia Removal from Real Pig Slurry Effluent
P01.42	<i>Pusker Regmi</i>	US	Biofilms on the Move: The Benefits of Biofilm at Low DO for Sustainable Nutrient Management
P01.43	<i>Mary Lusk</i>	US	Opening the biogeochemistry black box of urban stormwater ponds to understand their variable effectiveness for nutrient removal
P01.44	<i>Jehangir Bhadha</i>	US	Systems-inspired Phosphorus Mitigation Technologies to Improve Agricultural Water Quality in Florida, USA.

P01.45	<i>Xiaotian Zuo</i>	CN	Genome-centric metatranscriptomics uncover the active microbial guilds and mechanisms shaping metatranscriptomes of activated sludge microbiomes
P01.46	<i>Marcos Sales</i>	DE	Photogranules versus Aerobic Granular Sludge: comparative analysis of carbon and ammonia removal mechanisms during synthetic low-strength wastewater treatment
P01.47	<i>Steve Wirtel, P.E.</i>	US	Leveraging Algae to Provide Low Cost, Low Carbon Nitrogen and Phosphorus Removal and Recovery
P01.48	<i>Dagnija Grabuza</i>	LV	DEVELOPMENT AND EVALUATION OF INTEGRATED PROTOTYPES FOR PHOSPHORUS REMOVAL IN SURFACE WATER SYSTEMS
P01.49	<i>Tevhide Erusta</i>	TR	Performance of Sludge Fermentation at Neutral pH
P01.50	<i>Francisco Jesus Fernandez Morales</i>	ES	Enrichment nutrient removal organisms in alternating anaerobic/aerobic reactor for nutrient removal from wastewater
P01.51	<i>Shaoping Luo</i>	CN	Enhanced partial Denitrification and Phosphorus Removal Using Sulfur-Iron Composite Fillers
P01.52	<i>Marvin John Uy</i>	KR	Application of a Biodiversity-Based Ecosystem Service Index in a Constructed Wetland in South Korea
P01.53	<i>Emma Paterson-Stephens</i>	UK	MABR Technology for Biological Process Intensification: The UK's First Two Full-Scale Installations
P01.54	<i>Tamara Vobruba</i>	AT	Integrating Resource-Oriented Water and Nutrient Management into Sustainable Food Systems
P01.55	<i>Biao Yang</i>	CN	Study on primary enhanced low-carbon treatment process and organic matter capture efficiency based on covalently bound hybrid coagulants (CBHyC)
P01.56	<i>Islam Elhabib</i>	MY	Rhizobacteria-assisted Phytoremediation of <i>Ludwigia octovalvis</i> for Nutrient Removal and Microplastic Degradation in Landfill Leachate
P01.57	<i>Izharul Farooqi</i>	IN	Optimization of Electrocoagulation Parameters for the Removal of Ortho-phosphate and COD from Slaughterhouse Wastewater
P01.58	<i>Mahshid Sedghi</i>	PT	Energy-Efficient Phototrophic Biofilm-Based Water Reclamation and Nutrient Recovery
P01.59	<i>Gustavo Riveros</i>	CL	Beyond land application: A review of nutrient recovery technologies from biogas digestate for sustainable fertilisation.
P01.60	<i>Desly Kalonga</i>	ZM	Modular Duckweed Systems for Wastewater and Resource Recovery
P01.61	<i>Lina Wu</i>	CN	Resource Recovery Mechanism and Circular Economy Potential of the UASB-A/O-ANAOR System in Landfill Leachate Treatment
P01.62	<i>Israa Al-Baldawi</i>	IQ	Lab-scale Application of Coagulation–Flocculation for Treatment of Fish Farm Effluent
P01.63	<i>Saskia Hanneman</i>	NL	Vivianite, a mineral that contains phosphorus, can be 'mined' from municipal wastewater sludge.
P01.64	<i>Joao Bassin</i>	BR	Tertiary Nitrification of Oil Refinery Wastewater in Moving Bed Biofilm Reactors: Biofilm Development and Operational Stability
P01.65	<i>Martijn Croese</i>	NL	The metabolism of an anoxic respiring polyphosphate accumulating organisms
P01.66	<i>Aias Lima</i>	PT	Assessment of market ready technologies for phosphorus recovery from wastewater, sewage sludge and ashes

P02 Greenhouse Gases & the Broader Footprint

P02.01	<i>Siddharth Seshan</i>	NL	Long-Term Nitrous Oxide Monitoring in Full-Scale Aerobic Granular Sludge Systems: Insights from Utrecht WWTP
P02.02	<i>Jana Scheynen</i>	BE	Step by Step: N2O Mitigation from AGS-Cultivating Sequencing Batch Reactors through the Step-feed Operational Mode
P02.03	<i>Alexandre Galí</i>	ES	Design and development of innovative business models to foster sustainable management across the livestock manure value chain.
P02.04	<i>Peter Griffiths</i>	AU	A POTENTIAL BIOCHEMICAL PATHWAY FOR NITROUS OXIDE PRODUCTION FROM NITRITE DURING ACTIVATED SLUDGE TREATMENT
P02.05	<i>Ziping Wu</i>	AU	Nitrous Oxide Emissions from a Hybrid MABR under Intensified Operating Conditions
P02.06	<i>Barth Smets</i>	CN	Searching for N2O respiring bacterial catalysts to mitigate N2O emissions from WWTPs
P02.07	<i>Xinyue Cao</i>	CN	Mechanistic insights into nitrous oxide production in a full-scale high-ammonia CANON plant: linking biological and abiotic pathways
P02.08	<i>Anna Katrine Vangsgaard</i>	DK	N2O removal by end-of-pipe treatment through catalytic abatement - a pilot scale study
P02.09	<i>Juntong Leng</i>	IE	Phase-Specific Nitrous Oxide Dynamics and Microbial Mechanisms in a Partial Nitrification IASBR
P02.10	<i>Phillip Pedros</i>	US	Reduction of Nitrous Oxide (N2O) Emissions from Biological Nutrient Removal Processes by Thermal Decomposition
P02.11	<i>Nick Ivens</i>	NL	MITIGATION OF NITROUS OXIDE EMISSIONS IN WWTPS: LINKING THEORETICAL KNOWLEDGE WITH PRACTICAL INVESTIGATIONS AT DUTCH WATER AUTHORITY HHSK
P02.12	<i>Johanna Geesey</i>	BE	Dynamic (de)nitrifiers: N2O emission response of AGS to changing COD/N ratios and water temperatures
P02.13	<i>Sheng Zhou</i>	CN	Reduction of methane emission from paddy field by planting water-saving and drought-resistance rice with less irrigation water

P03 Pilot & full-scale

P03.01	<i>Yuichi Ito</i>	JP	Novel Ammonia Nitrogen Sensor with Ultrasonic Cleaning and Its Full-scale Evaluation in Conventional Activated Sludge and Nereda® System
P03.02	<i>Jorge García</i>	ES	Managed aquifer recharge as low-cost and nature-based tertiary treatment for urban wastewater.
P03.03	<i>Ariane Berthet</i>	NL	Suspended Ion Exchange® for Ammonium Removal in a Wastewater Treatment Plant– A Pilot Study.
P03.04	<i>Tânia Silva</i>	PT	From Waste to Resource: Circular Ammonia Recovery from Landfill Leachates using Degassing Membrane Technology
P03.05	<i>Matías Rivadulla</i>	ES	CAMELLIA®: coupling hygienisation of sewage sludge, anaerobic digestion and energy integration by an innovative anaerobic digestion technology
P03.06	<i>Carolina Galán Franco</i>	MX	Healing Wastes: Pilot-Scale Transformation of Maize-Lime Cooking Process into Hydroxyapatite and Treated Water
P03.07	<i>Leon Downing</i>	US	Emissions, Energy, and Performance: Low Energy BNR at Full Scale
P03.08	<i>Chengpeng Lee</i>	US	A Quantitative Comparison of Dissolved Oxygen and Ammonia-Based Aeration Control Strategies in a Full Scale Biological Nutrient Removal System
P03.09	<i>Sakib Ahmad</i>	US	Uncertainty in Clarifier Capacity Quantification Limits Process Intensification
P03.10	<i>Giacomo Rizzardi</i>	IT	Towards robust anoxic granules in fully anaerobic/anoxic SBR: development and assessment of treatment potential of real wastewater
P03.11	<i>JUAN GURRUCHAGA</i>	ES	Experimental analysis of nitrification and denitrification dynamics and treatment capacity for leachate
P03.12	<i>Marc Nijboer</i>	NL	Re-activating a saturated woodchip bioreactor: nitrate removal efficiency and side-effects of restarting after prolonged inactive periods
P03.13	<i>Bert Bundervoet</i>	NL	Pilot-Scale Phosphorus Recovery as Struvite from Digested Sludge Centrate Using the UPHOS® Technology
P03.14	<i>Rafael Chasles</i>	BZ	São Paulo, Brazil Drought Plan
P03.15	<i>Sander Wingelaar</i>	NL	Actors' perception of economic and environmental benefits driving the implementation of resource recovery in wastewater treatment plants in the state of Sao Paulo, from a Multi-Level Perspective
P03.16	<i>maaike Hoekstra</i>	NL	A greenfield wwtp addressing water challenges in treating wastewater in the 21st century
P03.17	<i>Pongsak Noophan</i>	TH	Comparisons of Nitrogen Removal Efficiencies and Microbial Communities of Partial Nitrification and Anammox Processes among Laboratory-Scale and Two Full-Scales (New Taipei Taiwan and Metro Water Recovery Facility, Denver, CO, USA)
P03.18	<i>Sudhir Pillay</i>	SA	Wastewater and Faecal Sludge Beneficiation in South Africa: Barriers, Opportunities, and Case Insights
P03.19	<i>Farrukh Basheer</i>	IN	Design, Simulation and Pilot Scale Study for Treatment of Slaughterhouse Wastewater (Nutrients) Using Aerobic Granular Sludge Reactor
P03.20	<i>Matías Rivadulla</i>	ES	Resource recovery in WWTPs: linking partial nitrification-anammox and struvite for fertilizers production

P04 Value-added Products

P04.01	<i>Gilberth Alfaro-Álvarez</i>	CR	Assessment of the safety and characterization of sewage sludge from a Municipal WWTP for composting use
P04.02	<i>Pavithra Pari</i>	IN	Enhancing Biogas Production from Food Organics and Garden Organics (FOGO) through Pretreatment Strategies
P04.03	<i>Yasemin Akdag</i>	TR	Comparative assessment of nutrient and valuable product recovery from <i>Spirulina platensis</i> and <i>Chlorella sorokiniana</i> cultivated in dairy wastewater
P04.04	<i>Wen Zhang</i>	US	Waste-to-Catalyst: Energy-Neutral Copper Recovery and Nitrate Reduction Using a Self-Filtering Al/Cu ²⁺ Galvanic Cell
P04.05	<i>Wentao TANG</i>	HK	Metabolic model-guided succinic acid recovery by <i>Yarrowia lipolytica</i>
P04.06	<i>DOGLAS MMASI</i>	TZ	Suitability of treated FS using <i>Jatropha curcas</i> on unplanted sand drying beds for agricultural use in Dar e Salaam, Tanzania
P04.07	<i>Kashif Rasool</i>	QA	Synergistic Optimization of Gas-Liquid Mass Transfer to Enhance Methane Oxidizing Bacteria Based Single Cell Protein Production
P04.08	<i>Nur 'Izzati Ismail</i>	MY	Integrating bioagglutination in circular aquaculture systems for resource recovery
P04.09	<i>Hao Sheng</i>	CN	Upcycling sewage sludge into anammox seeds via in situ nitrate-driven oxidation
P04.10	<i>Doyoung Kweon</i>	KR	Integrated Phosphorus and Organic Acid Recovery from Organic waste via Magnetically Separable Viviani Formation
P04.11	<i>Sultan Shaikh</i>	QA	Scalable Purple Non-Sulfur Bacteria Treatment of Fuel Synthesis Wastewater Using Treated Sewage Effluent as a Nutrient Source
P04.12	<i>Sultan Shaikh</i>	QA	Scalable Purple Non-Sulfur Bacteria Treatment of Fuel Synthesis Wastewater Using Treated Sewage Effluent as a Nutrient Source
P04.13	<i>Andrea Acosta Figueredo</i>	BE	Development and Evaluation of the High-Rate Granular Sludge (HiGS) Technology for Enhancing Resource Recovery from Wastewater
P04.14	<i>Indrajit Chakraborty</i>	IN	Integrated Nutrient Recovery and Bioproduct Generation from Microalgae under different mode of growths
P04.15	<i>AbdulAzeez Shobajo</i>	CZ	Phosphogypsum Valorisation in Anaerobic Digestion Enhances Digestate Nutrient Quality and Seedling Vigor
P04.16	<i>Duygu MUTLU YUCEL</i>	TR	A Holistic Approach to Produce Lactic Acid as a PLA Precursor from Sugar Industry By-products
P04.17	<i>Hao Sheng</i>	CN	Upcycling sewage sludge into anammox seeds via in situ nitrate-driven oxidation
P04.18	<i>Wen Zhang</i>	CN	Zero-Energy, Capillarity-Gravity Self-Filtration System: A Sustainable and Ultra-Low Cost Solution for High Efficiency Microalgae Removal
P04.19	<i>Carlos Ramos</i>	ES	Nutrients recovery from treated urban wastewater by nanofiltration and reverse osmosis membranes
P04.20	<i>Indrajit Chakraborty</i>	IN	Conversion of invasive water hyacinth into value-added biochar to benefit circular nutrient management and crop productivity
P04.21	<i>Sridhar Pilli</i>	IN	Optimization of Poultry Wastewater Treatment for Enhanced Biogas Production using Ultrasonication
P04.22	<i>Sini Reuna</i>	FI	Application of nutrients from wastewater treatment plant in industrial processes

P05 Microbial Ecology

P05.01	<i>Yi Liu</i>	CN	Sponge Iron as an Indirect Fe Source to Drive NDFO and Couple with Feammox for Autotrophic Advanced Nitrogen Removal
P05.02	<i>Sri Laxma Senthilnathan</i>	SE	Phage–Host Dynamics and Bioreactor Function in Nitrifying Sequencing Batch Reactors
P05.03	<i>Xiaofei Gong</i>	CN	Root Exudates Recruit Beneficial Microbes to Promote Anammox-Driven Nitrogen Cycling in Wetland
P05.04	<i>Hojun Kim</i>	KR	Enrichment of Fe(III)-Driven Anaerobic Methane and Ammonium Co-oxidizing Microbial Consortium and Its Metagenomic Insights for Carbon-Neutral Wastewater Treatment
P05.05	<i>Faiza Salsabilla</i>	ID	Microbial-Assisted Phytomining: Exploring Indigenous Bacteria to Enhance Metal Bioavailability and Uptake from Red Mud
P05.06	<i>cailong nie</i>	CN	Microscale niche differentiation and metabolic division of labor enhance the oxygen resilience of anammox consortia
P05.07	<i>Shiyi Liu</i>	ES	Characterization of cold-adapted nitrifying communities from a WWTP: metagenomic insights and enrichment culture studies
P05.08	<i>Tingxia Liu</i>	IE	Ecological Engineering of r/K-Selected Microbial Strategies to Enhance Anaerobic Propionate Degradation
P05.09	<i>Sukhwan Yoon</i>	KR	Fluctuations in ammonia-oxidizing bacteria biomass density as a potential driver of seasonal variations in N ₂ O emissions from activated sludge nitrification
P05.10	<i>Dongqi Huang</i>	CN	Mechanistic elucidation of microbial thioresdoxin systems via machine learning-guided molecular dynamics
P05.11	<i>Jiapeng Li</i>	CN	Diversifying Nitrogen Removal Pathways in A/O Process Treating Low C/N wastewater via Creating Various Living Niches for Functional Bacteria
P05.12	<i>Songkai Qiu</i>	CN	Functional microbial competition and evolution driven by increased COD/N and reduced temperatures in mainstream partial nitritation-anammox
P05.13	<i>Nan Zhang</i>	CN	Microalgae growth in reclaimed wastewater treatment plants: an unneglectable water security issue
P05.14	<i>Susan Hansen</i>	DK	MiDAS: Field Guide to the Microbes of Water Resource Recovery Facilities - "Know your microbes!"

P06 Decentralized & Oligotrophic

P06.01	<i>Joseph Lybik</i>	US	Experimental and model results from an optimized ammonium bicarbonate precipitation reactor using hydrolyzed urine for CO ₂ sequestration
P06.02	<i>Caitlin Courtney</i>	SA	Metabolomic insights into balancing the oxidation of endogenous organics and macronutrient recovery from human urine treated with Fenton's reagent
P06.03	<i>Zulkarnaini Zulkarnaini</i>	ID	Enhancing effluent quality of multi-stage anaerobic digestion of tofu wastewater through struvite precipitation using seawater as a magnesium source
P06.04	<i>Konstantinos Tsamoutsoglou</i>	BE	Advanced Nutrient Recovery from Digested Sludge via Struvite Precipitation
P06.05	<i>Scarlet-Marie Kilpatrick</i>	US	Assessing the Potential for Nitrogen and Phosphorus Removal, Recovery, and On-site Reuse with a Diatom-Dominated Water Treatment Wetland
P06.06	<i>Enrica Uggetti</i>	ES	Constructed Wetlands for decentralized sludge management: Biosolid Valorisation and Comparative Techno-Economic Analysis
P06.07	<i>EUGENIO MARÍN MARÍN</i>	ES	Improving Drinking Water Quality: Pilot Evaluation of Filter Media for Iron and Manganese Removal in Rural Groundwater
P06.08	<i>Marco D'Eugenio</i>	IT	Development of iron-modified alginate beads for the sustainable removal of phosphate from wastewater and their potential use as a slow-release fertiliser
P06.09	<i>Chengyu Xiao</i>	HK	UNDERSTANDING THE GLOBAL DISTRIBUTION OF GROUNDWATER SULFATE AND ASSESSING POPULATION AT RISK
P06.10	<i>Sergi Durán-Videra</i>	ES	WWTPs as sustainable source for nutrients and biostimulants recovery
P06.11	<i>Xingyang He</i>	CN	Study on an Intermittent Jet Aerated Biofilm Process and Morphological Changes of Nitrogen Transformation
P06.12	<i>Md Tashdedul Haque</i>	SK	Multifunctional Benefits of Decentralized Small-Scale NbS for Climate Change Adaptation in Highly Urbanized Areas
P06.13	<i>Adriano Tonetti</i>	BR	Using Spatial Analysis Tools to Support Sanitation System Planning in Rural Areas
P06.14	<i>Adriano Tonetti</i>	BR	Determination of the ideal and unique size for septic tanks used in rural communities

P07 Mathematical Modelling

P07.01	<i>Shuting Wang</i>	AU	A Novel Long-term Oxygen Transfer Efficiency (OTE) Prediction Method using a Kolmogorov-Arnold Network (KAN) based Hybrid Modelling Approach
P07.02	<i>Manel Garrido Baserba</i>	US	Optimizing Mainstream Partial Denitrification-Anammox Through Advanced Control Strategies: Multi-Site Demonstration Across Diverse Process Configurations
P07.03	<i>Jia-Qiang Lv</i>	CN	Machine Learning-Driven Prediction and Control System for Practical Application of Sulfur Autotrophic Denitrification Biofilters
P07.04	<i>Jin Wang</i>	FR	Zero-dimensional and one-dimensional modeling of hybrid densified sludge process
P07.05	<i>Vitor Vilar</i>	PT	Modelling of Struvite Precipitation in NETmix for Nutrients Recovery: Study of the Influence of Mesh Refinement on Micromixing
P07.06	<i>Giacomo Bellandi</i>	BE	Chemical Dosing Optimization in a Large Industrial WRRF: Dynamic and CFD Modelling to Boost Implementation and Sustainability.
P07.07	<i>Valiallah Amirian Mojarad</i>	BE	Toward energy-neutral and carbon-efficient treatment of carbon-poor low-strength sewage: Model-base evaluation of partial nitrification–denitrification–anammox (PaNDA)
P07.08	<i>Ralitza Nikolova-Kuscu</i>	UK	Balancing Compliance and Sustainability: Modelling for Total Nitrogen Reduction for UK Water Utility
P07.09	<i>Güçlü Insel</i>	TR	LINKING BIOKINETIC PARAMETERS TO PROCESS EFFICIENCY, ENERGY AND RESOURCE RECOVERY IN WASTEWATER TREATMENT PLANTS
P07.10	<i>Cristopher Da Silva</i>	BE	MONOD MODEL-BASED KINETIC AND DIFFUSIVITY STUDIES IN NITROGEN REMOVAL BIOFILMS

P08 Novel Technologies

P08.01	<i>Jana Font</i>	ES	Solid-state fermentation as an innovative technology for biostimulant production: Biowaste valorisation
P08.02	<i>Zehao Li</i>	BE	Microbial community and granulation dynamics in aerobic granular reactors, fast or slowly fed with simple or complex synthetic influents
P08.03	<i>Maite Pijuan</i>	ES	Single-Cell Protein Production by Enriched Methanotrophic Cultures under Variable Gas Atmospheres and Nitrogen Sources
P08.04	<i>Shelby Hackenburg</i>	US	BFF: A Novel Coupling of Bioelectrochemical Systems with Fungal Fenton Activity for Synergistic Degradation of Recalcitrant Organics
P08.05	<i>Ramesh Goel</i>	US	Reactive Migrating Carriers for Process Intensification and Micropollutant Management in Biological Nutrient Removal Systems
P08.06	<i>Xiuhong Liu</i>	CN	Nitrogen and phosphorus removal and interactions between algae and bacteria during algal-bacterial granular sludge formation and stabilization
P08.07	<i>Veronica Baldasso</i>	FI	Optimization of liquid digestate treatment to enhance downstream nutrient recovery
P08.08	<i>Jingqiu Sun</i>	CN	Enhanced Humic Acid Removal via Floc-based Dynamic Membrane for High-salinity Water Treatment
P08.09	<i>Jordan Landis</i>	US	Developing Slow- and Controlled-Release Fertilizers from Urine-Derived Struvite that Eliminate Microplastic Release into Soils
P08.10	<i>Hui Pan</i>	IE	Auto-floating microalgae granules: A game-changer for wastewater treatment and biomass harvesting
P08.11	<i>Tao Liu</i>	HK	Efficient metal removal from digested sludge and supernatant by nitrification-driven acidifying leaching and denitrification-driven alkalizing precipitation
P08.12	<i>Riccardo Lo Coco</i>	IT	Recovery of nitrogen-based salts from anaerobic reject water using an Open&Closed-loop membrane contactor system
P08.13	<i>Sining ZHOU</i>	CN	Mechanistic and metagenomic understanding of a three-dimensional electrode biosystem for anaerobic digestion of lipid-rich pharmaceutical wastewater
P08.14	<i>Wen Zhang</i>	US	Synchronous electrosynthesis and separation of ammonia and chlorine from waste brine streams via a stacked membrane-free electrolyzer
P08.15	<i>Yue Yin</i>	UK	Quantum-Inspired Modelling of DO-Regulated Nutrient Allocation via Energy–Electron Coupling in enhanced biological phosphorus removal
P08.16	<i>Wen Zhang</i>	US	Interfacial heating membrane distillation for advancing sustainable desalination: Challenges in Energy Metrics, Durability, and Scale-Up
P08.17	<i>Fangang Meng</i>	CN	Development of Fermentation and Respiration Bioprocesses for Nitrogen Removal Complying with Microbial Catabolism