PEOPLE 2026 Conference Program

November 23–25, 2026 | Virtual Conference | Version: 11222026

All times are Newfoundland Standard Time (NST, UTC−03:30). Oral slots include 12 minutes for the presentation and 3 minutes for questions.

Co-hosted with the 2026 Atlantic Symposium of the Canadian Association on Water Quality.

- 🎓 Student presenter

This program is subject to change. Please refer to the latest version for updates.

Program at a glance

Date	Time (NST)	Sessions and Highlights
Monday November 23	8:00 AM–5:00 PM	8:00–8:10 AM Welcome 8:10–8:30 AM Opening remarks, Dr. Bing Chen and Dr. Baiyu Helen Zhang 11:00 AM–12:00 PM Indigenous Engagement Workshop, Dale Booth 12:30–1:00 PM Keynote speech, Dr. Kenneth Lee
Tuesday November 24	8:00 AM–5:00 PM	11:00–11:45 AM Poster session
Wednesday November 25	8:00 AM–4:30 PM	11:30 AM–12:00 PM Keynote speech, Dr. Katherine Wilson 3:30–4:10 PM Social trivia 4:10–4:30 PM Awards and closing remarks by Dr. Baiyu Helen Zhang

Monday November 23

Time (NST)	Sessions and Presentations	Presenter and Affiliation
8:00–8:10 AM	Welcome	
8:10–8:30 AM	Opening Remarks	Dr. Bing Chen Director, PEOPLE Network Memorial University Dr. Baiyu Helen Zhang President, Canadian Association on Water Quality (CAWQ) Memorial University
8:30–9:15 AM	**Emerging Contaminants in Cold Regions (1) -- PFAS and Contaminants in Ice**	**Chair:** Xing Song Memorial University **Co-chair:** Min Yang Queensland University of Technology
8:30–8:45 AM	Seasonal Ice Shapes Microplastic Fate through Selective Entrapment and Changes in Particle Behavior after Thawing	**Zhikun Chen** Queen's University
8:45–9:00 AM	The First Survey of Legacy and Emerging per- and Polyfluoroalkyl Substances (PFAS) in Hulun Lake, China: Occurrence, Sources, and Environmental Impacts	**Jie Li** Shandong University
9:00–9:15 AM	PFAS Release and Risk-Based Prioritization in A Maritime Glacier	**Feng Jiang** Zhejiang Normal University
9:15–9:30 AM	Break	
9:30–10:45 AM	**Technical Solutions & Mitigation (2) -- Oxidation and Electrochemical Treatment**	**Chair:** Chunjiang An Concordia University **Co-chair:** Hongyi Li Memorial University
9:30–9:45 AM	The Overlooked Microscale: Rethinking Confinement in Photocatalytic Oxidation	**Runbo Yuan** Memorial University
9:45–10:00 AM	Electrochemical Technologies for Emerging Contaminant Removal and Byproduct Control in Wastewater Treatment	**Kaichao Yang** University of Science and Technology of China
10:00–10:15 AM	Activation of Peroxymonosulfate by Transition Metal-Loaded Biochar for the Degradation of Antibiotics in Water	**Chuanbin Wang** Guangdong University of Technology
10:15–10:30 AM	Synergistic Mitigation of Antibiotic Resistance via Solid Waste-Derived Single-Atom Catalysts and Light-Triggered Defect-Engineered Zr-MOFs	**Wang Chao-Yang** Chinese Academy of Agricultural Sciences
10:30–10:45 AM	Phosphorus-Regulated Ni Single-Atom/Cu Nanocluster Cathode Coupled with an Oxygen-Rich Ti/SnO_2 Anode for Efficient Electrochemical Degradation of Norfloxacin	**Hong Zhu** Beijing University of Agriculture
10:45–11:00 AM	Break	
11:00 AM–12:00 PM	**Indigenous Engagement Workshop**	**Dale Booth**

Time (NST)	Sessions and Presentations	Presenter and Affiliation
12:00–12:30 PM	Mid-day Break	
12:30–1:00 PM	**Keynote Speech** Reprioritizing Scientific Research to Support Emergency Preparedness and Response in an Era of Environmental Change, Decarbonization, and AI Expansion	**Dr. Kenneth Lee** Kenneth Lee Research Inc.
1:00–1:15 PM	Break	
1:15–2:15 PM	**Emerging Contaminants and Other (3) -- Oil Fate and Spill Remediation**	**Chair:** Nayereh Saborimanesh Natural Resources Canada **Co-chair:** Xing Song Memorial University
1:15–1:30 PM	Formation and Distribution of Emerging Fuel-Sediment Aggregates in Nearshore Aquatic Environments	**Lei Shen** Natural Resources Canada / University of Northern British Columbia
1:30–1:45 PM	Marine Biodegradation of Wood Pyrolysis Oil under Weathering and Chemical Dispersion: Transformation Pathways, Aggregate Formation, and Residual Toxicity	**Hongyi Li** Memorial University
1:45–2:00 PM	Fate of Fuel Oils in Sediment-Water Systems under Simulated Arctic Conditions	**Julia Orlova** Natural Resources Canada
2:00–2:15 PM	Effect of Biosurfactant-Magnetic Biochar Composite Ratios for the Removal of Weathered Crude Oil in Cold-Water Marine Shoreline Sediments	**Sayed Mohammad Nasiruddin** University of Northern British Columbia
2:15–2:30 PM	Break	
2:30–3:45 PM	**Emerging Contaminants in Cold Regions (4) -- Microplastics, Contaminant Fate and Toxicity**	**Chair:** Zhikun Chen Queen's University **Co-chair:** Fang Fang Memorial University
2:30–2:45 PM	Mechanism of Additives and Polymers Interaction during Microplastic Ozonation: Implications for Effluent Quality	**Anran Wang** Memorial University
2:45–3:00 PM	An Eight-Shape Framework for Selective Microplastic Retention in Water Treatment Residuals	**Jianfei Chen** University of Regina
3:00–3:15 PM	Acute Fish Toxicity Prediction for Terpenes and Terpenoids: A Clustering-Guided QSAR Approach	**Hongyang Ye** Memorial University
3:15–3:30 PM	Nontargeted Analysis with Machine Learning Method Revealing New Chlorinated Byproducts of Tire-Leaching Compounds and Their Formation Pathways during Water Chlorination	**Jenny Chau** University of Alberta
3:30–3:45 PM	Transient Encapsulation during Start-up Shapes EPS Restructuring and Aerobic Granular Sludge Responses to Aged Microplastic Stress	**Seyed Hesam-Aldin Samaei** University of Regina
3:45–4:00 PM	Break	

Time (NST)	Sessions and Presentations	Presenter and Affiliation
4:00–5:00 PM	**Technical Solutions & Mitigation and Other (5) -- Biological Treatment and Resource Recovery**	**Chair:** Wenxi Liao University of Guelph **Co-chair:** Runbo Yuan Memorial University
4:00–4:15 PM	Effects of Solids Retention Time on Curdlan and Xanthan Biosynthesis in Aerobic Granular Sludge Systems	**Rebecca Vesuwe** University of Northern British Columbia
4:15–4:30 PM	Thermal Performance and CO2 Fixation of Microalgal Photobioreactors in Cold Marine Climates	**Sahar Goudarzi** Memorial University
4:30–4:45 PM	Curdlan Biosynthesis in Aerobic Granular Sludge (AGS): A Review of Evidence and Prospects for Brewery Wastewater Application	**Shagbaor Amool** University of Northern British Columbia
4:45–5:00 PM	Fabrication of Modified Thin Next-Generation Nano-Composite Tubular Geopolymeric Membrane for Sustainable Lithium Recovery from Oil and Gas Produced Water	**Amir Naveed** University of Alberta

Tuesday November 24

Time (NST)	Sessions and Presentations	Presenter and Affiliation
8:00–9:15 AM	**Monitoring, Modeling & Sampling (6) -- Environmental Modeling and Assessment**	**Chair:** Min Yang Queensland University of Technology **Co-chair:** Tingyi Wei Memorial University
8:00–8:15 AM	A Life Cycle Framework for Environmental Screening of Artificial Intelligence	**Yanzhi Fan** Hainan Tropical Ocean University
8:15–8:30 AM	Multiscale Two-Phase Model to Simulate PFAS Retention and Leaching in Deformable Unsaturated Soils	**Yanhao Ning** Nanyang Technological University
8:30–8:45 AM	Safety Assessment and Digital Optimization of Yellow River Levees: A Case Study of the Jinan Reach	**Xianfeng Meng** Shandong Yellow River Surveying and Design Institute Co., Ltd.
8:45–9:00 AM	A Process-Based Bayesian Analysis of Air-Sea CO2 Exchange in the South China Sea	**Xinrui Mu** Hainan Tropical Ocean University
9:00–9:15 AM	Hydrogeological Heterogeneity Shapes the Occurrence and Distribution of Nitrosamines in Groundwater of the Pearl River Delta, China	**Wenwen Chen** Guilin University of Technology
9:15–9:30 AM	Break	
9:30–10:45 AM	**Ecological & Health Impacts, Monitoring and Other (7) -- Soil, Ecotoxicology and Hydrology**	**Chair:** Huifang Bi Concordia University **Co-chair:** Fang Fang Memorial University
9:30–9:45 AM	National Modelling with Multisite Cascading Calibration Improves Gridded Daily Discharge and Flow Characteristics across China	**Kaikui Cai** Peking University
9:45–10:00 AM	Antibiotic Resistance Genes in the Soil–Plant System under Manure Fertilization	**Qing Zhao** Chinese Academy of Agricultural Sciences
10:00–10:15 AM	Lysine-Mediated Modulation of Florfenicol Uptake, Translocation, and Phytotoxicity in Rice Seedlings under Integrated Irrigation-Aquaculture	**Tianming Zheng** Guangdong University of Technology
10:15–10:30 AM	Litter C/N Ratio Mediates Forest Soil Carbon Stabilization: Mechanism Exploration	**Kang Ma** Chinese Academy of Environmental Planning
10:30–10:45 AM	Stoichiometric Thresholds of Bacterial-to-Fungal Ratios Drive Microbial Assembly and Life-History Strategies Affecting Nutrient Metabolism in Long-Term Fertilized Croplands	**Moran Tang** Chinese Academy of Agricultural Sciences
10:45–11:00 AM	Break	

Time (NST)	Sessions and Presentations	Presenter and Affiliation
11:00–11:45 AM	**Virtual Poster Session**	**Judge:** Masoumeh Bavadi Memorial University **Judge:** Lee Britton Environment and Climate Change Canada
	Polycyclic Aromatic Hydrocarbons Sediment Accumulation from Rabigh, Saudi Arabia, Red Sea Coast: Sources and Environmental Potential Health Risks	**Ammar Bakheet** King Abdulaziz University
	Characteristics of Microplastics in Reykjavik Harbor Seawater	**Imtezer Miah** University of Iceland
	ASEAN Low-Carbon Development Pathways: An Integrated Methodological Framework	**Shasha Tian** Tongji University
	Rain-on-Snow Events and Seasonal Snow Persistence in the Gandaki Basin, Nepal: An Event-Based Assessment of Cryosphere-Climate Interactions	**Amit Adhikari** Swami Vivekanand Subharti University
	Environmental Concentrations of PFOS Accumulate in the Euglena Eyespot and Impair Chloroplast ATP Synthase Activity: A Dual Impairment of Phototaxis and Photosynthetic Light Reactions	**Junfeng Wang** Zhejiang University of Technology
	Plastic-Induced Photo-Oxidation of Mn(II) at the Water-Plastics Interfaces	**Mingyang Song** Washington University in St. Louis
	Fixed Heating Calendars in Warming Climate: Seasonal Misalignment of PM2.5 Compliance across China's Heating Zone	**Huanzhi Wang** Chinese Academy of Environmental Planning
11:45 AM–12:00 PM	Mid-day Break	
12:00–1:15 PM	**Monitoring, Modeling & Sampling (8) -- PFAS, Microplastics and Field Methods**	**Chair:** Alice Zhu Memorial University **Co-chair:** Anran Wang Memorial University
12:00–12:15 PM	Detecting PFAS Using Electrochemical Methods: A Rapid and Cost-Effective Alternative to Conventional Analysis	**Caroline Kupczyk** Queen's University
12:15–12:30 PM	Engineering Framework for Assessing and Quantification of Microplastics in Surface Water Sediment in Quebec	**Hong Guan** Concordia University
12:30–12:45 PM	Occurrence of Polybrominated Diphenyl Ethers and Their Associations with Microbial Communities in the Canadian Arctic	**Xing Song** Memorial University
12:45–1:00 PM	Selective Removal and Transformation of Dissolved Organic Matter in Moroccan Wastewater Treatment Plants: Insights from UV-Vis Spectroscopy, EEM-PARAFAC and Chemometric Analysis	**Omar Taoussi** University of Moulay Ismail / Université de Sherbrooke
1:00–1:15 PM	Environmental Microplastic Analysis: Linking Sample Preparation and Spectral Preprocessing to Machine Learning Performance	**Enze Cai** University of Regina
1:15–1:30 PM	Break	

Time (NST)	Sessions and Presentations	Presenter and Affiliation
1:30–2:30 PM	**Technical Solutions & Mitigation (9) -- Biological Systems and Clean Energy**	**Chair:** Christian Ortiz-Lopez Université Laval **Co-chair:** Hongjie Wang Memorial University
1:30–1:45 PM	Fungal-Bacterial Granules Enhance Nitrification Resilience through Biomass Retention under Ammonium Loading Stress	**Parnian Mojahednia** University of Regina
1:45–2:00 PM	Valorization of Aluminum-Based Water Treatment Residual for Environmental Remediation: Progress, Barriers and Pathways toward Practical Adoption	**Francis Osei Asibey** University of Regina
2:00–2:15 PM	Reinforcement Learning Based Optimization of Water and Wastewater Treatment for Energy and Greenhouse Gas Reduction: A Systematic Review	**Elaf Seif** McMaster University
2:15–2:30 PM	Intelligent and Reliability-Constrained Operation of a High-Renewable Microgrid to Reduce Diesel Dependence in Natuashish, NL, Canada	**Chinyere Blessing Frank** Memorial University
2:30–2:45 PM	Break	
2:45–3:45 PM	**Technical Solutions & Mitigation (10) -- Water Treatment and Spill Remediation**	**Chair:** Masoumeh Bavadi Memorial University **Co-chair:** Runbo Yuan Memorial University
2:45–3:00 PM	Eco-Friendly Washing-Agent-Assisted Techniques for Removing Oil from Contaminated Shorelines	**Huifang Bi** Concordia University
3:00–3:15 PM	Evaluating the Effectiveness of O2 and O3 NBs in Mitigating BFs and MPs in Premise Plumbing Systems	**Hamdu Ibrahim** Queen's University
3:15–3:30 PM	Electrode Potential Control Improves Greywater Treatment Performance While Limiting Dissolved Oxygen Depletion	**Shabnam Sharifyazd** University of Victoria
3:30–3:45 PM	Magnetic Biochar for Emulsified Oil Treatment in Cold Saline Water: Separation Performance and Post-Treatment Water Quality	**Wei Deng** University of Northern British Columbia
3:45–4:00 PM	Break	
4:00–5:00 PM	**Technical Solutions & Mitigation and Other (11) -- Treatment and Environmental Systems Optimization**	**Chair:** Zoe Li McMaster University **Co-chair:** Tingyi Wei Memorial University
4:00–4:15 PM	Temperature-Dependent Ammonia Stress and Organic Loading Thresholds in Dry Anaerobic Digestion of Nitrogen-Rich Swine Manure: Implications for Cold-Climate Manure Management	**Manita Tumbahangphe** Concordia University / Agriculture and Agri-Food Canada
4:15–4:30 PM	Cost-Efficient Wind Speed Forecasting for Cold-Region Microgrids: A Multi-Site Evaluation of Interpretable Hybrid Machine Learning across Canada	**Emmanuel Omo-Ikerodah** Memorial University
4:30–4:45 PM	Nature-Based Solutions for Water Quality Improvement: Integrating Meta Data Analysis of Collected Data and Watershed Modeling Using SWAT+	**Chowdhury Mohammad Toufiq Amin** The University of Texas at Arlington

Time (NST)	Sessions and Presentations	Presenter and Affiliation
4:45–5:00 PM	Engineering Volatile Fatty Acids (VFAs) Production from Aerobic Granular Sludge (AGS): Process Intensification, Carbon Steering, and Biorefinery Opportunities	**Glory Adujah** University of Northern British Columbia

Wednesday November 25

Time (NST)	Sessions and Presentations	Presenter and Affiliation
8:00–8:45 AM	**Technical Solutions & Mitigation and Other (12) -- Composting, Cold Soils and Wastewater**	**Chair:** Hongbing Dan Memorial University **Co-chair:** Hongjie Wang Memorial University
8:00–8:15 AM	Water-Salt Migration and Deformation Response of Sulfate Saline Soil during Freezing under Overburden Pressure	**Dongjun Hu** Lanzhou Jiaotong University
8:15–8:30 AM	Alternating Electric-Field-Enhanced Aerobic Composting and Its Effects on Functional Genes Associated with Greenhouse-Gas Mitigation	**Wuyang Zhao** Chinese Academy of Agricultural Sciences
8:30–8:45 AM	Dual Marangoni Convection Enhanced 3D Spiral Evaporator for Simultaneous Efficient Steam Generation and Organic Pollutants Degradation	**Dongfeng Yang** Dalian Maritime University
8:45–9:00 AM	Break	
9:00–9:45 AM	**Cryosphere and Monitoring (13) -- Airborne Contaminants, Microplastics and Ecotoxicity**	**Chair:** Fang Fang Memorial University **Co-chair:** Hongbing Dan Memorial University
9:00–9:15 AM	Mechanical Abrasion of Plastic Nurdles: Effects of Agitation, Size and Temperature	**Yawen Huang** Concordia University
9:15–9:30 AM	Impact of Environmental Pollutants on Carbon Fixation in Microalgal Photobioreactors: A Comparative Perspective between Wastewater and Productivity-Driven Systems	**Xueyan Xu** Memorial University
9:30–9:45 AM	Spatiotemporal Patterns and Transport of Wildfire Aerosols across Canada In 2023	**Yueyu Su** Concordia University
9:45–10:00 AM	Break	
10:00–11:15 AM	**Policy, Governance & Management and Ecology (14) -- Policy, Arctic Contaminants and Community Impacts**	**Chair:** Alice Zhu Memorial University and Dalhousie University **Co-chair:** Fang Fang Memorial University
10:00–10:15 AM	Assessing the Influence of Shoreline Armouring on Erosion Rates along Adjacent Low-Relief Sandstone Coasts	**Walter Rischke** University of Prince Edward Island
10:15–10:30 AM	Local and Indigenous-Led Monitoring of Migratory Species: Participation, Authority, and Decision-Making	**Krista Tremblett** McGill University
10:30–10:45 AM	Emerging Contaminants in Shipboard Wastewater from Arctic Shipping: Sources, Occurrence, Treatment, and Regulations	**Hongbing Dan** Memorial University
10:45–11:00 AM	When Do Green Roof Subsidies Work? an Interpretable Machine Learning Assessment of Toronto's Eco-Roof Incentive Program	**Shuyan Wan** Concordia University
11:00–11:15 AM	Working at the Edge of the World: Seafarers' Perspectives on Occupational Health and Safety in Canadian Arctic Shipping	**Maung Maung Ye Zin Zin** Memorial University

Time (NST)	Sessions and Presentations	Presenter and Affiliation
11:15–11:30 AM	Break	
11:30 AM–12:00 PM	**Keynote Speech**	**Dr. Katherine Wilson** SmartICE
12:00–12:30 PM	Mid-day break	
12:30–1:45 PM	**Technical Solutions & Mitigation (15) -- Sustainable Materials and Emissions**	**Chair:** Xiujuan Chen The University of Texas at Arlington **Co-chair:** Xing Song Memorial University
12:30–12:45 PM	A Conceptual Framework for Measuring Scope 3 Emissions Using Agentic AI	**Iman Nosoohi** Memorial University
12:45–1:00 PM	A pH-Switchable Silane Modified Graphene Oxide Adsorbent for Efficient Biodiesel Spill Recovery and Reuse	**Hongjie Wang** Memorial University
1:00–1:15 PM	Quantification of Greenhouse Gas Emissions from Spring Wheat and Winter Wheat Production in Prince Edward Island, Canada: An Eco-District Scale Analysis	**Muhammad Umair Ashraf** University of Prince Edward Island
1:15–1:30 PM	Life Cycle Environmental Risks and Pollution Prevention of Spent Lithium-Ion Batteries in Coastal Island Communities	**Ziyu Wang** Concordia University
1:30–1:45 PM	A Comprehensive Review of Near-Infrared Reflective (NIR) Coatings Technology Applications for Asphalt Roads in Cold Regions	**Zhili Wang** University of Ottawa
1:45–2:00 PM	Break	
2:00–3:15 PM	**Ecological & Health Impacts and Technical Solutions (16) -- Health, Monitoring and Infrastructure**	**Chair:** Xing Song Memorial University **Co-chair:** Hongbing Dan Memorial University
2:00–2:15 PM	From Community Structure to Functional Activity: Environmental Genomics of Arctic Freshwater Sediment Microbiomes Near Inuvik	**Christopher Weisener** University of Windsor
2:15–2:30 PM	Vitamin B9 Regulates Bacterial Mercury Methylation by Geobacter sulfurreducens PCA	**Fang Fang** Memorial University
2:30–2:45 PM	The Disinfection Dilemma: Disinfection Byproduct Formation, Occurrence, and Health Risks in Ready-to-Eat Vegetables	**Garrett Grubisa** University of Alberta
2:45–3:00 PM	An Integrated Model for Wastewater-Based Epidemiological Surveillance Utilizing Deep Learning Techniques	**Tingyi Wei** Memorial University
3:00–3:15 PM	CFD Assessment of Single-Phase Direct-to-Chip Liquid Cooling for Energy-Efficient and Low-Carbon Data Centers	**Amirreza Mogharrebi** Memorial University
3:15–3:30 PM	Break	
3:30–4:10 PM	Social Trivia	
4:10–4:30 PM	Awards and Closing Remarks	Dr. Baiyu Helen Zhang President, CAWQ Memorial University