

Symposium Schedule

Time	Event	Location
8:30 am	Gather Space Opens	
8:50 – 9:00 am	Opening Remarks: Professor Roland Cusick	Keynote Room
9:00 – 9:55 am	Keynote Speaker: Professor Pratim Biswas - Aerosol Science and Engineering and the COVID-19 Issue	Keynote Room
9:55 – 10:00 am	Transition Break	
10:00 – 11:00 am	Poster Presentation Session 1	Poster Room 1
11:00- 12:00 pm 11:00- 11:20 am 11:20 –11:40 am 11:40 –12:00 pm	Podium Session 1A <u>Samuel Aguiar</u> : <i>UIUC Department of Civil and Environmental Engineering</i> - Plantwide Implications of Low Yield Struvite Precipitation and Fines Washout <u>Xinyi (Joy) Zhang</u> : <i>UIUC Department of Civil and Environmental Engineering</i> - QSDsan: An Integrated Platform for Quantitative Sustainable Design of Sanitation and Resource Recovery Systems under Uncertainty – Process Modeling and Beyond <u>Haoran Yu</u> : <i>UIUC Department of Civil and Environmental Engineering</i> - Spatiotemporal Variability of Oxidative Potential of PM2.5 in the Midwest United States	Presentation Room A
11:00 –12:00 pm 11:00- 11:20 am 11:20 –11:40 am 11:40 –12:00 pm	Podium Session 1B <u>Yanina Nahum</u> : <i>University of Notre Dame</i> - Using Shear Rheometry and Image Analysis to Study Effectiveness of Biofilm Disruptors <u>Bumkyu Kim</u> : <i>University of Notre Dame</i> - Effects of Extracellular-Polymeric Substances (EPS) on the Performance of Membrane Bioreactors <u>Emily Clements</u> : <i>University of Notre Dame</i> - Effect of Temperature on Nitrifying Membrane Aerated Biofilm Reactors	Presentation Room B
12:00 – 1:00 pm	Networking/Lunch	
1:00 – 2:00 pm	Poster Presentation Session 2	Poster Room 2
2:00 – 3:00 pm 2:00 – 2:20 pm 2:20 – 2:40 pm 2:40 – 3:00 pm	Podium Session 2A <u>Sarang S. Bhagwat</u> : <i>UIUC Department of Civil and Environmental Engineering</i> - Sustainable Production of Acrylic Acid via 3-Hydroxypropionic Acid from Lignocellulosic Biomass <u>Charles Graham</u> : <i>University of Purdue Department of Environmental Engineering</i> - Removal of Per- and Polyfluoroalkyl Substances (PFAS) in Point-of-Use (POU) Activated Carbon and Membrane Filtration Systems <u>Hsin-Yin Yu</u> : <i>University of Purdue Department of Environmental Engineering</i> -Removal of Assimilable Organic Carbon in Activated Carbon and Reverse Osmosis Water Filtration Systems	Presentation Room A
2:00 – 3:00 pm 2:00 – 2:20 pm 2:20 – 2:40 pm 2:40 – 3:00 pm	Podium Session 2B <u>Katherine Crank</u> : <i>University of Notre Dame</i> - From Theory to Practice: Expanding the Quantitative Microbial Risk Assessment Framework <u>Brooke Stemple</u> : <i>University of Notre Dame</i> - Biogeochemistry of the Antrim Shale Natural Gas Reservoir <u>Sudheer Salana</u> : <i>UIUC Department of Civil and Environmental Engineering</i> - Development of a Semi-Automated Instrument to Measure the Cellular Reactive Oxygen Species (ROS) Activity of Ambient Particulate Matter	Presentation Room B
3:00 – 3:10 pm	Transition Break	
3:10 – 4:10 pm	Keynote Speaker: Dawn Taffler - Integrated Water Management; Saving the World ONE @ a time	Keynote Room
4:10 – 4:20 pm	Announcement of Results and Prizes	Keynote Room
4:20 – 4:30 pm	Closing Remarks: Professor Sotiria Koloutsou-Vakakis	Keynote Room

Poster Session Break-Down

Poster Session 1 – 10:00-11:00 am Poster Presenters 1-14	Poster Session 2 – 1:00-2:00pm Poster Presenters 15-28
1. <u>Chamteut Oh</u> - A New Method of concentrating Viruses for Wastewater-Based Epidemiology	15. <u>Runsen Ning</u> - A Molecular Approach to Remove Lead from Drinking Water
2. <u>Gemma G Clark</u> - Efficacy of Point-of-Use Filters Used Beyond the Recommended Lifetime	16. <u>Shadiyar Smagulova</u> - Smart Grid for Energy Saving
3. <u>Sydney Gard</u> - Disinfection Kinetics of Echovirus 12 with Free Chlorine at High pH	17. <u>Kathleen Martinez</u> - A Review of the Contamination and Remedial Processes for the Former Champaign Manufactured Gas Plant
4. <u>Tessa Clarizio</u> - Predicting Regional Air Quality and Climate Impacts of Future Agricultural and Land Use Change Scenarios in the Midwest United States	18. <u>Devin North</u> - Evaluation of Viral Concentration Methods for Enteric and Pathogenic Viruses in Wastewater
5. <u>Hannah Lohman</u> - Overcoming the Barriers of Resource Recovery Sanitation: Analyzing the Interdisciplinarity of the Sanitation Field	19. <u>Kristin Anderson</u> - The Use of Plasma-Based Water Treatment on the Removal of Pharmaceutical Compounds
6. <u>Weiqi Ni</u> - Novel Covalent Organic Framework (COF) Thin-Film Composite Nanofiltration Membrane for Effective Removal of Organic Compounds from Petroleum Produced Water	20. <u>Qianlu Zheng</u> - Electrical Double Layer of Ionic Liquid on Graphene Electrode
7. <u>Shion Watabe</u> - Implications of Financing Mechanisms on the Relative Economic Sustainability of Sanitation Technologies in Underserved Communities	21. <u>Joseph V. Puthussery</u> - Influence of Episodic Events on the Oxidative Potential of Ambient Particulate Matter in Delhi, India
8. <u>Yixiang Wang</u> - Contribution of Fe and Organic Compounds to Cellular Oxidative Potential (OP) of PM2.5 Collected in Midwestern United States.	22. <u>Taylor Stephen</u> - Integrating a Chemical Precipitation Model into QSDsan – An Open-Source Platform for the Design and Evaluation of Resource Recovery Technologies
9. <u>Yichen Lyu</u> - A Review: Intelligent IoT Systems for Traffic Management: A Practical Application	23. <u>Dalton Stewart</u> - Incorporation of Policy Incentives and Other Location-Specific Parameters into BioSTEAM for the Techno-Economic Analysis of Biorefineries
10. <u>Yifei Bi</u> - Removal of Manganese and Uranium in Tap Water with Point-of-Use Filtration Systems	24. <u>Kenneth Ruffatto</u> - Mapping the National Phosphorus Recovery Potential from Wastewater Treatment Plants and Corn Biorefineries
11. <u>Gus Greenwood</u> - Why Do Liquids Slip on Graphene? Effects of Layering and Supporting Substrate Underneath Graphene	25. <u>Dinaz Kureishy</u> - Uncovering the Link Between Land Use and Water
12. <u>Trevor Gresham</u> - Microalgae-Based Biorefineries for Wastewater Resource Recovery	26. <u>Emmanuel Kayiwa</u> - Understanding the Impact of Organometallic Redox Polymer Electrode Fabrication and Cycling Conditions on Stability and Selective Separation of Oxyanion Pollutants
13. <u>Wen Cong</u> - Mechanistic Study of Coxsackievirus and Adenovirus Inactivation by Chlorine and Aptamer-Nanopore Sensor Development	27. <u>Aijia Zhou</u> - Virus Detection in Sewage Water by One-Step qPCR
14. <u>Yuehao Shi</u> - Inactivation Of Adenovirus Serotype 41 With Monochloramine	28. <u>Marcel Briguglio</u> - Review and Recent Developments of the Community Multiscale Air Quality (CMAQ) Model