

27th Annual Environmental Engineering and Science Symposium Schedule

Time	Event	Location
8:15 am	Registration desk opens - Breakfast buffet available until 9:00 am	Hydro 1 st floor
8:50 – 9:00 am	Opening Remarks: Prof. Rosa Espinosa-Marzal	Hydro 1017
9:00 – 10:00 am	Keynote Speaker¹: Prof. Bruce W. Fouke (Prof. Verma introduces)	Hydro 1017
10:00 – 11:00 am	Poster Session 1 (Moderators: Zhiqian Han, Zhengmiao Jia)	Hydro 1 st floor
10:30 am – noon	Workshop: Yalin Li et al., The QSDsan Platform: Open-Source Tools for Quantitative Sustainable Design and Decision-Making of Sanitation and Resource Recovery Systems	Hydro 3019
11:00 am – noon 11:00 am 11:20 am 11:40 am	Podium Session 1A (Moderators: Chunghyeon Han, Zhiqian Han) Oh Chamteut - Plant-derived polyphenols: a sustainable alternative to inactivate enteric viruses Molitor Hannah - Intensive Mixed Community Microalgal Cultivation for Nutrient Recovery from Municipal Wastewater Yus Joaquin - Promoting natural coral growth using hydraulic lime substrates with inorganic additives	Newmark 1311
11:00 am – noon 11:00 am 11:20 am 11:40 am	Podium Session 1B (Moderators: Ruchitha Birawat, Yongjian Ma) Yang Xiaokai - Multi-phase chemistry surrogate modeling with elemental mass conservation using a Neural ODE Wang Shiyuan - Global disparities in PM2.5 exposure caused by consumption of goods and services Kumar Joshin - Correcting for biases in filter-based aerosol light absorption measurements at the ARM Southern Great Plains site	Newmark 2312
12:00 – 1:00 pm	Lunch	Bridge
1:00 – 2:00 pm	Poster Session 2 (Moderators: Ruchitha Birawat, Aman Kaushik)	Hydro 1 st floor
2:00 – 3:00 pm 2:00 pm 2:20 pm 2:40 pm	Podium Session 2A (Moderators: Alankrita Sahay, Kaifeng Xie) Ruffatto Ken - National inventory of phosphorus recovery potential from centralized infrastructure: a comparison of corn ethanol biorefineries and water resource recovery facilities Ye Quanhui - A magnetic nanoplatform to construct innovative bio-nano hybrid materials for sustainable resources recovery Bhagwat Sarang - Sustainable Production of Acrylic Acid via 3-Hydroxypropionic Acid from Lignocellulosic Biomass	Newmark 2311
2:00 – 3:00 pm 2:00 pm 2:20 pm 2:40 pm	Podium Session 2B (Moderators: Shreshtha Bangar, Zhengmiao Jia) Puthussery Joseph - Real-time measurement and source apportionment of five different endpoints of the oxidative potential of ambient particulate matter at an urban site Pavizhakattumadom Saptharishi Ganesh Subramanian - Assessing the influence of human-related activities on generation of indoor aerosols and their potential contribution to fomites Shetty Nishit - Measuring light absorption by freshly emitted organic aerosols: optical artifacts in traditional solvent-extraction-based methods	Newmark 3310
3:05 – 4:05 pm	Keynote Speaker¹: Dr. Jess Brown (Prof. Snoeyink introduces)	Newmark 1310
4:10 – 4:25 pm	Announcement of Prizes: Symposium Student Executive Committee	Newmark 1310
4:25 – 4:30 pm	Closing Remarks: Dr. Sotiria Koloutsou-Vakakis	Newmark 1310

¹ Title and abstract at the Symposium website: <https://publish.illinois.edu/2022-environmentalsymposium/keynote-speaker/>

Poster Sessions

Poster Session 1 – 10:00-11:00 am Poster Presenters 1-20	Poster Session 2 – 1:00-2:00 pm Poster Presenters 21-39
<ol style="list-style-type: none"> 1. Liu Yicen - The Impacts of Aerosol Mixing State on N₂O₅ Reaction Probability 2. Kaushik Aman - Comparative study on air quality status in Indian and Chinese cities before and during the COVID-19 lockdown period 3. Li Yurui - Enhancing electrosorption capacity and electrode longevity for selective arsenic removal through electrodeposition of ferrocene polymer coatings 4. Clark Gemma - Effects of point-of-use filters and stagnation on drinking water quality 5. Jia Zhengmiao - Evaluating the Possibility of achieving Efficient Seawater Desalination by Electrodialysis (ED) 6. Han Zhiqian - Several new solutions for metal pollution 7. Yongjian Ma - Review of chemical precipitation methods to remove heavy metal ions from industrial wastewater 8. Han Chunghyeon - A Review: Evaluation of Degradation of Perfluoroalkyl Substances through Plasma-based Water Treatment Process 9. Deptula Alex - Probing Interfacial Structural Dynamics of Glassy Gels for Engineering Porous Media 10. Greenwood Gus - Tuning Nanoscale Friction at the Graphene Interface Using an FET-Like Device 11. Fu Binxin - Nanoscale Insight into the Relation between Pressure Solution of Calcite and Interfacial Friction 12. Zhang Xuhui - Correlation between Nanorheological and Nanotribological Behavior of Ionic Liquids 13. Li Linkun - Biometric antifouling: An environmentally friendly way of conducting vessel antifouling 14. Cong Wen - Comparative study of Cocksackievirus and Adenovirus Inactivation by Chlorine Disinfection 15. Mao Yuqing - Whole-genome sequencing of Salmonella enterica to understand its transmission during a flood event in a rural area 16. Bangar Shreshtha - Impact of COVID-19 lockdown on ambient air quality in 9 indian mega cities 17. Birawat Ruchitha Kamlesh - Biodegradation of polyethylene terephthalate using microbial consortia 18. Cortes-Pena Yoel - Techno-Economic and Life-Cycle Implications of Integrating Cellulosic Ethanol Production and Seasonal Oilsorghum Processing at an Oilcane Biorefinery 19. Stewart Dalton - Incorporation of Policy Incentives and Other Location-Specific Parameters into BioSTEAM for the Techno-Economic Analysis of Biorefineries 20. Kim Ga-Yeong - Algae process modeling 	<ol style="list-style-type: none"> 21. Kudli Lavanya Prashantkumar - Techno-Economic Analysis and Life Cycle Assessment of Sustainable Azelaic Acid Production from oleic acid 22. Kwon Jiheon - Sustainability 23. Shah Shaival - Delineating groundwater recharge potential areas applying GIS techniques in Surat City (SMC), India 24. Park Manho - Accelerating air quality modeling with an advection surrogate model 25. Xie Kaifeng - Using Algal Biochar to Mitigate Greenhouse Gas Emissions in Agricultural 26. Hunter Hope - Aerosol composition in the Arctic 27. Salana Sudheer - PM_{2.5} induced cytotoxicity: Role of ROS and Glutathione Depletion 28. Li Jingyu - Developing hydrogel-based substrates to improve coral larvae settlement and coral growth 29. To Lane - Modeling fecal sludge pyrolysis for biochar production in an Omni Processor 30. Sahay Alankrita - Biochar for resource recovery 31. Emaminejad Aryan - Application of Bio-electrochemical Sensors for Carbon Monitoring at Water Resource Recovery Facilities: A Statistical and Microbial Analysis Approach 32. Aguir Samuel - Nutrient Recovery 33. Lohman Hannah - Elucidating the impact of locality-specific factors on sanitation system sustainability and decision-making 34. Zhang Xinyi - QSDsan: An Integrated Platform for Quantitative Sustainable Design of Sanitation and Resource Recovery Systems 35. Lee Ming Jun - Surface Structure Modulation of Agarose-Poly(acrylamide-co-acrylic acid) Double Network Hydrogels 36. Zheng Qianlu - Influence of ion specificity and water uptake on the electrical double layer of graphene-ionic liquid 37. Chaudhari Hrutuja - Analytical modeling for design of floating treatment wetlands as a sustainable technology for wastewater purification. 38. Kumar Aditi - Sustainability of Ion-Exchange Water Treatment Technology 39. Zhou Aijia - SARS-COV-2 detection in wastewater