Environmental Engineering & Sciences

Department of Civil and Environmental Engineering

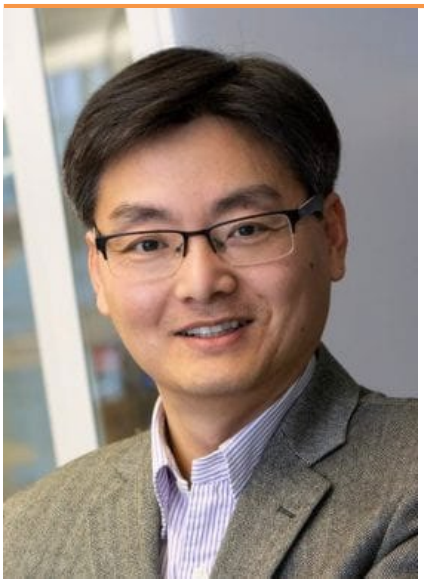
CEE 595AG Seminar

Friday, April 27, 2023 | 10:00 – 10:50 a.m. CST | 3310 Yeh Center

"New" Resource Recovery from Wastewater through Technological Advancement

Rapid socio-economic growth has created great challenges such as water scarcity, larger nutrient demand for increasing food production, and energy shortage. Wastewater is a key element in the water-energy-food nexus and may offer a promising solution for alleviating these challenges through innovative recovery of value-added resources. It is of great interest to transform conventional energy intensive wastewater treatment to a resource recovery process for reclaiming valuable resources such as nutrients, bioenergy derived from organic wastes, and high-quality water towards wastewater reuse. Those valuable resources are considered "NEW resources" (Nutrient-Energy -Water) and urge the development of cost-effective reclamation technologies through innovative research.

Guest Speaker



Prof. Zhen "Jason" He, PhD, F. IWA, F. WEF

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Dr. Zhen (Jason) He is the Laura & William Jens Professor of Environmental Engineering at Washington University in St. Louis. Prior to that, he was a Professor/Associate Professor at Virginia Tech and an Assistant Professor at University of Wisconsin – Milwaukee. He received a BS from Tongji University, a MS from Technical University of Denmark, and a PhD from Washington University in St. Louis, all in Environmental Engineering. His research focuses on technological solutions for resource recovery from wastes/wastewater. He has published more than 250 journal papers and received 3 US patents. He was recognized by a Walter L. Huber Civil Engineering Research Prize, Green Talent (BMBF, Germany), a 2018 Highly Cited Researcher, and Dean's Award for Research Excellence at Virginia Tech. He is the Editor in Chief for both Journal of Hazardous Materials and Water Environment Research. In 2020, he was named a Fellow of International Water Association (IWA). In 2022, he was elected a Fellow of Water Environment Federation (WEF).