Rachel Brennan, Ph.D., P.E. is a Professor of Environmental Engineering at The Pennsylvania State University, and holds a Courtesy Appointment in Agricultural and Biological Engineering. She earned her M.S. and Ph.D. in Environmental Engineering from the University of Illinois at Urbana-Champaign and is a licensed Professional Engineer in the state of Pennsylvania. Dr. Brennan’s expertise is in the development and application of water treatment technologies to protect human health and the environment. She currently leads several large research and education initiatives for solving sustainability challenges at the water-energy-food (WEF) nexus in developed and developing communities with an emphasis on reducing greenhouse gas emissions and reversing global warming. Students working with Dr. Brennan’s research group leverage the power of engineered and natural ecosystems to develop strategies to purify water from complex waste streams and produce a range of value-added products to support a circular bioeconomy, including biofertilizers, biofuels, and food.