Anaerobic membrane bioreactors as a next-generation technology to address the food-energy-water nexus

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relies mostly on high throughput DNA sequencing methodologies, requiring the development of bioinformatic and high performance computing methods of data analysis.

David Ladner (ladner@clemson.edu) joined the Department of Environmental Engineering and Earth Sciences at Clemson University in 2010 after completing a PhD in Environmental Engineering at the University of Illinois at Urbana-Champaign and a postdoc at Arizona State University. The Ladner research group studies physical-chemical processes for applications such as the removal of pesticides from drinking water, the removal of salt from seawater, the dispersion of oil in spill remediation, and the treatment of high-strength industrial wastewater. We specialize in automated and remotely-deployable membrane filtration systems and computational fluid dynamics (CFD) modeling for process design. The ultimate goal is to increase sustainability and resiliency by lowering energy and life-cycle costs in drinking water and wastewater infrastructure.