

2019 Dissertation Titles

- Fate of Antibiotic Resistance in Anaerobic Membrane Bioreactors, Principal Investigator (P.I): Adam Smith, Associate Professor
- Investigating the Role of Climate in Affecting Residential Electricity Consumption through High Spatiotemporal Resolution Observations, P.I: George Ban-Weiss, Associate Professor
- Developing Frameworks to Quantify the Operational and Environmental Performance of Energy Systems Within the Context of Climate Change, P.I: Kelly Sanders, Associate Professor
- Investigating the temporal trends, sources, and toxicity of ambient particulate matter (PM) in different metropolitan environments, and development of a novel aerosol generation setup for inhalation exposure studies, P.I: Constantinos Sioutas, Professor
- Impact of urban activity source emissions on physicochemical characterization and associated toxicity of airborne particulate matter (PM) in local and regional scales using source appointment models, P.I: Constantinos Sioutas, Professor

2018 Dissertation Titles

- Groundwater contaminant transport predictions in a sustainable water management scenario, P.I: Felipe de Barros, Associate Professor
- Bioelectrochemical treatment of anaerobic process effluents: mitigation of dissolved methane and sulfide, P.I: Adam Smith, Assistant Professor
- Advancing Energy Recovery from Food Waste using Anaerobic Biotechnologies: Performance and Microbial Ecology, P.I: Adam L. Smith, Assistant Professor
- Impacts of Heat Mitigation Strategies and Pollutant Transport on Climate and Air Quality from Urban to Global Scales, P.I: George Ban-Weiss, Assistant Professor
- Developing High-Resolution Spatiotemporal Methods to Model and Quantify Water Use for Energy, P.I: Kelly Sanders, Assistant Professor
- Physico-chemical characteristics and sources of ambient PM mass and number concentrations and their associated toxicity, and development of novel techniques for high time-resolution measurement of PM-bound metals for application in source apportionment studies, P.I: Constantinos Sioutas, Professor
- Thermally driven water treatment with membrane distillation: Membrane performance, waste heat integration, and cooling analysis, P.I: Amy Childress, Professor
- Identifying and mitigating the effects of “Urban heat islands” in California, P.I: George Ban-Weiss, Assistant Professor
- Toxicity of Urban Particulate Matter: Long-Term Health Risks, Influences of Surrounding Geography, and Diurnal Variation in Chemical Composition and the Cellular Oxidative Stress Response, P.I: Constantinos Sioutas, Professor

2017 Dissertation Titles

- Wastewater reclamation and potable reuse with novel processes: Membrane performance and system integration, P.I: Amy Childress, Professor
- Chemical and Toxicological Characteristics and Historical Trends of Size-fractioned Particulate Matter from Traffic-related Emissions in Los Angeles, P.I: Constantinos Sioutas, Professor
- Characterization of Black Carbon: From Source to Evolution of Physical and Optical Properties in the Atmosphere, P.I: George Ban-Weiss, Assistant Professor