

The Costello lab in the Department of Bioengineering at the University of Missouri - Columbia is in search of PhD candidate in the field of biological, environmental and sustainable engineering, with a focus on food, agricultural and energy systems.

The goal of the project is to consider the environmental and economic life cycle impacts of a range of organic waste treatment options to improve decision-making capacity for institutions and municipalities. Emphasis will be placed on diversion and treatment of food and bio-based polymer waste streams. The student will be exposed to and expected to participate in ongoing research to characterize the embodied environmental impacts of wasted food as well as possible policy-based solutions.

The chosen PhD candidate will assist with data collection, processing, model construction and analysis to characterize multiple organic waste treatment systems using life cycle assessment and robust optimization techniques. The analysis will identify the optimal solution(s) given a variety of possible waste streams and logistical arrangements.

The student will be supervised by Drs. Christine Costello (Bioengineering and Civil and Environmental Engineering Departments) and Dr. Ronald McGarvey (Industrial and Manufacturing Systems Engineering & Truman School of Public Affairs).

An undergraduate and master's degree in an engineering, or similar, discipline is required. Students with demonstrated experience may be considered without an M.S. degree.

The target start date for this position is Spring 2015 with a possible summer start date. Students will be guaranteed a stipend, tuition waiver and medical insurance for one year, additional funding pending available funds.

To apply: Interested individuals should include a 1-2 page cover letter stating research interests and experience along with a current resume and the names and contact information of three references. Admission to the University of Missouri's graduate program is also required. Applications will be reviewed until a suitable candidate is found. Questions can be directed to Dr. Christine Costello at costelloc@missouri.edu