Postdoctoral Positions at Georgia Tech

Applications are invited for two postdoctoral researcher positions in the School of Earth and Atmospheric Sciences and the School of Civil and Environmental Engineering at the Georgia Institute of Technology. The two postdocs will conduct research related to the characterization and resource recovery from biological wastes, funded by the National Science Foundation *Innovations at the Nexus of Food, Energy, and Water Systems* (INFEWS) program. This is a multi-institute and multi-investigator project, and the postdocs will have opportunities to participate in interdisciplinary research involving aspects of geoscience, chemistry, microbiology, environmental engineering, and soil science.

The individual for the first position is expected to conduct thermochemical treatments of biowastes and to characterize the transformation of nutrients, organics, and metals through the treatment process and under soil conditions. Requirements and qualifications include:

- PhD in mineralogy, geochemistry, chemistry, environmental engineering, or closely related fields
- Experience with synchrotron X-ray techniques such as spectroscopy, scattering, and microscopy. Experience with EXAFS and shell-by-shell fitting is highly favorable.
- Familiarity with other laboratory analytical techniques, such as nuclear magnetic resonance spectroscopy and X-ray photoelectron spectroscopy
- Knowledge of solid-liquid interface properties, such as mineral-water interface reactions (sorption, redox, dissolution, precipitation), carbon transformation, nitrogen and phosphorus cycling
- Excellent oral and written communication skills

The individual for the second position is expected to conduct research on the fermentation/anaerobic digestion of liquid and/or gaseous streams of biowastes. Requirements and qualifications include:

- PhD in environmental engineering, environmental biotechnology, biochemical engineering, or a closely related field of study
- Hands-on experience in constructing and maintaining laboratory-scale bioreactor systems
- Knowledge of anaerobic processes, including kinetics and mathematical modeling, along with expertise in advanced instrumental analysis (GC, GC/MS, LC/MS/MS), and molecular biology methods for microbial community analysis
- Excellent oral and written communication skills

Both postdocs will be appointed for a duration of one year, with possibility of extension to a second year depending on satisfactory performance and funding availability. Interested individuals should submit a single pdf file that includes: 1) a cover letter that outlines the applicant's research, expertise match to the position's requirements and career goals; 2) curriculum vitae; 3) copies of representative recent research publications; and 4) contact information of three references, electronically to Dr. Yuanzhi Tang at yuanzhi.tang@eas.gatech.edu (for Position 1) or to Dr. Spyros G. Pavlostathis at spyros.pavlostathis@ce.gatech.edu (for Position 2). We anticipate filling the positions as early as May 2018, but later start dates are also acceptable. Review of applications will begin immediately, and will continue until the positions are filled.

Georgia Institute of Technology is an Equal Opportunity/Affirmative Action employer, and applications from women and under-represented minorities are encouraged.