Postdoctoral Research Associate in the Air Quality Research Center at the University of California, Davis.

One postdoctoral research position is open in the Air Quality Research Center (AQRC) at the University of California, Davis (UC Davis). This Postdoctoral scholar will be working primarily in a project aiming at determination of the emissions of greenhouse gases (GHG) and other priority pollutant gases on pre and post-installation of anaerobic digester for the following types of waste treatments: green waste/food waste mixture; wastewater sludge, and dairy waste. The successful candidate will work with a research team led by Prof. Frank Mitloehner and Dr. Ramin Yazdani to conduct on-site measurements of the emissions, in different seasons, from the selected sites in California in a multi-year research project funded by the Electric Power Research Institute (EPRI) and the California Energy Commission (CEC). The project aims also at measuring and calculating the emissions rates of priority pollutant gases from different equipment employed to process the waste before and after the biogas is converted into renewable natural gas or electricity.

The individual will have primary responsibility to (1) design and conduct laboratory and field experiments based on the project tasks; (2) set up the necessary sampling equipment such as wind tunnels and flux chambers; (3) collect and store solid, liquid and gas samples for analysis either by contract laboratories or in-house laboratories; (4) travel to and stay at the field sites; (5) take field notes and measurement values; and (6) operate and maintain a Mobile Agricultural Air Quality (MAAQ) laboratory (including calibrating the gas analyzers and monitoring sensors, and collecting research data) under supervision of a senior research team member. The individual will be responsible for transporting the MAAQ lab and equipment to the selected sites with help by other staff members. The individual will be expected to process, analyze, interpret data, and prepare project reports, technical publications and presentations.

Qualifications: Applicants should have a Ph.D. in Atmospheric Sciences, Agricultural or Environmental Engineering or related fields. The individual should possess the ability to conduct independent air emission measurements and modeling. She/he should have strong background in waste management technologies including anaerobic digestion; wastewater process and anaerobic digestion; biogas processing and utilization, and data processing and statistical analysis. Other essential qualifications include excellent oral and written English-language communication skills and a team-oriented perspective; high quality records of scientific research; ability to meet deadlines, work well with minimal direction; produce high-quality research outputs; good time management and recordkeeping; and a valid US driver license (DL) that can be converted to California DL at the time of hiring and ability to drive the MAAQ lab to project sites as needed.

Preference will be given to individuals with some experiences in: solid waste and organic waste digestion, wastewater sludge digestion, dairy farms digestion; hands-on experiences of instrumentations of measuring gas emissions and flux chamber, and anaerobic digestion of solid waste, liquid waste, and manure management technologies; data acquisition system; and modeling of the emissions.

The position is initially for one year with potential renewal for another year based on performance and funding availability.

How to Apply: Submit cover letter, curriculum vitae, sample of related publications, and the names and contact information of three references by email attachments to:

Dr. Yongjing Zhao.

Air Quality Research Center

University of California, Davis

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Phone: 530-219-9014

Screening of applications will begin immediately, and recruitment will continue until the position is filled. Interviews with applicants will be scheduled via phone or videoconference. We offer a competitive salary and generous benefits, including health insurance, retirement plan, vacation and sick leave, and support to a successful career in scientific research. The successful candidates will be encouraged to submit the output of their work to scientific conferences and professional meetings.