Job posting

Ph.D. in Environmental Engineering (Environmental Microbiology in Wastewater Treatment)

Job Type: Graduate

Job Institution: University of Illinois at Urbana-Champaign

Job Description:

The Microbiome-Environment Interface (MEI) Research Group, led by Dr. Ran Mei in the Department of Civil and Environmental Engineering (CEE) at the University of University of Illinois at Urbana-Champaign (UIUC), invites applications for fully funded Ph.D. positions in Environmental Engineering with a focus on environmental microbiology in wastewater treatment. The group studies basic science (i.e., microbial physiology and ecology) and applies the basic science to engineered water systems (e.g., sustainable wastewater treatment), with the aim to develop microbiology-informed engineering strategies that improve the system performance and reduce the effects of various waste streams on the environment. To achieve our goals, we integrate bioinformatics, microbiology (e.g., microbial cultivation), and engineering principles. The appointment is expected to start in Spring or Fall 2025.

Qualifications

- A strong work ethic, motivation, and ability to acquire new knowledge.
- Strong interest in bioinformatics/microbiology/environmental engineering.
- Cable of working independently and collaboratively as part of a team.
- Excellent written and oral communication skills or a strong motivation to improve them.
- Candidates should meet the requirements of the department and the college. International students should also meet the minimum requirements of English proficiency exams.

Benefits

Enrolled students will receive a full tuition waiver and a stipend, which is very competitive considering the living cost at Urbana-Champaign aera (e.g., 2b2b apartment within walking distance to office at ~$1000/month). Outstanding candidate may be nominated for prestigious entrance fellowship at the department and college level. The students will work in a supportive research environment. They will receive individually tailored training in water engineering, bioinformatics, and microbiology, depending on the research interests, background, and career expectations, after discussion with the PI. The students will be engaged in cross-disciplinary collaboration with experts on campus and across the world.

Application process

Please contact Ran via email with the subject heading "Graduate Application" by August 1st for spring admission and December 1st for fall admission. This will give us sufficient time to prepare for the formal application process. Please include unofficial transcripts, CV, TOEFL score, GRE score (if you have one, but this is not required by the department anymore), contact information of two references, and a one-page personal statement of your research experience and interest. Additional

information may be requested upon review. Review of applications will continue until positions are filled.

About the PI

Prior to (re)joining the CEE at UIUC as an Assistant Professor, Ran completed postdoctoral research at Japan Agency for Marine-Earth Science and Technology (JAMSTEC, 2023-24) and the National Institute of Advanced Industrial Science and Technology (AIST, 2021-2023). He received his PhD (2015-2020) and MS (2013-2015) from UIUC, and BS from Peking University in China (2009-2013). You can find more about me and our group here.

About CEE and UIUC

UIUC is a world leader in research, teaching, and public engagement, ranked at #12 among public universities in the US. The CEE department enjoys an outstanding reputation for excellence in undergraduate and graduate education, and for research that improves the quality of life in our nation and around the world. The Environmental Engineering Undergraduate and Graduate Program ranked at #5 and #4, respectively. The Urbana-Champaign twin cities, which "sandwich" the University campus, are 2-3 hour drive to three major metropolitan centers – Chicago, St. Louis, and Indianapolis. The research group, department, and university acknowledge equal access/equal opportunity and welcome individuals with diverse backgrounds, experiences, and ideas who also embrace and value diversity and inclusivity.