Funded Ph.D. Positions in Biological Engineering at Utah State University

Position Description:

Dr. Luguang Wang's research group in the Department of Biological Engineering at Utah State University (USU) is seeking 2 Ph.D. students to join in Spring 2024 or Fall 2024. The successful candidates will have the opportunity to work on the following research topics:

- Scaling up novel bioelectrochemical systems for hydrogen production
- Carbon dioxide capture using bioelectrochemical systems
- Modeling of biosystems using machine learning algorithms

The Ph.D. students will receive full support, including salary, tuition waiver, and health insurance.

Position Qualification:

1. Self-motivated students with a master's or bachelor's degree in biological engineering, environmental engineering, chemical engineering, or a closely related field; students with science degrees in related fields are also encouraged to apply.
2. Previous research experiences with bioelectrochemical systems, 3D printing, and/or machine learning techniques are highly desired. Experiences with other research topics in the fields of biological engineering, environmental engineering, and chemical engineering are also desired.
3. Good verbal and writing communication skills, team spirit, problem-solving skills, and dedication to academic excellence.

Prospective students are encouraged to email Dr. Wang (luguang.wang@usu.edu) with a single PDF file containing the following items:

1. A one-page cover letter describing your research background, relevant experiences, and future career goals.
2. C.V.

3. Official or unofficial copies of transcripts.
4. Contact information for three references.

About Dr. Luguang Wang

Dr. Wang is a new tenure-track assistant professor in the Department of Biological Engineering at Utah State University (USU), starting in August, 2023. Prior to joining USU, he was a postdoc fellow at The Johns Hopkins University and a research associate at Oregon State University (OSU). Dr. Wang obtained his Ph.D. in Biological and Ecological Engineering from OSU, working with Dr. Hong Liu on bioenergy and bioproducts production using microbial electrolysis cells. He had his B.S. from Shandong University, China. Dr. Wang has diverse research interests and experiences in using bioelectrochemical systems to convert organic/inorganic waste streams and renewable electricity into bioenergy and bioproducts. He also has interests and experiences in using machine learning for biosystem modeling. His research works have been published in Chemical Engineering Journal, ACS Catalysis, Water Research, Bioresource Technology, Environmental Science: Nano, Environment International, International Journal of Hydrogen Energy, and other scientific journals.

About Utah State University

Founded in 1888, Utah State University is Utah's premier land-grant and space-grant university, with a strong commitment to excellence, access, and inclusion. USU serves approximately 27,500 students throughout the state at three residential campuses, eight statewide campuses, and 23 education centers. USU Online has served students from all 50 states and 55 countries for over 25 years, and USU Extension provides outreach and service to all counties in Utah. As a land-grant university, USU engages communities and empowers people to lead successful lives of involvement, innovation, and impact. As an R1 research institution, USU provides a high-quality undergraduate and graduate education at an affordable price. Washington Monthly has consistently ranked USU in the top 10 among public universities for contribution to social mobility,

research, and public service. More information can be found in https://www.usu.edu/about/

USU Biological Engineering (BE) is a small but rapidly growing department with about 200 undergraduates, 25 master's and Ph.D. students, and 10 faculty members. USU BE advances research in biofuels, bionanomaterials, cell and metabolic engineering, tissue engineering, viral gene vectors, and waste-to-bioproducts. Graduate school alumni pursue research in consumer and medical products, diagnostics, food, instrumentation, pharmaceutical, and water treatment in industry, federal, and academic institutions. The BE graduate program was ranked 23rd among national universities by U.S. News in 2021, tying with Oregon State University and the University of Tennessee — Knoxville. More information can be found in https://engineering.usu.edu/be/index

Contact information

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