Faculty Position(s) Available in
Biological Engineering
Department of Biological and Environmental Engineering, Cornell University

Position: Assistant/Associate Professor, Tenure-track.

Location: Cornell University, Ithaca, NY 14853-5701. The academic home for this position is the Department of Biological and Environmental Engineering in the College of Agriculture and Life Sciences.

Position Description and Responsibilities:
This biological engineering tenure-track position requires a balanced effort between research (50%) and teaching (50%) on a 9-month academic year basis. Improved strategies for harnessing the utility and sustainability of biological and environmental systems are critical, especially in this unprecedented period of environmental change. Novel approaches are needed to mimic, interface with and utilize biological systems for a wide range of applications including but not limited to chemical synthesis, food security, water resource management and alternatives to fossil-fuel-based economy.

The existing agricultural production system faces a daunting challenge of meeting the needs of a growing population of people (9-10 billion by 2050) within the space of reduced (net zero) greenhouse gas emissions, reduced water availability, heightened energy costs and potentially lower energy availability, under increased pressure to reduce non-organic practices and diminished available land for production. It is within this challenging context that the next generation of biological engineers will work. While all sub-disciplines of biological engineering will be considered, particular attention will be paid to candidates working at the nexus of food, water and energy, and digital sustainable agriculture.

We would expect applicants to have strong skills in two or more of the following areas: biological engineering, biochemical engineering, biochemistry, molecular biology, plant or animal physiology, biogeochemistry, electrochemistry, and ecology.

The successful candidate has the chance to participate in university-wide initiatives and centers such as Atkinson Center for a Sustainable Future, the Center for Materials Research and the Center for Nanoscale Science and Technology. Collaboration within and outside the department is encouraged and expected.

Teaching responsibilities will include two courses that integrate biology with engineering; one focusing specifically on design methodologies for biological engineers at the junior level. This course will address how coursework in biology and biochemistry can be considered through the lens of transport, thermodynamics and chemical kinetics to arrive at novel biological or biologically-inspired designs. The second course will be negotiated with the candidate upon arriving at Cornell. Advising undergraduate students and mentoring postdocs and graduate
students is also expected. This individual would contribute primarily to our biological engineering BS program but would also be open to participating in our environmental engineering BS program and CALS initiatives in Environmental Science and Sustainability.

**Qualifications:**
A Ph.D. in an appropriate discipline is required with demonstrated capability and success in developing research and teaching programs at the interface of engineering and biological sciences. A strong background in engineering and biology is required. While both Assistant and Associate Professor ranks will be considered, preference will be for applicants at the Assistant Professor rank.

**Applications and Starting Date:** Anticipated starting date is July, 2018. Applications including a CV, statements of research and teaching interests, copies of relevant publications, reference letters and transcripts should be submitted online at: https://academicjobsonline.org/ajo/jobs/9940. Application review will begin on December 1, 2017 and will be accepted until this position is filled.

To strengthen an already diverse faculty, the department encourages women and underrepresented minorities to apply for this position.