

The University of Cincinnati is pleased to announce four tenure-track faculty positions in the areas of environmental biology, environmental chemistry, urban water infrastructure and watershed hydrology. These positions are part of a Water Cluster Initiative that will hire six new tenure-track faculty over the next two years to strengthen interdisciplinary programs in water research, education and outreach. The Water Cluster hires represent a joint initiative between the College of Engineering and Applied Science (CEAS), McMicken College of Arts & Sciences (A&S), and the College of Design, Architecture, Art and Planning (DAAP).

Building on our research and innovation strengths, UC's Cluster Hiring Initiative supports existing and emerging partnerships within and between colleges, divisions and areas. In partnership with the Vice President of Research, the Provost's cluster hiring investments harness the power of faculty members focused on solving the world's biggest challenges through leading-edge research and interdisciplinary collaborations that erase boundaries and embrace creative, bold ideas.

Designed to attract top-quality faculty from around the world, UC's Clusters represent the university's commitment to investing in faculty and interdisciplinary problem-solving. UC's Water Cluster establishes our region as a national and global leader in water research, education and outreach centered on integrated water resources management within and across natural and engineered systems. By bringing water planning and management experts together, the Water Cluster provides a supportive platform for new approaches to environmental sustainability.

A job description for each the specific positions follow; please see the Provost's website <http://www.uc.edu/provost/clusters> for more information about the Cluster Hiring initiative and visit <https://career8.successfactors.com/career?company=UCPROD> for a listing of all open positions.

Environmental microbiology of hydrological systems. We seek to hire an assistant professor with research interests in environmental microbiology. Emphasis is placed on understanding the broad factors affecting water quality including biological, hydrological and geological processes, and the impacts on human health in natural and urban water resources systems from local to regional scales. Specific areas of interest include natural and human-influenced dynamics of microbial communities, the detection and mitigation of waterborne pathogens, algal blooms, and/or biofilms. Candidates using metagenomics/bioinformatics approaches to these questions are particularly encouraged to apply. The successful candidate will complement the three broad areas of interest within the water cluster, including human impacts on the global hydrologic cycle, urban water and wastewater systems, and linkages between water and energy systems. Applicants must have a Ph.D. in biology/microbiology or a closely related field, with an expected home department of Biological Sciences and/or Environmental Engineering. (Apply to: UC Requisition ID 5587)

Environmental aquatic chemistry. We seek to hire an assistant/associate professor with research areas that include, but not limited to fate and transport of emerging contaminants, endocrine disruptors, and consumer product chemicals in the aquatic environment. Specific areas of interest include environmental trace analysis of organic compounds in environmental and biological samples using liquid and gas chromatography tandem mass spectrometers (LC-MS/MS and GC-MS/MS). Expertise and experience in analytical methods development, chemical cycling, bioavailability and modeling and the application to environmental research approaches are considered strong assets. Applicants must have a Ph.D. in environmental

chemistry/engineering or a closely related field, with an expected home department of Environmental Engineering and/or Chemistry. (Apply to: UC Requisition ID 5007)

Urban water infrastructure. We seek to hire an assistant/associate professor with research interests centered on urban water resources design and management. For a candidate emphasizing urban water infrastructure, we are seeking a candidate with research interests associated with improving fundamental understanding of water movement and water quality transformation within the urban environment and/or designed infrastructures. Example areas of research application that are of interest include, but are not limited to, storm water management, including mitigation of combined sewer overflows; water reuse and recycling; and low impact/green infrastructure technologies. Successful candidates are expected to have expert knowledge in one or more aligned research areas including systems analysis, scientific computing, data analytics, data assimilation, real-time control and related software systems. Applicants must have a Ph.D. in civil engineering or environmental engineering or a closely related field with an expected home department of Environmental Engineering. (Apply to: UC Requisition ID 5006)

Watershed hydrology. We seek to hire an assistant professor to develop and advance science-based watershed and water quality models and decision support tools that simulate the impacts of land use, climate, land-atmosphere interactions and anthropogenic influences on surface runoff, on groundwater resources and on water quality in both natural and engineered environments at a watershed scale. Preference will be given to candidates with expertise and accomplishments in one or more of the following areas: hydrologic modeling of runoff, fate and transport of water quality parameters (nutrients, sediments, chemical pollutants, and bacteria); the impacts of land use, urbanization and climate change on stream and lake water quality and algal blooms; design and evaluation of best watershed management practices for controlling legacy and emerging water quality issues; and mitigating urban and agricultural non-point source pollutions. We desire a candidate with an integrated understanding of the interactions between climate, water, and ecosystems, and with technical skills and experience in GIS, spatial statistics, and computer simulation. Applicants must have a Ph.D. in geography/geology/hydrology/environmental engineering or a closely related field with an expected home department of Geography or Environmental Engineering, and a potential joint appointment in the second department or in others, including Geology (A&S), commensurate with the background and expertise of the candidate. (Apply to: UC Requisition ID 5588)

Responsibilities: The successful candidate will be expected to develop and maintain an internationally-recognized externally-funded research program; provide excellence in undergraduate and graduate teaching and education; and contribute to scholarly activities performed within academic communities across the university. The successful candidate will also be expected to contribute in meaningful ways to interdisciplinary research and educational activities that complement and are synergistic within the Water Cluster.

Qualifications: A Ph.D. degree in the specified or closely related discipline is required. Candidates will be evaluated based on their alignment within the Water Cluster and on their academic credentials, their record of research, teaching and scholarly activities and potential for success in developing a funded research program and making contributions in research, teaching and service to the field.

Appointment: The position is anticipated to be filled at the rank of assistant or associate professor, as above. However, exceptional associate and full professor candidates will be considered based upon credentials. Successful candidates will have a primary appointment in one of six departments in CEAS, A&S, and DAAP with potential secondary appointments in other appropriate programs within and outside these departments. The primary Departments include:

- College of Engineering and Applied Science
 - Department of Biomedical, Chemical, and Environmental Engineering
 - Department of Civil and Architectural Engr and Construction Management
- McMicken College of Arts & Sciences
 - Department of Biological Sciences
 - Department of Geography
 - Department of Geology
- College of Design, Architecture, Art and Planning
 - School of Planning

Proposed Start Date: Aug 15, 2016 or as negotiated

To Apply: For full consideration, please submit a cover letter, a curriculum vita that includes a list of recent publications; a list of four references with address, email and phone contact information; and a detailed research (3 page maximum) and educational (2 page maximum) plan to the appropriate job requisition ID (listed above). For full consideration, all application material must be submitted electronically to the University of Cincinnati's on-line application system at <https://career8.successfactors.com/career?company=UCPROD> by October 15, 2015 to the position number associated with the specific opening shown above. Applications will be accepted until the position is filled. For questions about the positions, please contact the appropriate individual listed below:

Environmental Microbiology: Prof. Ron DeBry (ron.debry@uc.edu)

Environmental Aquatic Chemistry: Ms. Bethany Mitchell (bethany.mitchell@uc.edu)

Urban Water Infrastructure: Ms. Bethany Mitchell (bethany.mitchell@uc.edu)

Watershed Hydrology: Prof. Lin Liu (lin.liu@uc.edu)

EEO/AA: The University of Cincinnati has a strong commitment to the principle of diversity and, in that spirit, seeks a broad spectrum of candidates including women, minorities, veterans and people with disabilities. Individuals with disabilities desiring accommodations in the application process should notify the Human Resources Department at 513-556-6381 by the application deadline.

The University of Cincinnati is the recipient of the National Science Foundation ADVANCE Institutional Transformation Award to increase the participation of women in academic science and engineering careers.