

Postdoctoral Scientist opportunity in the study of saltwater intrusion in a changing coastal environment

The University of Delaware in Newark, Delaware, USA invites applications for a postdoctoral scientist to be part of a diverse interdisciplinary team, supported by a National Science Foundation grant, focused on the broad topic of water quality and water security in Delaware's changing coastal environment. The research engages a team from several universities and the researcher will have the opportunity to network with scientists and stakeholders from multiple disciplines and sectors. The researcher will work with and provide guidance to other postdoctoral researchers, graduate students, and undergraduates in the research group. A PhD in Hydrogeology or a related field is required. Expertise in hydrogeology, numerical modeling, and experience in working with social scientists, including coupled natural-human systems modeling, are desired strengths. Excellent communication and collaboration skills are required.

Background:

Many coastal regions of the world have entered a critical period when multiple pressures threaten water security, defined as the capacity of society to safeguard adequate, sustainable quantities of high-quality water. In Delaware, threats to water security relate primarily to water quality rather than quantity and arise largely due to human behavior—whether from excess nutrients from agriculture and households, increased salinity due to groundwater pumping and sea-level rise, or degradation of ecological systems from an expanding human footprint. Thus, improving water security is fundamentally about making better decisions, based on clear scientific understanding, reliable methods and models for predicting future outcomes, improved technologies, and evidence-based policies and programs that cost-effectively invoke positive behavioral change. This project aims to assess major threats to Delaware's water quality and to develop viable technological and policy solutions for meeting the challenges imposed by them. In Delaware and across the globe, threats to water security negatively affect human health, ecosystem function, and critical economic sectors, such as tourism or agriculture.

Newark, Delaware offers a moderate cost of living, and is ideally situated on the mid-Atlantic coast, about halfway between New York and Washington, DC.

The University of Delaware holds diversity, equity, and inclusion as important values. We view diversity broadly, including but not limited to an individual's race, age, ethnicity, gender identity, sexual orientation, socioeconomic status, disability status, beliefs, and culture, as well as how those identities intersect. Supporting diversity in our faculty, student body, and staff, as well as valuing and respecting diversity in our teaching, research, and service represent important priorities that contribute to the strength of our community. We encourage the open exchange of ideas from a variety of viewpoints in an environment of respect, collaboration, and fairness. We promote the principles of equity and inclusion through recruitment and retention, graduate training, research, service and teaching, as well as through open and productive dialogue.

Interested applicants should apply online at www.udel.edu/udjobs. For more information, contact Dr. Holly Michael (hmichael@udel.edu). Review of applications will begin immediately and continue until the positions are filled.