

Supervisor: Dr. Jason Hubbart

Job Title: Post-Doctoral Research Associate: Hydrologic Modeling and Water Quality

Location: Institute of Water Security and Science (IWSS), West Virginia University

Position Location: Morgantown/Monongalia County/various field sites statewide

Position Terms: Full-time (1.0fte), benefits eligible

Overview/Job Description: The WVU [Institute of Water Security and Science](#) (IWSS) is seeking to fill the position of Post-Doctoral Research Associate of Hydrologic Modeling and Water Quality. This is a non-tenure track, full time (1.0fte) position with full benefits. The incumbent will calibrate and validate a watershed scale hydrological model in the Chesapeake Bay Watershed, and/or other regional watersheds to estimate land use practice mediated hydrology and water quality. Given the integrating nature of hydrologic and climate sciences, the incumbent must consider various natural (e.g. climate change) and anthropogenic (e.g. land use/land cover change) contributing factors, and address varied, exigent ramifications of water resource quality (e.g. human health, aquatic ecosystem health, ecosystem degradation) and quantity (e.g. availability, access, sustainability). Therefore, this candidate will also develop cooperative research partnerships with academic, industry, and regulatory institutions at local, state, and regional scales as necessary to generate exemplary, world-class research and scholarship. As broadly defined, the position may require service and outreach and include integration of natural science and socioeconomic data to improve understanding and decision-making at a variety of spatial and organizational scales.

West Virginia University is the state's flagship research-one institution, and is among the top universities in the nation, with demonstrated excellence in teaching and research. Recognizing the vital role of water to the world and state, the WVU Institute of Water Security and Science coordinates and promotes research in various areas related to water security, floods, droughts, stewardship, energy, resource management, innovations, policy, human health, land-use practices, sustainability, and other emergent areas.

Position Requirements: The successful applicant must demonstrate experience in hydrology, hydroclimate modeling, and water sciences (including any laboratory instrumentation experience). The applicant must possess strong writing skills, and the ability to communicate technical information to scientific and lay communities, alike. Demonstrated grant writing experience is a plus. The successful applicant must hold the degree of Ph.D. at the time of hire.

Duties & Responsibilities

Responsibilities are functional in nature, and performed under limited supervision. Specific tasks include, but are not limited to:

- 1) Field work as needed to maintain field instrumentation, collect and post-process observed data.
- 2) Create and maintain existing and data mined project databases.
- 3) Attend meetings as needed with project partners.
- 4) Attend research conferences and read scientific literature to keep abreast of technological advances and current research findings.
 - a. Identify and assist with acquisition of funding from public, private, and federal sources. Write research proposals, papers, and abstracts.

- 5) Conduct literature reviews as needed to meet research goals.
- 6) Perform laboratory and field experiment activities according to protocol.
- 7) Oversee research facilities and personnel
 - a. Assure compliance with research protocols and safety requirements.
 - b. Oversee and direct undergraduate and graduate researchers in the completion of experiments as needed.
 - c. Maintain lab equipment; keep accurate inventory of lab assets; monitor and assure proper use and conditions of lab equipment.
- 8) Write and present research/study status reports for review and use of the Principal Investigator.
- 9) Prepare results of experimental findings for presentation to colleagues and the sponsor; at professional/technical conferences; and/or, for publication in scientific journals, as directed.

To apply: Upload a transcript (including indication of earned Ph.D.), curriculum vitae, cover letter (including research interests and goals) and the names and contact information of three references. For additional information, contact Dr. Jason Hubbard at Jason.Hubbart@mail.wvu.edu. IWSS website: <http://www.iwss.wvu.edu>.