

Job Title: Watershed Installation Manager for Critical Zone Observatory (CZO)

Job Duration: 3-4 years. This is a limited term full-time appointment with an extension dependent on competitive grant renewal success.

Location: Stroud Water Research Center (SWRC), 970 Spencer Road, Avondale PA 19311,
www.stroudcenter.org

Job Description: The Watershed Installation Manager will be responsible for helping to research, design, purchase, install, implement, and maintain a network of hydrological and geochemical monitoring devices and accompanying communication network for real-time data transmission to the internet. The manager will work with scientists from the Stroud Water Research Center and the University of Delaware to establish a National Science Foundation funded Critical Zone Observatory (CZO) within the Christina River Basin (in Pennsylvania and Delaware). The CRB-CZO (<http://www.udel.edu/czo/>) is one of 6 Critical Zone Observatories in the US (<http://criticalzone.org/> & <http://www.czen.org/>).

Job Qualifications: We are seeking an individual with an exceptionally strong background in environmental sensors, electronics and computing. The ability to design, troubleshoot, fix, calibrate, and upgrade integrated systems of electronic devices is required. Proven skills in setting up and maintaining monitoring networks of field instruments is highly desired, including: sensor calibration, data logging, data communication devices and protocols (wired and wireless), database management, data analysis, basic programming, and remote power sources (i.e. solar cells and batteries). Previous experience with the following sensors is preferred: stage height recorders (pressure transducers, capacitance loggers), thermistors, dissolved oxygen sensors, specific conductance electrodes, ion selective electrodes (ISE) such as pH, field spectrophotometers, light sensors, precipitation loggers, and other sensors used in environmental and meteorological monitoring. Knowledge of quality control, quality assurance, and data validation protocols in real-time data management is also preferred. Familiarity with SAS, Microsoft SQL Server, ArcGIS, CUAHSI's Hydrological Information System (HIS) and Observations Data Model (ODM), Javascript, Python or other common database software and programming languages is preferred. An interest in biogeochemistry and hydrology is helpful.

Minimum Qualifications: Bachelors of Science + 6 years experience or Masters of Science + 4 years experience, or Ph.D. in relevant discipline such as electrical engineering, hydrology, atmospheric science, geo/eco-informatics, computer science,. Positive work ethic, attention to detail, and ability to work as a team member are a must.

Salary: competitive salary to be commensurate with educational and professional training.

To Apply: send a cover letter with a statement of interest, resume, and contact information of three references to the address below. Email is preferred. Applications will be reviewed starting February 1 and continue until the position is filled. Start date is flexible but availability as early as March 1 is helpful.

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Stroud Water Research Center

**970 Spencer Road
Avondale, PA 19311**