

Aquatic Instrument Engineer/Scientist

Essential Duties and Responsibilities:

- ✓ Design and document sensor installations for water quality in-situ sensors in small, wadeable streams, navigable rivers, and small lakes.
- ✓ Collaborate to define aquatic sensor field and lab calibration procedures.
- ✓ Co-develop and implement data QA/QC, gap-filling, and correction plans.
- ✓ Travel to sites as part of the design effort and to oversee sensor construction efforts.
- ✓ Develop sensor maintenance training program for field crews.
- ✓ Participate in the larger science community, including participating in independent research and collaborations and attending meetings/conferences.

Education:

- ✓ MSc in hydrology or related engineering field AND 5+ years of experience installing and maintaining sensors in small streams of North America.
- ✓ BSc in hydrology or related engineering field AND 10+ years of experience installing and maintaining sensors in small streams of North America.
- ✓ Specialization in a freshwater science or engineering field with emphasis in environmental monitoring of freshwater streams and lakes.

Required Experience:

- ✓ Significant experience with maintenance and calibration of sensors used in freshwater ecosystems.
- ✓ Demonstrated experience quality checking, correcting, and verifying data from in-situ sensors, including defining and correcting sensor drift.
- ✓ Significant field experience working in streams and lakes of North America.
- ✓ Demonstrated experience working with detailed, engineer-level plans and blueprints.
- ✓ Demonstrated experience working in a collaborative scientific and engineering enterprise.
- ✓ Demonstrated ability to write technical and scientific documents.
- ✓ Experience communicating in oral and written formats in a professional environment.

Preferred Experience:

- ✓ Experience with sensor installations in large, navigable rivers and in small lakes is preferred.
- ✓ Experience with CAD or other blueprint software.
- ✓ Working knowledge of stream ecological function preferred.
Knowledge of freshwater chemistry dynamics of streams and lakes preferred.

Skills and Abilities:

- ✓ Ability to document engineering and science specifications and plans
- ✓ Ability to read/review CAD or other blueprint documents
- ✓ Ability to write and review science documents
- ✓ Strong knowledge of sensor data assessment procedures and best practices
- ✓ Strong knowledge of statistical design and analyses

- ✓ Ability to communicate and work effectively both independently and part of science/engineering teams
- ✓ Strong communication and interpersonal skills
- ✓ Travel to domains at least 4x/year

Physical Abilities:

- ✓ The candidate may be exposed to conditions in the field, and therefore must be able to traverse uneven ground such as dirt banks, stream beds, and shallow ponds carrying equipment and materials up to 40 lbs.