



NSF I-PERF POST DOCTORAL RESEARCH FELLOWSHIP

Aclarity is a venture capital backed water technology company that designs and deploys proprietary electrochemical water treatment products to destroy harmful contaminants and protect the environment and human health. Our goal is to be the most impactful water company by delivering sustainable, cost effective, and superior water treatment solutions to the world. We are a dynamic and growing startup that values inclusiveness, hard work, and fun.

At present, Aclarity is heavily involved with research identifying optimal treatment conditions for a number of organic and inorganic compounds including (but not limited to) poly- and perfluorinated alkyl substances (PFAS), ammonia, cyanide, and nitrate. We are examining these in several different water matrices including landfill leachate, industrial wastewaters, and potable water sources.

Aclarity has deployed numerous pilots and started up their first multi-reactor customer install in December 2021. We have begun expanding our product line from single anode-cathode pairs operating in batch mode to larger systems containing multiple electrode pairs and operating in different flow modes including single-pass and internal recirculation. We are also exploring different electrode material and configurations to optimize treatment of different contaminants.

Position Summary: Functioning somewhat independently, the Postdoctoral Researcher will design, organize and conduct highly specialized and advanced experiments using established scientific protocols and procedures and, in some cases, design new protocols; summarize findings and publish results in research journals; assume general responsibility for scientific operations of the laboratory; provide supervision and guidance to junior technicians, student interns, and researchers. The postdoctoral research fellowship is funded by the National Science Foundation (NSF) Innovative Postdoctoral Entrepreneurial Research Fellowship (I-PERF) for 12 months. Upon completion, the role may transition to a permanent position.

Examples of Duties:

- Design and implement research protocols; design safety procedures; adapt new procedures, methods or instrumentation relative to research procedures.
- Oversee experimental preparation, equipment maintenance, quality control, analysis of samples; determine appropriate analytical methods for different parameters and experimental matrices.
- Collect, prepare, and analyze research data; keep a detailed notebook summarizing experiments and recording research data; maintain computer database of research data; tabulate and display data for presentation in company materials, research conferences, and for manuscript preparation; use graphics and statistical software to analyze and present data.
- Supervise other personnel in the laboratory to coordinate research and development efforts for increased efficiency; participate in training of current staff and student interns as needed.
- Search pertinent scientific literature as needed.
- Assist with ordering and procurement of supplies and equipment and with general maintenance of laboratory
- Follow the Occupational Safety and Health Administration OSHA Laboratory Safety Guide.

As a startup, the Postdoctoral Researcher will work with all aspects of the company under the supervision of the Director of R&D or their designee.

Minimum Qualifications: Ph.D. in chemistry, chemical engineering, environmental engineering, electrochemistry, or related with more than 2 years of experience in a research environment. Experience with advanced oxidation processes or electrochemical processes is highly desirable.

NSF I-PERF Program:

Funded by the National Science Foundation (NSF), the Innovative Postdoctoral Entrepreneurial Research Fellowship (I-PERF) recruits, trains, mentors, matches, and funds early-career Science and Engineering (S&E) doctoral degree recipients to participate in innovative entrepreneurial activities at some of the nation's most promising startup companies.

I-PERF addresses a national need to accelerate small business innovation in support of federal government research by providing small businesses with doctoral level expertise at a reduced cost and training the next generation of S&E PhDs in high-tech entrepreneurship.

I-PERF Fellows receive an annual base stipend of \$78,000 per year, optional individual health and life insurance benefits, relocation assistance to the approved host company, a professional conference travel allowance, and scripted professional development training funded by the National Science Foundation.

Physical Requirements

Regularly required to walk, stand, sit, talk, and hear; operate objects, tools, or controls; pick up paper, files and other common office objects. Ability to view computer screens and work with details for extended periods of time. Work to be performed in a lab environment, therefore proper safety protocols must be followed.

Location:

This position is located in Worcester, MA. Applicant must be local or be willing to relocate.

To Apply:

Please send cover letter, CV, and list of references to info@aclaritywater.com for consideration to this position. This application will remain open until filled and will close contingent upon the availability of resources from the program. For more information about the company visit us at www.aclaritywater.com

Aclarity, Inc. is an equal opportunity employer and gives consideration for employment to qualified applicants without regard to race, color, religion, creed, national origin or ancestry, ethnicity, sex (including pregnancy), gender identity or expression, sexual orientation, age, physical or mental disability, citizenship, past, current, or prospective service in the uniformed services, genetic information, or any other characteristic protected under applicable federal, state, or local law.

As per National Science Foundation requirements, this position must be filled by a US Citizen, National, or Permanent Resident