



Job Title: Research Intern

Opportunity: Exciting hands-on work demonstrating a novel technology for climate resiliency for homes & businesses in coastal VA. This is a paid internship.

Company/Project Summary: Triangle Environmental Health Initiative (TEHI), headquartered in Durham, North Carolina, USA, is a small business focused on the development of technologies and services related to Water, Sanitation, and Hygiene (WaSH). TEHI partners with academic institutions and private companies to develop novel technologies that TEHI can then accelerate from the lab to the field, and finally to market. TEHI has particular experience in transitioning technologies through all Technology Readiness Levels (TRLs), from idea creation (TRL 1) to proving systems in operational environments (TRL 9), and has worked with Duke University, North Carolina State University, Crane Engineering, and others to develop and transition 20+ prototypes from US labs to the field in 10+ countries.

TEHI has been selected as a winner of the RISE Rural Coastal Community Resilience Challenge held in partnership with Virginia Sea Grant (VASG), the Middle Peninsula Planning District Commission (MPPDC) and the Middle Peninsula Chesapeake Bay Public Access Authority. Through this program, TEHI will pilot two full-scale prototype treatment systems for onsite wastewater treatment and non-potable reuse in the Middle Peninsula region of Virginia with the end goal of developing a market-ready product. As such, TEHI is looking to hire a Research Intern to support day-to-day operations for this pilot program and support other product development activities.

Position Overview: As an intern supporting the Research Technician, you will have the opportunity to work closely with TEHI's research and development (R&D) team in Durham, NC, as well as with community partners involved in the RISE program, including MPPDC, local universities, and others. Your primary responsibilities will include assisting the TEHI Research Technician in the hands-on operation and monitoring of the two pilot systems, collecting data, troubleshooting, and identifying areas for improvement. We understand that this role entails a unique mix of activities, and we are committed to providing training for any subject areas that you may not be familiar with. However, we expect you to be proactive, independent, problem-solving oriented, and to work effectively with your hands.

Responsibilities:

- Support the Research Technician with:
 - Conducting daily to weekly visual inspections of the pilot systems to identify leaks and monitor effluent quality
 - Collecting liquid samples from different process locations and transporting them to the lab
 - Following routine wastewater analysis protocols at partner institutions, with training and support provided
 - Collaborating with the R&D team to troubleshoot issues and implement solutions

- Assisting in the troubleshooting and repair of system problems, including leaks and pumps
- Other tasks may include:
 - Desk research on local and national regulations regarding onsite wastewater treatment and reuse
 - Interviews with local and national stakeholders in the onsite wastewater treatment and reuse space
 - Documenting field activities and supporting the development of standard operating procedures

Minimum Qualification Requirements: To be considered for this intern position, you should meet the following qualifications:

- Pursuing a degree or certificate in an applicable engineering field or a technical program
- Ability to adhere to safety guidelines in laboratory and prototyping environments, with a basic understanding of laboratory procedures
- Some hands-on experience with mechanical equipment through coursework, projects, or extracurricular activities
- Demonstrated problem-solving abilities and an interest in learning about systems processes
- Strong communication skills in English, both written and verbal, to effectively communicate with the team and community partners

Location: While TEHI is headquartered in Durham, NC, this intern position requires you to be based in the Virginia Middle Peninsula or surrounding area (such as Newport News, Norfolk, Richmond, etc.) for the duration of the project. You should have reliable transportation to drive to the pilot locations.

Timing Details:

Anticipated Start Date: December, 2023

Expected Duration: 15 weeks

Expected time commitment: 20 hours per week

Application Details:

To apply, send an email to work@triangle-environmental.com before November 15, 2023, with the subject line "TEHI Research Intern" and the following information:

- Resume/CV
- Contact information for three references