



Field Engineer

Somerville, MA

Overview:

ZwitterCo, Inc. provides revolutionary nanofiltration membrane solutions for treating highly-impaired industrial wastewater based on cutting-edge zwitterionic polymer chemistry. Our membranes show unprecedented fouling-resistance, high permeability, and true size-based separations at the nanometer scale. We aim to make the reuse of every water source economically viable.

ZwitterCo is rapidly expanding and bringing its first product to market. Our team operates at an accelerated pace and the successful applicant can expect to hold responsibility for tasks critical to the growth of our enterprise. Our commitment to personal development leads to a working environment rich with healthy debate, thoughtful feedback, and passionate teammates aligned around a global purpose.

Individuals who take initiative to expand their learning and who are energized to collaborate on challenges beyond their existing domains of knowledge will thrive in our community. We are seeking a motivated, curious, and talented individual for an integral engineering role - the focus of which will be on designing, building, and operating systems to run prototype-scale and pilot-scale performance trials, running tests on customer water samples, and executing on the commissioning and start-up work for full-scale implementation. The work will be hands-on and require domestic travel to support field operations.

This position will report directly to the VP of Product and offers an opportunity to be on the leading edge of clean technology development and execution.

Responsibilities

- Execute on Field Pilots
 - Commissioning Equipment
 - Wiring meters and sensing equipment
 - I/O tests – program communicates to equipment and transmitters read process values correctly
 - Functional testing of program/HMI/PLC
 - Install membranes and cartridges
 - Water Quality Analysis
 - Basic chemistry tests (colorimeter, Hach kits, BOD, COD, TOC, TSS, etc)
 - Sampling
 - Interact w/ customers and field staff
 - Conduct training for operations/handoff process equipment
 - Customer-facing sales / communicate ZwitterCo value / build trust
 - Troubleshoot technical problems and identify solutions
- Execute Bench-Scale and Prototyping Pilots
 - Build prototyping unit (aid in design)
 - Develop and carry out testing protocols for client water studies
- Prototyping



- Iterative design and build, machining, testing
- Data Analysis
 - Calculations and process knowledge (TMP, dP, permeability, flux)
 - Writing reports, communicating and presenting results

Qualifications

Ideal candidates will:

- Hold a bachelor's degree in engineering (e.g. chemical, mechanical), chemistry, material science, or a related field
- Have 2+ years of experience in the water treatment industry performing tasks related to field service, commissioning, and designing and building systems based on separation technologies
- Demonstrate strong communication and presentation skills and professional presence
- Be self-motivated, independent, and capable of working with people of all manners of background, education, and technical competency
- Have a valid driver's license and clean driving record and is willing to travel by car or air to customer sites
- Willing to work long hours (12h/day) during 2-week deployments when supporting field operations

Desirable background knowledge:

- Water treatment unit operations
- Membrane operations, parameters, and form factors
- Water quality parameters such as BOD, TOC, TSS, and SDI
- Electrical design for PLC-based, automated systems
- Programming for systems engineering (e.g. LabVIEW, RSLogix 5000, Lua)

Duties

Day-to-day tasks will include:

- Design and build piloting and prototyping systems
 - E.g. P&ID drafting, electrical design, controls, programming, wiring, piping
- Develop and execute testing programs for customer water samples in the lab
- Develop and execute on-site piloting studies for customers
- Write detailed technical reports summarizing field and lab tests; give presentations on these findings to the ZwitterCo team
- Commission, start-up, and hand-off pilot and full-scale systems at customer sites
- Troubleshoot operational issues with customers both on-site and remotely

Compensation

Compensation will be commensurate with experience and include equity in the company.



Schedule and Location

This is a full-time position out of ZwitterCo's headquarters at Greentown Labs in Somerville, MA. This position will require frequent travel to support field operations.

How to Apply:

Email your resume and a few sentences about your relevant experience and interest to croy@zwitterco.com.