Electrochemist

MOSS LANDING, CA / FULL-TIME

Verdagy is creating a new class of very large-scale hydrogen electrolyzers that will help decarbonize some of the most difficult to abate sectors of our global economy. Our approach is to design large modular skid-mounted hydrogen electrolyzers that will be used to architect very large-scale hydrogen production plants. In your role as an electrochemist, you will be working with members of the research, manufacturing, and engineering teams to build lab-scale apparatuses, collect relevant data, and advance the team’s analytical monitoring skill-set. You will work on both well-established projects and on emerging research projects.

ROLES & RESPONSIBILITIES

- Build-out, refine, document, and maintain comprehensive benchtop corrosion testing and failure analysis capabilities, including design, assembly, and modifications to plumbing, hardware, and electronics to meet experimental needs for lab systems
- Prepare and conduct chemical and electrochemical corrosion assessments under or mimicking system operating conditions according to industry standards (i.e., ASTM)
- Leverage electrochemical techniques such as CV, LSV, CP/CA, ECSA, and EIS to perform accelerated lifetime testing of components
- Research and develop coating methods for components that would benefit cost, performance, lifetime, scale-up and/or manufacturing
- Prepare, process, and characterize samples using but are not limited to: titration, GC, UV-VIS, ICP-OES, XRF, XRD, SEM, EDS/EBSD, pH, conductivity, and optical microscopy (knowledge of all not required)
- Assist and mentor other researchers with electrochemical testing and equipment
- Tailor communications of key experimental findings to both a small technical team and a large company-wide audience.
- Perform general chemistry laboratory tasks safely such as weighing, mixing, pipetting, titrations, measurements, calculations, waste handling

PRIOR EXPERIENCE & PROFESSIONAL QUALITIES

- Minimum Graduate Degree in Chemistry, Materials Science, or applicable Engineering field
- 4+ years lab-based research experience in chemistry or a related field
- Familiarity with welding techniques and dissimilar materials is a plus
- Strong qualitative skills and creative problem solving
- Self-starter with the ability to spot problems and the drive to solve them
- Experience in processing large sets of quantitative data using Python IDE or similar interface
- Excited to be part of a small team that is making a difference
- Passion for decarbonization preferred
About Verdagy
The Verdagy team is a dedicated and innovative group of forward thinkers looking to dramatically change the hydrogen electrolyzer industry. Verdagy is a spinoff of green chemistry pioneer Chemetry Corporation. Our years of experience in electrochemistry and plant operations and engineering have provided us an opportunity to rapidly commercialize our innovative and novel approach to hydrogen electrolysis. We are backed by an incredible group of financial investors, renewable energy developers and Fortune 100 corporations. Our investor/partners are leading companies in the petro-chemical, industrial chemicals, energy infrastructure and mining industries, all sharing an extraordinary desire to deeply decarbonize their businesses at very large scale. This is where Verdagy’s membrane-based, large aspect ratio cells, running at high current densities provides the scale solution needed for industrial decarbonization. Verdagy operates offices, laboratory and pilot plant facilities in Moss Landing, California, to further commercialize this technology platform.

Employee Benefits, Flexibility & Ownership
Verdagy provides generous health/dental/vision/disability insurance benefits for our employees and their immediate family. We know flexibility is important and we value and respect individual contribution whether it comes from work done at home, during odd hours, or at Moss Landing with teammates. Employee equity and ownership is our way to ensure everyone participates in the results and value creation of the company. We offer a 401k and an unlimited time-off policy.

Diversity & Inclusion
We value everyone and are actively seeking diversity as we grow. We believe a diverse team of people with different perspectives and lived experiences enriches the quality of our work and is fundamental to a positive, collaborative and inclusive culture.

Culture
We are building a people-centric culture where trust, respect and empowerment are built into every aspect of Verdagy and our way of working. If you want to do your best, most purpose-filled, meaningful work, come and join us – your contributions are needed now more than ever.

Verdagy is an Equal Opportunity Employer