



Alchemity, LLC
www.alchemity.tech

Job Title: Engineer (Entry-, Mid-, Senior-Level)

Company Name: Alchemity

Job Location: College Park, Maryland

Job Type: Full-Time

About Us: At Alchemity, we embody the spirit of transformation. Led by a seasoned C-suite with over seven decades of collective expertise in R&D, scaleup, product development, commercialization, and operations, Alchemity is a vibrant startup company, a spinout from University of Maryland, on a mission to produce value-added chemicals and e-fuels without CO₂ emissions. We're dedicated to reducing or eliminating the greenhouse gases responsible for global climate change, as we channel our energy towards shaping a sustainable future. We are looking for multiple candidates to join us on this fulfilling journey.

Job Description: Join our dynamic team as an Engineer at Alchemity and be part of our journey to revolutionize technology and sustainability. As an Alchemity engineer, you will gain wide experience from laboratory experiments, to instrumentation, construction of customized equipment and facilities, technology scaleup, product development, demonstrations, and deployment. Such unique exposure allows for fulfilling personal and professional growth across different areas of potential interest. The candidate's main objective will be to facilitate growth and project successes in areas of ceramic reactor membranes, fuel cells, electrolyzers, clean hydrogen, and e-fuels. This position combines substantial hands-on and experimental work with equipment and technology designs, data analysis, documentation, and internal and external reporting. Enthusiastic candidates with a curiosity-driven mindset are encouraged to apply.

Responsibilities:

- Develop, utilize, and demonstrate various experimental, analytical, and reporting skills
- Design, develop, build, and commission experimental test stands and procedures; facilitate relationships with materials and equipment vendors
- Fabricate, scale, and test single cells and reactors, and reactor bundles and stacks
- Operate and maintain production and testing equipment
- Develop and document quality assurance and quality controls metrics to ensure reproducibility and facilitate building QA/QC equipment
- Develop, build, and operate demonstration systems and ultimately products
- Collaborate with interdisciplinary teams to develop and implement cutting-edge solutions
- Address complex challenges, proposing innovative solutions for ceramic membranes, reactors, and electrochemical reactors
- Contribute to projects from concept to reality, shaping the forefront of energy production, clean hydrogen, e-fuels, and chemicals generation
- Stay at the forefront of tech through research, bolstering your expertise
- Develop and document processes, designs, standard operating procedures, batch records, and practices to share knowledge and ensure reproducibility
- Facilitate regular internal and external communication with funding agencies, partners, and customers.
- Provide support, facilitate, and assist in proposal writing and fundraising efforts (to the extent of position requirements and seniority level)
- Supervise and mentor technicians or other engineers, fostering their professional growth and skill development to effectively advance critical business and technical opportunities
- Conduct job duties following all safety protocols and procedures

Requirements:

- Background in chemical, mechanical, electrical engineering, materials science, or similar fields
- B.S. with 0-3 years for entry-level, or M.S. with 1-2 years of industrial experience for mid-level positions
- M.S. with 3+ years of industrial experience or Ph.D. with 2-3 years of postdoctoral/industrial experience for senior-level position

- Strong problem-solving skills, embracing challenges and growth
- Proficiency in relevant tools and technologies is preferred, although not required
- Experience with AutoCAD and/or SolidWorks is a plus; experience coding macros in MATLAB is a plus
- Experience managing projects and supervising teams is a plus
- Mentorship ability for senior level; collaborative spirit across all levels
- U.S. citizenship or permanent residency preferred, candidates with STEM-OPT will also be considered

Benefits:

- Competitive compensation and benefits package, including vacation and paid sick leave
- Fast-paced, inclusive startup culture offering opportunities for rapid professional growth
- Access to cutting-edge projects and technologies

Equal Opportunity Employer Statement: Alchemy is an Equal Opportunity Employer (EOC). We are committed to fostering, cultivating and preserving a culture of diversity, equity, and inclusion. We embrace and encourage our employees' differences as that is what makes our employees unique. Our management team is dedicated to this policy with respect to recruitment, hiring, placement, promotion, transfer, training, compensation, benefits, employee activities, and general treatment during employment.

If you're ready to drive innovation with adaptability, apply now to be part of Alchemy's pioneering journey.