

1 Mechanical Engineer/Process Development Engineer

1.1 Introduction

ZeoDAC is in the business of capturing carbon dioxide to create a better tomorrow. We are striving to become a major part of the solution towards Net Zero carbon emissions. As a start-up founded in 2023, we are working to rapidly develop and deploy our Direct Air Capture (DAC) process that can remove carbon dioxide (CO₂) and water (H₂O) directly from the air. These products can be supplied to a variety of commercial and industrial customers. We seek to expand our technical team that is developing our core technology.

As a Mechanical Engineer/Process Development Engineer you will be instrumental in the testing and development of novel DAC systems onsite in our facility in Atlanta, Georgia. You will work alongside our experienced team of engineers and use your skillset to propel the development and deployment of our DAC systems.

If you are excited about making an impact on the environment at a groundbreaking DAC startup, we invite you to apply!

This is a full-time, on-site opportunity at our research and development laboratory in Atlanta, Georgia.

Pay Range: \$90,000-\$110,000 per year

1.2 Qualifications

- Bachelor's degree in Mechanical Engineering or related discipline with 0-2 years of industry experience.
- Strong hands-on experience with lab-scale equipment design, construction, and operation.
- Solid understanding of experimental methods, including Design of Experiments (DOE) methodology.
- Strong analytical skills and ability to work with data scientists to interpret test data.
- Proven track record of trouble-shooting equipment.
- Experience in analyzing data sets and communicating results with team members.
- Strong proficiency in AutoCAD, Solidworks, and/or other 3-D modeling software.
- Experience in Labview programming and operation, or other demonstrated programming acumen.
- Experience in dynamic simulation software, such as COMSOL or FLUENT, for heat transfer, flow dynamics, is advantageous.

- This position is required to be performed full-time, on-site, at our Atlanta, GA, facility.
- This position requires physical activities including climbing stairs or ladders, stooping, crouching to work on equipment, operating machinery and lifting and carrying loads of 40 pounds or more. May require standing or sitting for long periods of time to perform specific operations.

1.3 Job Responsibilities

At a start-up, you will be required to wear many hats to support the development of this critical technology. However, below are more specific responsibilities for this role:

- Support technology development of novel DAC processes. This involves knowledge of thermodynamics, heat/mass transfer, fluid flow, chemical reactions and process dynamics.
- Support development and design of lab and pilot-scale adsorption systems.
- Operate lab-scale fixed bed adsorption systems under various environmental conditions.
- Model heat transfer and fluid flow dynamics through various types of equipment such as heat exchangers, adsorption beds, blowers, etc.
- Assist in preparing external communications that highlight experimental results or design parameters.
- Provide input on techno-economic analysis.

1.4 Job Benefits

- Medical Benefits: Company currently offers a monthly reimbursement stipend for medical benefits. Company will soon offer group health benefits, at which time employees will have the option to enroll.
- PTO: Employee will accrue 3 weeks of PTO, which can be used for vacation or sick time, over each year of employment.

1.5 Company

ZeoDAC is an equal opportunity employer. All applicants will be considered for employment without attention to race, color, religion, sex, sexual orientation, gender identity, national origin, veteran or disability status.

To apply, please send a copy of your resume to info@zeodac.com