

Terraform Industries, Inc.

Direct Air Capture System Lead

terraformindustries.com

Los Angeles, California

Carbon capture and utilization only makes economic sense at $< \$100/\text{T-CO}_2$. Well, how hard could it be?

A future proof source of all industrial carbon?

Just copy trees? There's got to be a better way!

At Terraform Industries, we've made cheap synthetic natural gas from sunlight and air. We have already developed the cheapest direct air capture system ever built. Now it needs you to mature and productize it to the point where we ingest four cubic kilometers of air every second worldwide.

More generally, we are determined to conquer the primary energy consumption layer of our entire civilization. We've developed the tech needed to pipe pure solar photovoltaic direct current electricity into intermittent primary materials production at the lowest possible cost, limited only by the laws of physics. Our total addressable market is about 500 TW, and we think you will enjoy helping us complete our mission.

Mission

Your mission is to take over the development of the Terraform Direct Air Capture system, pushing it to greater heights, lower costs, and higher productivity. Terraform CO₂ is the source of carbon for synthetic methane, methanol, and coke. These, in turn, are transformed into ethylene, propane, gasoline, aviation fuel, iron, silicon, graphite, and numerous other products. There are only 118 elements after all!

The Direct Air Capture System Lead reports directly to the Technical Director.

Responsibilities

- Take full ownership of the ongoing design, development, and deployment of our low cost and scalable direct air capture system
- Complete the design and deployment of the full scale DAC demonstration unit, as well as begin serial production, in 2025
- Design or oversee any electrical, mechanical, fluid, and thermal systems associated with the process
- Mechanical design with a bias for manufacturability and scalability

- Own the DAC process delivery timeline and success from inception to integration
- Lead and participate in internal technical design reviews and push for rapid iteration
- Source, evaluate, and integrate key components for rapid prototyping and production
- Lead recruitment efforts for your team, and actively contribute to team career development

Qualifications

- Bachelor's degree in mechanical engineering or aerospace engineering or equivalent
- 5+ years of professional experience in mechanical design and analysis
- 2+ years of professional experience with powdered or granular materials
- Demonstrated history of effectively managing design projects from conception to implementation, including working with cross-functional teams and managing vendor relationships
- Demonstrated ability to intuitively or analytically arrive at self-evidently correct designs

Preferred Qualifications

- Experience with high temperature electrical kilns and/or heaters
- Knowledge of high volume material processing industries
- Familiar with high-volume manufacturing processes and experienced in sourcing and procuring parts on a large scale, ideally on more than one class of factory
- Knowledge of international engineering standards and experience in validating and qualifying designs for demanding outdoor environments
- Ability to work in fast-paced, demanding iterative design and manufacturing environments

Logistics

Location - Terraform Industries is based in the castle building in Burbank, near Los Angeles, California. Work is 100% on site.

Remuneration/benefits - Terraform Industries is proud to offer a competitive benefits package including: equity, performance bonuses, 401k, health, dental, and vision insurance, and a flexible leave policy.

Pay range: \$120,000.00 - \$220,000.00 per year, to be determined on a case-by-case basis based on job-related knowledge and skills, education, and experience.

Travel - Some travel (5-20%) may be required to oversee installation off-site.

Terraform Industries is an Equal Opportunity Employer; employment with Terraform Industries is governed on the basis of merit, competence and qualifications and will not be influenced in any manner by race, color, religion, gender, national origin/ethnicity, veteran status, disability status,

age, sexual orientation, gender identity, marital status, mental or physical disability or any other legally protected status.

Apply

Email recruiting@terraformindustries.com with a compelling one pager with your best evidence of execution ability. We are fans of your work, so include YouTube links, photos of hardware, etc. In addition to your one pager, you should include a one page [resume](#) of no more than 300 words.