

Terraform Industries, Inc.

Silicon Production Lead Engineer

terraformindustries.com

Los Angeles, California

If you want to converse with an artificial superintelligence, first, you must make metallurgical grade silicon.

Rocks are full of it.

There's gotta be a better method than carbothermal reduction!

At Terraform Industries, we've made cheap synthetic natural gas from sunlight and air. Now it is time to become even more metal. We've shown we can tear oxygen off elements 1 and 6. Why not element 14? Can infinite free sunlight make this metal even cheaper?

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 lead the development of the Terraform silicon production process, leveraging our existing tech stack in a new direction. We already have the lowest cost green hydrogen in the industry and unique knowhow around low capex intermittent processes. You get to pioneer an intermittency-friendly method to electrolyze silicon with pure sunlight.

The Silicon Production Lead Engineer reports directly to the CEO.

Responsibilities

- Take full ownership of the design, development, and deployment of a low cost and scalable silicon production system
- Build and launch a pilot silicon process in 2025, with substantial first principles analysis as well as practical prototyping
- Design any electrical, mechanical, fluid, and thermal systems associated with the process
- Mechanical design with a bias for manufacturability and scalability
- Own the silicon 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 in the silicon industry
- 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 industrial chemistry and/or electrolytic metal reduction methods
- Knowledge of standard installation and fabrication methods of furnaces, foundries, mills
- 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.