



## **THERMAL SYSTEMS ENGINEER**

**Location: Delhi NCR**

### **Background**

Takachar is a global organization with a vision to dramatically increase the amount of biomass (crop and forest residues) economically converted into useful products. Our impacts include income and job creation in rural areas, as well as mitigation of CO<sub>2</sub> emission and air pollution associated with conventional open-air biomass residue burning. We have been recognized for our work through awards such as the Earthshot Prize 2021 and the UNEP Young Champions of the Earth Award 2020.

## **Responsibilities**

The thermal system engineer will work with our Chief Technology Officer and Product Development Lead to define system requirements, conduct component search, and design specific thermal components to integrate with Takachar's product. The design lifecycle will include working with end users and customers (both in India and elsewhere internationally) to define technical requirements, contacting vendors for competitive bids, modelling system integration in SolidWorks, supervising the fabrication and integration of parts for system assembly, and testing the final parts both in the lab and in the field with actual end users to verify that they do meet the initial requirements. Multiple iterations may be needed to finalize the component and its integration.

## **Skills and Experience**

- Prior experience with design of thermal systems such as dryers, gasifiers, or boilers as well as their subsystems.
- Strong fundamentals in engineering thermodynamics, heat & mass transfer and fluid mechanics
- Comfortable working with basic metal fabrication equipment and techniques, including: Cutting, rolling, bending, and (optionally) welding.
- Working knowledge of Solidworks, thermal/fluid modelling packages like Ansys Fluent
- Be able to advise and brainstorm with the team on the best and/or fastest fabrication solution to achieve a certain goal.

As we are an early-stage start-up, please expect that goals and targets will change at moment's notice, sometimes daily, depending on the unpredictable testing outcome and what is required at a given stage. For some people accustomed to working towards long-term targets, this may prove to be a frustrating experience. But flexibility and willingness to constantly learn and adapt is required when working in a small start-up company.

## **To Apply**

Please send your resume and cover letter to [careers@takachar.com](mailto:careers@takachar.com). In your cover letter, please walk us through the following:

1. Your learning and takeaways from a design project that you enjoyed working on
2. Your long-term career goals and how this position may help you towards these goals.

**What you will get:**

- Compensation: INR 8-10 lakhs per annum depending on skills and experience, with additional performance bonus
- Paid parental leave
- Health benefits
- Continuing education credits
- Opportunity to be at the forefront on climate action and pollution mitigation
- A work environment that invests in your personal and professional growth
- A culture that values curiosity & exploration

Takachar (Himalayan Sustainable Energy Solutions Private Limited) is an Equal Opportunity Employer and does not discriminate on the basis or perception of race, colour, religion, sex, sexual orientation, gender identity, national origin, disability, age, or any other consideration made unlawful by central government, state government, or local laws.