

Process Engineer

Company Overview:

Plastics made from oil and gas have become indispensable materials for nearly every industry, but their toll on the environment through emissions and pollution is growing unchecked. ReSource has created a technology to produce the first commodity plastic that is made from truly sustainable feedstocks, has a favorable end-of-use profile, and yet outperforms incumbents. We are commercializing a proprietary technology for producing FDCA, a replacement for the petrochemical known as PTA that is used to make polyester plastics. More than 50 million tons of PTA are produced annually, resulting in >100 million tons GHG emissions each year. Polyester represents a >\$100B industry, with applications spanning packaging, bottles and fibers. Polyesters made using FDCA have superior gas barrier, thermal, and mechanical properties, which translates into increased shelf-life of perishable goods with less material, making them ideal for packaging. FDCA-based polyesters are 100% recyclable, industrially compostable, and degrade much faster than conventional polyester if released into the environment. The commercialization of these materials has been impeded by the high complexity and cost of conventional technologies for making FDCA, all of which source FDCA from edible sugar. ReSource's technology produces FDCA from CO₂ and inedible biomass and eliminates two thirds of the process steps, dramatically reducing cost to enable market penetration for high volume applications. In addition to favorable economics, we make it possible to produce FDCA with negative emissions.

The company is located in Berkeley and was founded in 2019 on technology developed at Stanford University. Backed by leading venture investor Khosla Ventures, we are currently optimizing process conditions in preparation for an integrated pilot plant.

Position Overview:

We are looking for a chemical engineer to work on process development and process scale-up engineering efforts. This individual will optimize and scale process steps to inform design decisions for an integrated pilot plant. As one of the first employees of ReSource, this person will be a defining team member and have an opportunity to make a major impact on the commercialization of the technology.

Qualifications and skills:

- At least 3 years of experience in process engineering for new technology commercialization
- Experience in designing, assembling, and operating continuous reactors
- Experience in oxidation chemistry and heterogenous catalysis preferred
- Demonstrated strong problem-solving skills with the ability to parse complex technical problems
- Team Player with experience of working in a fast-paced environment
- Experience in process safety management, process hazards analysis, and hazards mitigation