

Junior Chemical Engineer



Are you looking for a job where ...

- the opportunities to pave your own career path and grow are endless;
- you have an opportunity to build things from scratch and make an impact;
- you get a permanent R&D position which is all about developing new technology;
- you can work with bright people from across the world in the same lab;
- you can simply be yourself, you are unique!

... If so, you are probably ready to hear more about Fairbrics story...

And what if it was possible to make clothes from CO2?

It is not a dream, this is what we do at Fairbrics! We are building the novel technology to efficiently transform CO2 captured at heavy industry sites into low-carbon polyester fabrics.

Are you looking for technology that helps fight climate change?

Today, polyester is produced from petroleum. Textile industry emits 1.2bln tons of GHG gases into the atmosphere yearly – this is more than all international flights and shipping combined! At Fairbrics, we are on a mission to combat climate change by developing innovative circular manufacturing process, based on the latest developments in catalytic chemistry. Our process uses CO2 as feedstock to manufacture synthetic fibers.

Are you looking for a career with ambition and growth?

Based in France Paris region, Fairbrics already generated traction amongst textile industry market leaders such as H&M and Aigle. We are also backed by top climate tech Venture Capital funds. Fairbrics is expanding its European footprint by building its first-of-a-kind flagship demonstrator facility in Antwerp, Belgium as part of the EU-funded Project.

If you are still interested in reading, an open role with our start-up may be for you! We are looking for an independent, hands-on, and experienced Chemical engineer.

About the job

We are looking for a Chemical Engineer in our industrialization team. They will effectively translate the outcomes of catalytic chemistry research from the R&D team into plant manufacturing specifications and requirements at all relevant phases.

Key responsibilities will include:

- Play a major role in the scale-up of Fairbrics technology from the lab to the pilot and the plant scales including batch and continuous processes under the supervision of a chemical engineer.
- Perform mass balance and heat balance calculations as well as mass transfer studies.
- Carry out process simulation studies on a dedicated software (e.g. ASPEN) for plant optimization and energy efficiency.
- Perform design and sizing calculations of process equipment as well as evaluating PFDs / P&IDs in partnership with an engineering company.



- Conduct the required studies related to chemical process safety, including but not limited to flammability limits, storage stability and reaction exothermicity.
- Support the R&D team to optimize chemical reactions giving a chemical engineering point of view.
- Maintain professional and technical knowledge, remaining updated on the advantages and disadvantages of a broad range of process apparatus (reactors, distillation, gas separation, mixers...).

Desired profile

- · MSc or PhD in a technical field: chemical engineering, chemistry or equivalent
- 2 years in industrial environment / engineering company
- Expertise in process simulation (Aspen HYSYS, Aspen plus, Proll...) is required
- · Autonomy and proactivity are essential
- Ability to learn new topics with minimal guidance
- · Highly motivated and a team player
- Excellent oral and written communication skills
- · Ability to work in a fast-paced, rapidly changing environment
- · Ability to manage multiple projects, prioritize, and meet deadlines
- · Strong organizational skills and attention to detail
- Fluency in English is required; French is a plus

Additionally

- Safety analysis skills (HAZOP, HAZID...)
- · Familiarity with heterogenous / homogenous catalytic systems
- Experience with gas/liquid and high-pressure processes



Location

Villebon-sur-Yvette (Paris area, France)

Compensation and perks

- Competitive compensation
- Employee benefits (health insurance, public transport allowance)
- · Key role in a dynamic start-up environment
- Wonderful colleagues and fun activities ;)

