

Process Engineer - Bioextrax AB, Lund Sweden

About the company

Bioextrax is an innovation-driven company using industrial biotechnology to contribute to a more sustainable future. The company is originally a spin-off from the Department of Biotechnology at Lund University and is today a rapidly growing publicly traded company.

Our vision is to be a world-leader in bio-based technologies accelerating the transition to a sustainable, green global economy. The company is consistently working to develop innovative and green solutions based on microbiology and biotechnology.

The core of our company is a highly scalable bio-based platform technology for the hydrolysis of protein-rich materials. This technology has many applications contributing to a sustainable and circular economy. Based on this platform, we are developing chemical-free methods to produce the biobased and biodegradable biopolymers PHAs (polyhydroxyalkanoates) and turn various protein-rich materials such as poultry feathers into valuable ingredients for feed, textile, and cosmetic applications. Read more about our company and work at www.bioextrax.com.

About the position:

Bioextrax has installed a new upscaling fermentation facility in Lund, Sweden, and we are looking for a Process Engineer to join the team. The new facility employs both fermentation and downstream processing technologies working with bacterial cultures and biomaterial hydrolysates. You will be working closely with our fermentation and analysis teams in a collaborative role where your tasks will include operation, control, monitoring and maintenance of the pilot scale processes and equipment.

The position is full-time based in Lund, Sweden. Since fermentation is a continuous process the position may require occasionally require work outside regular working hours.

Your responsibilities will be (but is not limited to):

- Operation of pilot-scale (3 - 1000 L) bioprocess experiments, both USP and DSP.
- Downstream processing of cells and products to reach high recovery and purity using centrifugation, filtration, polishing and drying
- Preparation and sterilization of solutions and media for cultivation of bacteria and treatment of substrates
- Set up and run test of equipment
- Ensure continuous operation of processes and equipment
- Preparation of protocols and Standard Operating Procedures for technology transfers
- Presentation and interpretation of results and project outcomes
- Installation and operation of machines and equipment related to Chemical Engineering or Biotech fields like bioreactors, boilers, centrifuges, decanters, filters, dryers, autoclaves, freezers and other lab scale machines
- Trouble shooting of process and machined performance, yield and reproducibility
- Ensuring both efficiency and safety of processes

Qualifications

- Technical degree, Bachelor, or MSc in Chemical/Mechanical/Production engineering
- 4+ years of experience in engineering in the chemical industry or similar fields
- Awareness of HSSE protocols
- Good communication skills in English (Swedish not necessary)

As a person, you must be organized, reliable and able to follow instructions. It is also important that you are flexible, solution-oriented and innovative.

Required work experience:

- Experience in running, and controlling, chemical, biochemical or food production processes
- Practical experience in DSP of chemical or biochemical processes (centrifugation, membrane filtration, coagulation, or sedimentation, etc.), cell disruption, extraction, or other purification technologies
- Experience with continuous operation of chemical or biochemical processes
- Experience with pilot and industrial scale plants in chemical, food or biobased production
- Experience in handling, drying, and storing of chemical or biomaterials
- Great ability to perform both independently and in a team

Desired experience:

- Experience in microbial fermentation for extracellular or intracellular products such as microbial lipids, PHA, enzymes, or biomass
- Downstream processing of biobased products such as PHAs (polyhydroxyalkanoates) and/or natural fibers
- Experience in process cost estimation and statistical experimental design (such as Aspen, SuperPro, SchedulePro, or DOE). Familiar with Digital Control System for process automatic control
- Industrial-scale USP/DSP experience is a significant advantage

How to apply

Please send your application (CV and cover letter) to edh@bioextrax.com. Apply no later than September 30th 2023.