

# Fermentation Scientist – microbial protein hydrolysis Bioextrax, Lund, Sweden

#### **About Bioextrax**

Bioextrax is an innovation-driven company using industrial biotechnology to contribute to a more sustainable future. We are originally a spin-off from the Department of Biotechnology at Lund University and are now 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 business is a bio-based platform technology for hydrolysis of protein rich materials. This technology has many applications that can contribute to a bio-based and circular economy. We have developed methods to produce the bio-based and biodegradable polymers polyhydroxyalkanoates (PHAs) and to turn various protein-rich materials such as poultry feathers into valuable materials to be used in feed, textile, and cosmetic applications.

While we are bringing our technologies to the market, we are constantly exploring new ways our platform can contribute to a more sustainable society. Does this interest you? Are you up for the challenge?

#### About the position

We are looking for a Fermentation Scientist with special focus on microbial hydrolysis of proteins, to join our team in Lund, Sweden. You will be working closely with our Chief Technology Officer in a creative role where your tasks will range from design and execution of lab/pilot experiments to the exploration of new applications for our bio-based technologies. You will be responsible for process conceptualization and identification of new processes, and the development and testing of strategies to improve bioprocess KPIs such as yields and product properties. You will be directly involved in designing experiments, running bench-top and pilot-scale fermenters downstream processing of product, generating and analyzing data and materials for customers, preparing experimental reports, and providing input on technical approaches to meet project goals. You will lead a team of more junior employees.

The position will require occasional shift work (e.g. evenings, nights and/or weekends).

#### Who are you?

- We are looking for an ambitious individual with a background in Biochemical engineering, Biotechnology, Microbiology, or a related field.
- You have a willingness to join a quickly expanding team on our journey from a small R&D company to a global leader within the bio-based economy.



## • Work experience:

- PhD with minimum three years of industry experience (including post-doc working in industry-related projects), or
- o MSc. with minimum eight years of industry experience.

# Required lab experience:

- Microbial and/or enzyme protein hydrolysis at lab and pilot-scale with different cultivation techniques (batch fed-batch, repeated, and continuous).
- Optimization of microbial cultivation conditions for high hydrolysis activity and product yield/recovery.
- Downstream processing of hydrolysis product and reactants.
- Characterization of hydrolyzed proteins, peptides, amino acids and similar.
- Online/Offline monitoring of microbial growth and products (spectroscopy, electrophoresis, and chromatography).
- Biomass pre-treatment.
- Cell-free hydrolysis reactions (e.g. protease, esterase, amylase, lipase, or cellulase,)

## Desired experience:

- Bioprocess design and cost estimations.
- Keratin hydrolysis with biological methods.
- Assessment of keratin utilization in feed/food or material applications.

### Job responsibilities:

- Management and supervision of project teams in designing and operating lab and pilot scale fermentation experiments.
- Presentation and interpretation of results and projects outcomes.
- Active contribution to improve processes and methods and evaluate the patentability of results.

The position is full-time. Salary depends on experience.

# About you:

You have an entrepreneurial mindset and the ability to take advantage of new opportunities and let go of things that do not work. You also possess a willingness to learn new things, collaborate, and critically assess new ideas.

We think that the right person can work on a stand-alone basis. It is also important that you are flexible, solution-oriented, innovative and at the same time being reliable. You possess good social skills and are a down-to-earth team player.

Bioextrax is growing fast, and you consider it an exciting opportunity to be part of our journey.

Do you want to join us? Send CV to Bioextrax CEO, Edvard Hall at <a href="edh@bioextrax.com">edh@bioextrax.com</a>, please include reference letters, no personal letter is needed. This is an on-going recruitment process; interviews are being conducted continuously. For questions regarding the recruitment process, please contact CEO, Edvard Hall at <a href="edh@bioextrax.com">edh@bioextrax.com</a> or on +46 736 267 643