Bioextrax is looking for an Analytical Polymer Scientist

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.

The core of our business 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 have developed chemical-free methods to produce the bio-based and biodegradable polymers PHAs (polyhydroxyalkanoates) and turn various protein-rich materials such as poultry feathers into valuable materials for feed, textile, and cosmetic applications. Read more about our work on www.bioextrax.com.

We are currently looking for an Analytical Chemist to join the team on our transformative journey to become a global leader within the bio-based economy.

About the position

You will be working closely with our Lead Analytical and Polymer Technology scientist in a creative role where your tasks will range from experimental design, sample handling and preparation, setup and optimization of analytical methods, data analysis, documenting and reporting. We expect you to have some focused experience in the characterization of the physicochemical properties of polymers, or even better biopolymers, and their blends and composites. We expect you to contribute to design, optimization and assessment of strategies for purification of biopolymers mostly via green chemistry technologies so deep knowledge of polymer chemistry is an asset.

This role would require you to be able to be comfortable with standard methods for physicochemical characterization of polymers (DSC, TGA, FTIR, GPC, NMR, rheology, etc), and being able to use the analytical data to establish correlations between synthesis/downstream processing and physicochemical properties. Previous experience with other biobased, biodegradable synthetic or natural polymers is an asset.

Additionally, you will assist with the interpretation of the analytical data in close collaboration with our Lead Analysis and Polymer Technology scientist. For this it is expected that you have worked with at least one high level data analysis software such as Sigmplot® or Matlab®. Preference will be given if some programming background is demonstrated. The position also involves operating and performing basic maintenance of our analytical equipment.

Your job responsibilities:
- Processing of biomass, polymers, hydrolyzed biomass and other similar samples for analytical analysis.

- Development and optimization of analytical methods using gas chromatography (GC), gel permeation chromatography (GPC), differential scanning calorimetry (DSC), and rheology.
- Complete documentation and reports for samples including timely entries in notebooks and laboratory databases.
- Interpretation, critical analysis and presentation of the analytical results.
- Active contribution to the improvement of processes and methods, as well as evaluation of the patentability of the results.
- Identification of opportunities for automation of routine tasks to minimize analytical errors/variability.

Your background/ work experience:
MSc. graduates within analytical chemistry, polymer chemistry, polymer technology, material science, physical chemistry, environmental engineering, or related discipline.

Required lab experience:
- At least two years of practical experience working in a laboratory environment.
- Practical knowledge of GC, GPC, DSC, TGA and rheometers.
- Strong theoretical knowledge of the principles of operation of the above mentioned analytical instruments.
- Some practical experience and good theoretical knowledge of statistical analysis and design of experiments.

Desired experience:
- We highly value experience in analytical analysis of biologically synthesized analytes, specifically of biopolymers.
- Some programming experience in Python, Matlab, R or similar is a clear advantage.
- We also value experience in advanced statistical analysis programs beyond Excel.

Do you have a curiosity and passion for creating sustainable products?
The successful candidate should have an entrepreneurial mind-set and the ability to take advantage of new opportunities and let go of things that do not work. Willingness to learn new things, collaborate, and critically assess new ideas are also essential. You should also have the ability to communicate effectively with cross functional teams.

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

This is a full-time position based in Lund, Sweden, and the salary is negotiable depending on the candidate's experience.

Does it sound like you?
To apply, please send your **CV** to Per Erik Velin at pev@bioextrax.com (no cover letter needed). This is an on-going recruitment process; interviews are being conducted continuously.