

Postdoctoral scholarship at the Department of Chemistry – Ångström, Uppsala University, Sweden

Uppsala University is a comprehensive research-intensive university with a strong international standing. Our mission is to pursue top-quality research and education and to interact constructively with society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden's most exciting workplaces. Uppsala University has 42,000 students, 7,000 employees and a turnover of SEK 6.7 billion. The Department of Chemistry – Ångström has around 170 employees and 150 guest researchers and master students.

We are looking for a postdoctoral scholar to join the Microbial Chemistry group at Chemistry – Ångström. Research in the Microbial Chemistry group is focused on cyanobacteria, photosynthetic microorganisms with the ability to convert solar energy, CO₂ and water into useful compounds. We work on metabolic engineering of cyanobacteria for renewable generation of chemicals and fuels, with the greater goal to contribute to a sustainable future through biotechnology. Gene technology is employed to alter the metabolism of cyanobacteria, so that we can harvest the converted solar energy in the form of desired products, generated directly within the host cell.

The Microbial Chemistry group provides a highly creative research environment, and the projects we are working on provide many opportunities for interaction and collaboration. The group currently consists of three senior scientists, several post-doctoral researchers, and graduate students in different stages of their education.

The post-doctoral scholar will work in a project aiming to generate strains of cyanobacteria with new capabilities in formation of renewable chemicals. You will identify target pathways and enzymes to be incorporated in the cells, make genetic constructs and test them in model organisms, and evaluate the results. The project is focused on biosynthesis of terpenoids, a large and structurally diverse family of compounds with many applications, ranging from fuels to pharmaceuticals. Molecular and biochemical techniques are used to analyze the cells' response to genetic and environmental changes, in terms of productivity, growth, photosynthesis, and other characteristics. The results are used to further develop the design of new engineered cells, and to increase our fundamental understanding of cyanobacterial metabolism and limitations to productivity.

The successful candidate will develop and perform research in this area. Guiding students will also be a part of the responsibilities. The appointment is for a maximum of two years, and is financed by a grant from the Carl Trygger Foundation that consists of a scholarship that will be paid directly to the postdoctoral fellow by the foundation.

Qualifications: The applicant must at the appointed starting date have a PhD in molecular biology, biotechnology, biochemistry or related area, with strong practical experience in molecular biotechnology. Large emphasis will be put on personal qualities; we are looking for a person with good collaboration and communication skills, who is able to work efficiently and independently. Excellent knowledge in English, both written and oral, is a must.

Application: The application should be written in English and include:

- (1) Letter of motivation, with a short description of your research interests, and why you feel you are a good match for the project.
- (2) CV, including a description of relevant skills and experiences, as well as a full publication list.
- (3) A copy of your degree diploma, and other relevant official transcripts or documents you wish to provide in support of your application.
- (4) Names and contact information for at least two persons who can provide a letter of reference in support of your application, with a short description of how these individuals are professionally related to you.

Personal circumstances (for example parental leave) that are important for the validation of merits should also be described in your application.

Uppsala University aims for gender balance and diversity in all activities in order to achieve a higher quality at all levels of the organization. We therefore welcome applicants of any gender, background, and life experience.

Pay: Stipend according to local agreements, for one year with possibility for one year prolongation.

Starting: August 15, 2019, or as agreed.

Working hours: 100 %

For further information about the position please contact

Associate Professor Pia Lindberg, phone: +46 18-4716587, e-mail:

pia.lindberg@kemi.uu.se

You are welcome to submit your application by email to <u>pia.lindberg@kemi.uu.se</u>, no later than May 15, 2019.