

## **Postdoctoral Fellows in Materials Chemistry for CO<sub>2</sub> capture and utilization. Closing date: April 30<sup>th</sup> 2024. Dnr: SU-432-0042-24.**

The Department of Materials and Environmental Chemistry is one of the biggest departments at Stockholm University with about 160 employees and 2,000 students. The teaching focuses on solid state chemistry, materials chemistry and modern characterization techniques. The main research areas are porous materials, bio-based materials and electron microscopy.

### **Project description**

The position will be associated with the project "CO<sub>2</sub> capture and utilization by sustainable materials and techniques". The project aims to explore novel methods for CO<sub>2</sub> capture and utilization including the use of CO<sub>2</sub> as a building unit, use of polymers as adsorbents for CO<sub>2</sub> capture, and/or (electro)catalysis of CO<sub>2</sub>.

### **Research tasks**

We expect that a successful candidate has either a developed knowledge in materials chemistry or related ones (polymer chemistry, electrochemistry, physical chemistry, etc.) and wants to expand into studies of CO<sub>2</sub> capture and utilization. The candidate will be involved to maintain the laboratory's routine operation, assist master students or fresh PhD students in their lab work, participate group activities and develop collaborations within the group and/or the department.

### **Qualification requirements**

Researchers are appointed primarily for purposes of research and must hold an equivalent degree to a Swedish doctoral degree from another country.

### **Assessment criteria**

The PhD degree should have been completed no more than three years before the deadline for application. An older degree may be acceptable under special circumstances.

In the appointment process, special attention will be given to research skills in synthesis of porous polymers and/or carbons, CO<sub>2</sub> chemistry, electrocatalysis and sustainable (bio)materials. Candidates with a background in CO<sub>2</sub> capture and utilization, polymer science, porous materials or electrocatalysis is an advantage.

### **Scholarship**

This is a scholarship for at least one year, with the possibility of renewal if there are special reasons. Start date in May 2024 or by agreement.

### **Contact and Application**

Further information and application of the position direct to Professor Jiayin Yuan, [jiayin.yuan@mmk.su.se](mailto:jiayin.yuan@mmk.su.se), and Dr. Bo Pang, [bo.pang@mmk.su.se](mailto:bo.pang@mmk.su.se). The application should be marked with SU-432-0042-24.

Please include the following information with your application

- Your contact details and personal data
- Your highest degree
- Your language skill
- Contact details for 2 references and
- Cover letter (1 page)
- CV – degrees and other completed courses, work experience and a list of publications
- Research proposal (1 page) describing:
  - why you are interested in the field/project described in the advertisement
  - why and how you wish to complete the project.

**Welcome with your application!**