LINKÖPING UNIVERSITY
Hereby advertises a

Postdoctoral Scholarship in Stretchable All-Organic Batteries

Laboratory of Organic Electronics, Department of Science and Technology, Linköping University (Campus Norrköping)

Research environment
In the Laboratory of Organic Electronics (LOE) we explore electronic and optical properties of organic semiconductors, biomaterials from the forest and hybrid organic materials. We share a common interest in exploiting the combination of electronic and ionic charge for use in energy, internet-of-things, health care and biology applications. Our research topics include synthesis, material science, theory and modeling, device physics, nanotechnology, biotechnology and system design. Our activities span the range from basic research to commercialization, the latter carried out in close collaboration with RISE Acreo. LOE currently has ~130 researchers and research students divided into eleven units, each led by a principal investigator. Read more at: www.liu.se/loe

The Soft Electronics group within LOE develops composite materials, design concepts and devices for deformable electronic systems. Areas of special interest are stretchable (semi)conductors, energy harvesting/storage, bioelectronics, and actuators. Read more at: www.liu.se/soft-electronics

Linköping University (LiU) conducts world-leading, cross-disciplinary research in fields that include materials science, IT and life science technology. LiU is one of the largest universities in Sweden and today has 27,000 students and 4,000 employees. The students are among the most desirable in the labour market and international rankings consistently place LiU as a leading global university. Read more at www.liu.se

Position and duties
The aim of the project is to develop materials, design concepts and applications for stretchable all-organic batteries. Stretchable batteries are attractive for flexible IOT-tags and wearable devices, as they remain flexible and deformable even at significant thicknesses. The project builds on technology platforms in soft electronics and organic batteries/supercapacitors, which in recent years have been developed within the Laboratory of Organic Electronics.

This scholarship will focus on the development of novel functional material composites and fabrication processes for stretchable all-organic batteries, providing the postdoctoral scientist the opportunity to learn and develop:

- Stretchable conducting polymer battery electrodes.
- Fabrication methods for stretchable electronics.
- Novel concepts for stretchable all-organic batteries.
- Applications for the developed batteries.

Studies and research will be conducted in close collaboration with several partners, including the research institute RISE Acreo.

Qualifications and requirements
Scholarship may be granted only to non-Swedish citizens with a PhD or equivalent acquired in another country than Sweden. The applicant must not have been employed by Linköping University previously.

The applicant must have or be about to receive a doctoral degree in a subject relevant to the research project (e.g. material science, applied physics, (electro)chemistry) and needs to be passionate about research. Experience in stretchable electronics will also be valued. Problem solving ability, creativity and relative fluency in English are essential.

Starting date
Spring 2020, or by agreement.

Appointment and Conditions
Appointment is initially for one year with a possibility of an extension for a second year depending on a mutual agreement. The total time for receiving a scholarship from Linköping University can never exceed two years.

- The scholarship amounts to SEK25000:-/month (tax-free) (~€2500/month). Travel costs to/from Sweden for a scholarship holder will be covered up to a maximum amount. Funding can be available to participate in conferences.
- Essential information about healthcare, insurances etc. can be found here. Questions are welcome to HR@itn.liu.se

Application procedure
The following documents (in pdf-format) must be submitted when applying for a scholarship

- Cover letter (1 page describing your background and your interest in this position)
- Curriculum vitae, including at least two references that we can contact
- List of publications
- Statement of Research Interests, max 1 page
- Copy of PhD diploma
- Copy of MSc grades

The application should be sent electronically to klas.tybrandt@liu.se and a copy to registrator@itn.liu.se. **Mark your application with reference number Dnr ITN-2020-00011 in the e-mail subject field.**

Applications deadline: **9 February 2020**.

Contact
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Annelie Westerberg, HR partner, HR@itn.liu.se