

## **Postdoctoral scholarship in *organic bio-optoelectronics* (Reference number: ITN-2019-00313)**

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

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 <http://www.liu.se>

The Laboratory of Organic Electronics belongs to the Department of Science and Technology and is renowned for its world-leading research on electronic and optical devices based on organic materials. Its primary theme involves the coupling of ions and electrons as signal carriers for applications in organic bioelectronics, printed electronics, organic energy and electrochemical devices, and nanooptics. Currently, the research staff of the Laboratory includes about 80 researchers (professors, senior and junior scientists and PhD students), see <http://liu.se/loe> for detail.

### **Background and duties:**

The postdoctoral scholar shall work with development of organic bioelectronics, in particular focusing on implantable biomedical devices activated by deep red light illumination. The research will feature fabrication and testing of photo(electro)chemical devices for eliciting (electro)physiological responses. These will be tested in *in vitro* and *in vivo* models. A substantial part of the research work will require microfabrication techniques in a cleanroom environment. Access to electrophysiology labs and single cell and animal models will be provided, where device validation will be performed. Close collaboration with neuroscientists and pre-clinical researchers is envisioned. Brain-targeted applications will be the focus, pursuing primarily therapies for epilepsy.

### **Qualifications and requirements to applicants:**

- 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 physics, materials science/engineering, electrical engineering, or biomedical engineering; or equivalent. Problem solving ability and creativity are essential.
- The applicant must have a proven track record in scientific research, evidenced by peer-reviewed publications.
- Experience with 1) bioelectronics devices, 2) microfabrication, and 3) *in vivo* electrophysiology recording are considered major advantages

- Good communications skills and written and spoken English are required.

**Starting date**

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). Economy class travel to/from Sweden for a scholarship holder will be covered. 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](mailto:HR@itn.liu.se)

**Application procedure:**

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

- Cover letter (1- 2 pages describing your background and your interest in this position)
- Curriculum vitae, max 2 pages, including at least two references that we can contact
- List of publications
- Statement of Research Interests, max 2 pages
- Copy of PhD diploma

The application should be sent electronically to [eric.daniel.glowacki@liu.se](mailto:eric.daniel.glowacki@liu.se) and a copy to [registrator@itn.liu.se](mailto:registrator@itn.liu.se). Mark your application with reference number ITN-2019-00313

in the e-mail subject field.

Deadline for application is 18.12.2019.

**Contact:**

Eric Daniel Glowacki, Senior Lecturer, [eric.glowacki@liu.se](mailto:eric.glowacki@liu.se)  
Annelie Westerberg, [HR@itn.liu.se](mailto:HR@itn.liu.se)