Postdoctoral scholarship in **Organic energy materials** (Reference number: Dnr ITN-2018-00210)

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](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](http://liu.se/loe) for detail.

**Background and duties:**

As one of the most abundant material on earth, cellulose has attracted great attention for various industry applications. Cellulose-based nanomaterials, which are generally known as nanocelluloses, are interesting renewable biomaterials, which have potential novelty in material science, electronics and biomedical engineering. In order to realize the functionality of nanocellulose in practical applications, a profound understanding of the material is critical. The focus of the project is to study the structure depended properties of cellulose-based materials, modify their chemical functional groups, explore their function in piezoelectric and thermoelectric applications, and construct devices to recover energy from motions and wasting heat. The theoretical and experimental studies will be performed in the Energy materials group led by Prof. Xavier Crispin, and supervised by both Prof. Xavier Crispin, Associate Professor S. Fabiano and Assistant Prof. Dan Zhao, with strong interaction with other groups in the Laboratory of Organic Electronics.

**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 a subject relevant to the research project (e.g. physics, materials science, chemistry, etc.) and needs to be passionate about research. Problem
solving ability and creativity are essential. Expertise on piezoelectric material characterization, energy harvesting devices and cellulose processing is advantageous.

**Starting date**
2019-09-01, 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). 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

**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 Dan Zhao dan.zhao@liu.se and a copy to registrar@itn.liu.se. Mark your application with reference number Dnr ITN-2019-00210 in the e-mail subject field.

Deadline for application is 2019-07-10.

**Contact:**
Dan Zhao, Assistant Professor, dan.zhao@liu.se
Annelie Westerberg, HR consultant, HR@itn.liu.se