



Postdoctoral scholarship in Organic Photonics and Nanooptics (Reference number: Dnr ITN-2020-00211) **at the Laboratory of Organic Electronics, Department of Science and Technology, Linköping University (Campus Norrköping)**

Research environment

Linköping University (LiU) conducts world-leading, cross-disciplinary research in fields including materials science, IT, and life-science. 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 (LOE) is part of LiU's Department of Science and Technology and is renowned for its world-leading research on electronic and optical devices based on organic materials, with application areas including sensors, displays, printed electronics, bioelectronics, and energy conversion. Currently, there are about 140 researchers at LOE (professors, senior and junior scientists, and PhD students), see <http://liu.se/loe> for details.

The Organic Photonics and Nanooptics group is an international team led by Dr. Magnus Jonsson. The group focuses on the development and studies of novel nanooptical materials and concepts, including [switchable organic plasmonics](#), [cellulose metamaterials](#), and [sensors for artificial skin](#). More information can be found at www.mpjonsson.com and at liu.se/en/research/organic-photonics-and-nano-optics.

Available postdoc scholar research project:

The Organic Photonics and Nanooptics group now has an opening for a postdoc scholar to join the team, specifically in the area of organic nanooptics. In brief, the project goal is to produce novel nanostructures of organic materials and study their nanooptical properties and potential for plasmonic and dielectric metasurfaces. The project involves nanofabrication in a cleanroom environment and characterisation of samples by optical spectroscopy and other means. The experimental part of the project may be complemented by optical simulations and theory.

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 PhD in a subject relevant to

the research project (e.g. physics or materials science) and needs to be passionate about research. Problem solving ability and creativity are essential, as well as good oral and written communication skills in English.

- Relevant expertise areas include: nanooptics, metasurfaces, organic materials, such as dye molecules and conducting polymers.
- Relevant background skills include: nanofabrication in cleanroom environment, polymerization and materials development; optical characterization (ellipsometry, optical spectroscopy, etc.), electrical and electrochemical characterization; general materials characterization (AFM, SEM, etc.), device fabrication, optical simulations (FEM, FDTD).

Appointment and Conditions:

- 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.
- Appointment is initially for one year with possibility of extension for a second year upon a mutual agreement. The total time for receiving a scholarship from Linköping University can never exceed two years.
- Essential information about healthcare, insurances etc. can be found [here](#). Questions are welcome to HR@itn.liu.se
- Starting date will be spring 2021 or by agreement

Application procedure:

The following documents should be submitted as one combined pdf-document:

- 1. Cover letter: max 2 pages, describing your background and research interests and what makes you interested in the position.
- 2. CV: max 4 pages, including contact details to three references persons
- 3. Full publication list
- 4. Copy of passport and of PhD diploma

The application should be submitted by email as one combined pdf document to Dr. Magnus Jonsson at magnus.jonsson@liu.se, with copy to registrator@itn.liu.se. Mark your application with *reference number ITN-2020-00211* in the email subject field.

Deadline to apply for these postdoc scholarships is **31st of January 2021**.

Contacts:

Dr. Magnus Jonsson, research group leader, magnus.jonsson@liu.se
Maria Hallström, HR representative, maria.hallstrom@liu.se