RISE Acreo is recruiting a PhD student placed in Lund

The position

RISE Acreo has teamed up with Sweden Water Research AB, and Lund University through Water Resource Engineering and Solid-State Physics, in a joint four-year PhD project focusing on how water disinfection using ultraviolet light emitting diodes (UV-LEDs) can be optimized and implemented at scale.

The goal of this PhD project is to generate knowledge and understanding of UV light disinfection strategies and efficacy for water treatment facilities and point-of-use applications and conduct pioneering research in this area. The candidate will, among other things, study effects of different UV wavelengths/combinations of wavelengths and strobing, study ideal illuminance distribution, dose, packaging and geometry of UV LEDs together with flow reactor design. During the project, scalable prototypes will be designed and demonstrated in a polluted water system and the candidate will generate profound knowledge in materials science, design, operation, limitations and integration of UV LEDs in the entire system.

We are looking for positive, ambitious and technology-oriented individuals to join our growing team. This is a highly interdisciplinary doctoral project, requiring skills and/or an ability to study the areas of water dynamics, surface physics, optics, microbiology, materials science, nanotechnology and fluidics. Since this is a research institute PhD position, the student must be highly motivated to do not only scientific research, but also to understand industrially oriented innovations at the interface between academia and commercial research. The student will be employed at RISE Acreo AB, enrolled at Lund University and the project will result in a doctorate in Water Resource Engineering.

Qualifications

- You hold a relevant Masters Degree in science or engineering.
- You have taken advanced courses that are relevant for the doctoral project or have acquired the relevant skills in other positions.
- You value working in the boundary between fundamental and applied research.
- You have excellent skills in data analysis and visualization.
- You have very good command of the English language, both written and spoken.
- You work on your own initiative and set pride in delivering to set deadlines.
- You are a curious, innovative and highly ambitious self-motivated team player.

In addition to the formal eligibility requirements, the selection will also be based on other previous and meriting work, such as master thesis, project work, and courses as well as interviews with the applicants.

About the partners

RISE Acreo is a Swedish research institute within electronics, optics and communication technologies. As one of Europe’s top research institutes, we provide cutting edge resources and knowledge within these areas. We have the facilities and lab resources to offer advanced R&D as well as small scale production and prototyping. Our mission is to find new ICT-solutions for existing and future demands, creating sustainable growth in industry and society. RISE Acreo has 145 employees in Stockholm/Kista (HQ), Gothenburg, Norrköping, Lund and Hudiksvall.
In 2016, RISE Acreo established a site in Lund to further expand its business and strengthen its position as a natural R&D partner in the Skåne/Copenhagen area. We now have an exciting open opportunity to join the growing team as a PhD student.

RISE Acreo has an open, non-hierarchical culture and believes in a balance between personal and professional life. The student’s individual development plan will support both the student’s ambitions and the institute’s business needs. RISE Acreo is a multicultural enterprise, and always aims to be an attractive employer for both women and men, independent of cultural background.

Sweden Water Research is a research and development company founded in 2013 by three large water suppliers in the south Sweden: Nordvästra Skånes Vatten & Avlopp AB, Sydvatten AB and VA SYD. In a targeted, resource-efficient way we carry out research, development and innovation work in areas that are important for the utilities and their owner-municipalities.

The division of Water Resources Engineering is part of the Department for Building and Environmental Technology at the Faculty of Engineering of Lund University. At the division, research is pursued on hydrology, hydraulics, coastal engineering, groundwater, water supply and water treatment, among other topics. The division has about 15 senior researchers and about 30 PhD-students. The research is of strong international character, and takes place in collaboration with many researchers and projects around the world.

The Division of Solid State Physics at Lund University engages in research and education in nanoscience, specifically in materials science, and in interdisciplinary applications. The division has about 100 employees with a strong research focus on materials science in a wide range of applications including nanoelectronics, energy conversion and optoelectronics. The research activities at the Division are closely integrated into the research environment of NanoLund. The Division also hosts and manages Lund Nano Lab, a state-of-the-art nanofabrication facility that is open to external users.

Application

For more information about the position, contact Kristian Storm (kristian.storm@ri.se, +46 709 35 83 55).

To apply, send your CV, academic certificates and cover letter to Kristian.storm@ri.se. We will scan applications and contact applicants continuously.

Labor union contacts
For Unionen: Olof Öberg
For Saco (Sveriges Ingenjörer): Ingemar Petermann