



Post doctoral position in membrane technologies

Lunds Tekniska Högskola, Institutionen för kemiteknik

Lund University was founded in 1666 and is repeatedly ranked among the world's top 100 universities. The University has 42 000 students and 7 400 staff based in Lund, Helsingborg and Malmö. We are united in our efforts to understand, explain and improve our world and the human condition.

LTH forms the Faculty of Engineering at Lund University, with approximately 9 000 students. The research carried out at LTH is of a high international standard and we are continuously developing our teaching methods and adapting our courses to current needs.

Subject description

Wastewater treatment is the third largest application area for membrane technology. The development of membrane technology in the area of wastewater treatment is mainly driven by two trends: (1) recycling and resource recovery and (2) stricter discharge limits. In addition there is an increasing need for processes with a smaller energy demand and reduced foot-print, compared to the processes applied today. It is foreseen that these trends will prevail in the future and so will the role of membrane technology in municipal wastewater treatment.

The Department of Chemical Engineering at Lund University has a long tradition of research in both membrane technology and municipal wastewater treatment. The research in both fields is applied and often conducted in collaboration with municipal organisations and private companies. A major part of the research includes experimental studies in laboratory or pilot scale.

The position as post-doc will focus on development of membrane applications for municipal wastewater treatment enabling future demands on resource recovery and cleaner water. Such applications could include direct membrane filtration, membrane bioreactors and process configurations for removal of micropollutants.

Work duties

The main duty involved in a post-doctoral position is to conduct research. Teaching may also be included, but up to no more than 20% of working hours. The position shall include the opportunity for three weeks of training in higher education teaching and learning.

Detailed description of the work duties:

- Research within the subject area, i.e. membrane technologies for municipal wastewater treatment
- Teaching in the first, second and third cycles of studies
- Supervision of degree projects and doctoral students
- Actively seeking external research funding
- Collaboration with industry and wider society
- Administration related to the work duties listed above

Qualification requirements

Appointment to a post-doctoral position requires that the applicant has a PhD, or an international degree deemed equivalent to a PhD, within the subject of the position, completed no more than three years before the last date for application. Under special circumstances, the doctoral degree can have been completed earlier.

Additional requirements:

- Very good oral and written proficiency in English.
- Experience of lab and pilot scale testing within membrane filtration of municipal wastewater.
- Drivers license.

Assessment criteria and other qualifications

This is a career development position primarily focused on research. The position is intended as an initial step in a career, and the assessment of the applicants will primarily be based on their research qualifications and potential as researchers. Particular emphasis will be placed on research skills within the subject.

For appointments to a post-doctoral position, the following shall form the assessment criteria:

- A good ability to develop and conduct high quality research.
- Teaching skills.

Additional assessment criteria:

- Documented research experience on membrane filtration in municipal wastewater treatment.
- Experience of resource recovery from wastewater.
- Ability to formulate research ideas within the field.

Consideration will also be given to good collaborative skills, drive and independence, and how the applicant's experience and skills complement and strengthen ongoing research within the department, and how they stand to contribute to its future development.

A smaller part of the work may include teaching such as supervision of graduate students and teaching in regular courses. Experience and skills from supervision and other teaching are therefore meritorious.

Terms of employment

This is a full-time, fixed-term employment of a maximum of 2 years. The period of employment is determined in accordance with the agreement "Avtal om tidsbegränsad anställning som postdoktor" ("Agreement on fixed-term employment as a post-doctoral fellow") between Lund University, SACO-S, OFR/S and SEKO, dated 4 September 2008.

Instructions on how to apply

Applications shall be written in English. Please draw up the application in accordance with LTH's

Academic qualifications portfolio – see link below. For this position your application should also include a one page tentative research plan within your field of interest, which integrates with ongoing research in the membrane group and the water and environmental science group. Upload the application as PDF-files in the recruitment system. Read more:

To apply for academic positions at LTH

Lund University welcomes applicants with diverse backgrounds and experiences. We regard gender equality and diversity as a strength and an asset.

We kindly decline all sales and marketing contacts.

Type of employment

Temporary position longer than 6 months

Contract type

Full time

First day of employment

As soon as possible

Salary

Monthly

Number of positions

1

Working hours

100%

City

Lund

County

Skåne län

Country

Sweden

Reference number

PA2017/3463

Contact

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Lunds universitet is using Varbi recruitment system in the recruitment process.

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