

Jobbnorge-ID: 76008
Søknadsfrist: Avsluttet
Nettside:
Omfang:
Varighet:

Researcher positions

Researcher positions on Life Cycle Assessment and Environmentally Extended Input-Output Analysis of Energy Systems at NTNU

The Industrial Ecology Program (IndEcol) and Centre for Sustainable Energy Studies (CenSES) at the Norwegian University of Science and Technology (NTNU) are seeking researchers for work on environmental assessment of energy systems.

The Industrial Ecology Program (IndEcol) is an interdisciplinary research and teaching program managing its own International MSc program and PhD program. IndEcol has a high reputation within the field as evidenced by a high-profile international evaluation. We are quite active in the areas of life-cycle assessment, material flow analysis, and the use of input-output analysis for environmental assessments, as evidenced by numerous publications and international prizes.

The current research activities are funded by national and European agencies, as well as industrial partners. There is a long tradition of working on both industrial and policy applications. The Industrial Ecology Program is well integrated in the international research community through the participation in EU projects, the participation in ISIE and IIOA working groups and the UNEP International Panel on Sustainable Resource Management. Key faculty staff currently serves as members of the IPCC, the UNEP Resource panel and IEA task force. IndEcol currently includes about 40 graduate students, 23 PhD Candidates, six Post Docs, 2 Researchers, the programme administration (Programme Director, MSc Programme Director, Office Manager and Co-ordinator) and associated professors.

The Centre for Sustainable Energy Studies is a long-term research project and is one of the Centers for Environmentally Friendly Energy (FME) founded by the Norwegian research council. The research objective of CenSES is to conduct research that supports public and private decision makers in strategic decisions and policies that will promote environment-friendly energy technologies and lead to a sustainable energy system. The CenSES consortium involves both universities and research institutions spanning from the fields of engineering, via economics to social sciences and humanities.

The industrial Ecology Program has responsibility for the environmental assessment of current and prospective energy technologies and systems in CenSES. We are therefore seeking qualified personnel to support this activity. We foresee strong synergies and collaboration with other ongoing projects and activities at IndEcol on both methodological development as well as applications.

Researcher code 1109/1110 - Environmental Assessment of Energy Systems (IVT-60/11)

We are looking for a person with a PhD and preferably some post doctoral experience in life cycle assessment and or input-output analysis. A proven ability to produce scientific work as evidenced by peer-reviewed publications is warranted. Knowledge of Matlab or related software or programming language is a prerequisite. Evidence for the ability to participate in group work and to take initiative should be provided.

The researcher will work on development of methodologies and application of these for environmental assessment of various energy technology scenarios. This involved extending upon current work on LCA and EIO undertaken at IndEcol (eg. In the projects CenBio, ECar, EXIOPOL, PROSUITE and CREEA). Work with dynamic extensions of LCA and EIO are foreseen. Some experience with operations research is therefore advantageous.

This person will be the leading researcher on the project from our side. In addition to research responsibilities he/she will also be expected to support the IndEcol faculty with some managerial tasks related to CenSES. Other duties will involve advising master students and working with PhD students. The candidate must be fluent in both written and oral English. The position has duration of 4 years.

Researcher code 1108 - Environmental Assessment of Energy Systems (IVT-52/11)

The researcher will work with the evaluation of prospective environmental impacts and resource requirements of technologies and measures for climate mitigation. The work will address the resource use and emissions during the construction of the required infrastructure, the operation and the disposal of waste. Methods utilized include life-cycle assessment and environmental risk analysis. The modeling of technologies includes embedding them in a global model of production and consumption constructed by others in the group in the EU projects EXIOPOL, PROSUITE and CREEA. The researcher will support an expert group in the International Resource Panel under UNEP in its assessment of climate mitigation technologies.

The candidate should have a relevant Master's degree in industrial ecology, engineering, physics, applied mathematics or economics. Strong analytical capabilities and good written and oral communications skills are essential. Competence in MatLab, operations research, and/or database tools is of advantage. The candidate must be qualified for admission to the PhD program at NTNU (B average at the MSc level). In

addition, the applicant must be fluent in English. Competence in Norwegian is of advantage. Trondheim is the place of duty. The position has duration of 2 years.

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Salaries:

The position as researcher code 1108, is remunerated wage levels 47 to 70 on the Norwegian State salary scale, with a gross salary from NOK 384 700 to NOK 579 400 per annum. Researcher Post-Doc level code 1109, wage levels 57 to 76 on the Norwegian State salary scale, with gross salary from NOK 455 900 to NOK 654 600 per annum. Researcher equivalent to professor code 1110, wage levels 60 to 91 on the Norwegian State salary scale, with gross salary from NOK 480 700 to NOK 981 100 per annum. The salary is adjusted according to the recent wage negotiations, and given subject to the final approval of the Storting (the Norwegian Parliament). There will be a 2 % deduction to the Norwegian Public Service Pension Fund from gross salary.

The position adheres to the Norwegian Government's policy of balanced ethnicity, age and gender. Persons with immigrant background are encouraged to apply.

NTNU's objective is to increase the number of females in scientific positions. Female applicants are therefore encouraged to apply.

Further information on the positions can be obtained from Associate Professor Anders Hammer Strømman (anders.hammer.stromman@ntnu.no, +47 73598948) or from Professor Edgar Hertwich (edgar.hertwich@ntnu.no, telephone +47 73598949).

General information on the industrial ecology program is available from our website www.ntnu.edu/indecot.

The application must contain information of educational background and work experience. Certified copies of transcripts, reference letters and publications should be enclosed. Applications must be submitted via this page - **ref. no. IVT-52/11 (researcher code 1108) or ref. no. IVT-60/11 (researcher code 1109/1110)**.

Application deadline for the position is 10.08.2011.

Tilleggsinformasjon

Arbeidssted: