

## Kunnskap for en bedre verden

Jobbnorge ID: 159083 Deadline: 11/13/2018 Website: http://www.ntnu.no

Scope: Fulltime

Duration: Temporary

The Department of Electronic Systems has a vacancy for a

# Postdoctoral Research Fellow in "Environmental effects of seismic acquisition on marine mammals"

#### This is NTNU

At NTNU, creating knowledge for a better world is the vision that unites our 7 000 employees and 40 000 students.

We are looking for dedicated employees to join us.

Video: https://www.youtube.com/watch?v=clgKd1SwGLI

#### About the position

The Faculty of Information Technology and Electrical Engineering, at the Norwegian University of Science and Technology (NTNU) has a vacancy for a 100% position as a Postdoctoral Research fellow at the Department of Electronic Systems (IES).

The position is affiliated with the Acoustics Group. The position requires training and expertise in physics, mathematics and acoustics or seismic.

The Postodoctoral position has a duration of two years.

The acoustics group (https://www.ntnu.edu/ies/acoustics-group) studies the generation, propagation and reception of sound waves, as well as transducers and related signal processing, in a wide range of scenarios: sound for the communication between humans (speech and music); the influence of sound (noise) on humans and animals; and technical uses such as for remote sensing, designing materials and devices for noise abatement, biodiversity assessment and underwater communication networks.

The position reports to Head of department.

#### Job description

This postdoctoral fellowship is financed by ARCEx. The Research Centre for Arctic Petroleum Exploration, ARCEx, is a research collaboration between academia and industry with support from the Research Council and Norwegian authorities. Through a common effort, ARCEx contributes to the understanding of the geology and resource potential of the high north. ARCEx develops new geophysical exploration techniques suitable for the Arctic and new models for environmental risk connected to operations in the north. Education and training is anintegrated part of ARCEx. ARCEx is hosted by UiT The Arctic University of Norway in Tromsø.

The post doc position will focus on environmental effects of seismic acquisition on marine mammals, and especially whales. The impact of high frequency sound generation by conventional seismic air gun arrays and how such frequencies can be attenuated is a key topic for the post doc position. Analysis and acquisition of acoustic signals generated by marine mammals are crucial elements of the research the post doctoral fellow will be involved in. Furthermore, to develop new and efficient methods to detect marine mammals during seismic acquisition will be in focus. Other aspects are related to design or modification of marine seismic sources to reduce or remove unwanted environmental effects caused by seismic acquisition.

#### **Qualification requirements**

A postdoctoral research fellowships is a qualification position in which the main objective is qualification for work in academic positions. Completion of a Norwegian doctoral degree in acoustics, geophysics or physics or corresponding foreign doctoral degree recognized as equivalent to a Norwegian doctoral degree is required.

The appointment is to be made in accordance with the regulations in force concerning State Employees and Civil Servants and <u>national</u> <u>guidelines for appointment as PhD, postdoctor and research assistant.</u>

Other qualifications:

- · Expertise in signal analysis, underwater acoustics and/or cavitation phenomena
- · Proficiency in oral and written English.

#### Personal characteristics

- · Experience with transdisciplinary work
- · Excellent communication skills, both oral and written
- · Willingness to learn Norwegian

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualification requirements specified in the advertisement

#### We offer

- · exciting and stimulating tasks in a strong international academic environment
- an open and inclusive work environment with dedicated colleagues
- favourable terms in the Norwegian Public Service Pension Fund
- employee benefits

#### Salary and conditions

Postdoctoral candidates are remunerated in code 1352, and are normally remunerated at gross from NOK 515 200 per annum before tax. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

A yearly amount for operating costs will be added.

Appointment takes place on the terms that apply to State employees at any time, and after the appointment you must assume that there may be changes in the area of work.

#### **General information**

Working at NTNU

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background. The position offers challenging and varied tasks in a versatile and pleasant environment that is characterized by active, committed and skilled employees. Women are encouraged to apply. NTNU is an equal opportunity employer and welcomes applicants from both EU/EEA and non-EU countries. The university is strongly committed to diversity within its community and welcomes applications from members of ethnic minorities.

Under the Freedom of Information Act (Offentleglova), information about the applicant may be made public even if the applicant has requested not to have their name entered on the list of applicants.

Questions about the position can be directed to Professor Martin Landrø, phone number +4773594973/+47 918 97 550, e-mail : martin.landro@ntnu.no.

About the application:

Publications and other academic works that the applicant would like to be considered in the evaluation must accompany the application. Joint works will be considered. If it is difficult to identify the individual applicant's contribution to joint works, the applicant must include a brief description of his or her contribution.

Please submit your application electronically via jobbnorge.no.The application should contain the following attachments:

- Applicants' CV (including list of publications, relevant former positions and references) and copy of relevant transcripts and diplomas.
- Short statement on the applicant's personal qualifications and motivation for the position.
- Short statement from a former supervisor/tutor/teacher.
- · Contact information for two references.
- Other relevant attachments.

Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree: <a href="http://ec.europa.eu/education/tools/diploma-supplement\_en.htm">http://ec.europa.eu/education/tools/diploma-supplement\_en.htm</a>

Applicants invited for interview must include certified copies of transcripts and reference letters. Please refer to the application number 2018/20691 when applying.

Application deadline: 13.11.2018

### NTNU - knowledge for a better world

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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

#### **Department of Electronic Systems**

The digitalization of Norway is impossible without electronic systems. We are Norway's leading academic environment in this field, and contribute with our expertise in areas ranging from nanoelectronics,

phototonics, signal processing, radio technology and acoustics to satellite technology and autonomous systems. Knowledge of electronic systems is also vital for addressing important challenges in transport, energy, the environment, and health. The <u>Department of Electronic Systems</u> is one of seven departments in the <u>Faculty of Information Technology and Electrical Engineering</u>.

#### Living in Trondheim

Trondheim is situated by the Trondheim fjord in the middle of Norway. It is the third largest city in Norway but still small by European standards. It is known for having the atmosphere both of a small and a large city and is famous for its student friendly environment. In all seasons Trondheim is an ideal place for those interested in outdoor life, whether your interest is by the sea or in the fjords, in the forest or in the high mountains. Trondheim is also a nice place to raise children. So, why not grasp this opportunity to boost the rest of your personal and professional life with some years in Trondheim?

For more information regarding moving to Trondheim, Norway and working at NTNU, please see: http://www.ntnu.edu/nirs

#### Additional information

#### Place of service:

O.S Bragstadsplass 2B 7491 Trondheim (Trondheim Municipality)