

## Kunnskap for en bedre verden

Jobbnorge-ID: 112311 Søknadsfrist: Avslutta

Nettside: Omfang: Varighet:

# Postdoctoral Fellowship in Applied Geophysics: Seismic- and Electomagnetic Survey (IVT-49/15)

The Department of Petroleum Engineering and Applied Geophysics at The Norwegian University of Science and Technology, Trondheim, Norway invites applicants for a Postdoctoral research fellowship in applied geophysics. The Postdoctoral Fellowships is a fixed-term position with the primary objective of qualifying for work in top academic posts. The appointment is for a term of 4 years, and will be part of the Research Centre for Arctic Petroleum Exploration (ARCEx).

ARCEx is a national research center with several national and international partners from academia and industry. The center aims to improve knowledge of petroleum resources in northern and Arctic areas, with the complementary aim of providing essential knowledge and methodology for eco-safe exploration in the high north. This Postdoctoral fellowship will be working in the work package Technology for eco-safe exploration in the Arctic, with focus on electromagnetic surveys. For more information, visit: <a href="https://www.arcex.no">www.arcex.no</a>

The research will focus on use of seismic- and Controlled Source Electromagnetic Method (CSEM) data for prospect-, play- and basin exploration, and on monitoring reservoir systems in Arctic Basins. The seismic method is relative robust both for exploration and production monitoring. CSEM has been shown promising for direct detection of hydrocarbons in the Barents Sea, and a combined use of CSEM data and seismic data may be effective in reducing exploration risk.

The main activities in the project will be to study general reservoir properties (lithology, porosity, permeability and anisotropy) and link these to geological structures of Barents Sea reservoir compartments. In this way their potential of being detected by combined use of seismic and CSEM will be better understood. Further, the project will study the potential for reservoir monitoring during production either by seismic methods alone, or combined with CSEM. Finally the project will develop workflows for reservoir monitoring using repeated (time lapse) surface seismic data combined with ocean bottom geophones and CSEM.

The candidate must have a PhD in a relevant field, with strong skills in data analysis. Excellent communication skills, both oral and written are important, and the applicant must speak and write English fluently.

Key requirements include:

- Experience in performance evaluation (e.g. modeling, analysis, simulation)
- · Ability to work independently and to assist in supervising students, at the graduate level

#### **Conditions of appointment**

The position is in code 1352, normally in salary grade 57-72 in the Norwegian State salary scale, gross NOK 482.500 - 639.200 per year, depending on qualifications. A deduction of 2% is made as a statutory contribution to the Norwegian Public Service Pension Fund. The application must contain:

- information about education and relevant experience (a CV)
- certified copies of academic diplomas and certificates
- applicants from universities outside Norway are kindly requested to send a diploma supplement or a similar document, which describes
  in detail the study and grading system and the rights for further studies associated with the obtained degree
- the research project description, as described above
- the PhD thesis and other publications that the applicant wishes to be taken into account; joint work should clearly indicate the applicant's contribution

Incomplete applications will not be taken into consideration.

For further information about the position, please contact Professor Ståle Emil Johansen (stale.johansen@ntnu.no). The application must be sent electronically as one combined PDF file via www.jobbnorge.no
Application deadline: 20 April 2015

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### Tilleggsinformasjon

#### Arbeidssted: