



NTNU

Kunnskap for en bedre verden

NTNU - kunnskap for en bedre verden

Ved NTNU i Trondheim er den teknologiske kunnskapen i Norge samlet. I tillegg til teknologi og naturvitenskap har vi et rikt fagtilbud i samfunnsvitenskap, humanistiske fag, realfag, medisin, lærerutdanning, arkitektur og kunsthøgskolen. Samarbeid på tvers av faggrensene gjør oss i stand til å tenke tanker ingen har tenkt før, og skape løsninger som forandrer hverdagen.

**Fakultet for ingeniørvitenskap og teknologi
Institutt for petroelumbsteknologi og anvendt geofysikk**

PhD Position within Rock Physics (IVT 153/14)

The Department of Petroleum Engineering and Applied Geophysics at The Norwegian University of Science and Technology, Trondheim, Norway invites applicants for PhD research fellowship in the field of rock physics. The position is part of the project "Shale Rock Physics: Improved seismic monitoring for increased recovery", which is funded by the Norwegian Research Council (PETROMAKS 2 program) and six industry partners. The project is coordinated by SINTEF Petroleum. The PhD research fellowship is awarded for a total of 3 years and the experimental work will be carried out at SINTEF's Formation Physics Laboratory.

The main task of the PhD position is to study dispersion (frequency dependence of wave velocities) of acoustic wave velocities in shales and its stress and temperature dependence, which is of importance for the interpretation of seismic wave propagation. A newly developed compaction cell will be employed that allows for combined measurements of velocities at seismic and ultrasonic frequencies. Based on the experimental results, a velocity-dispersion model will be developed and incorporated in a shale rock physics model. The work will be carried out in collaboration with the Colorado School of Mines (USA). The PhD work will include both experiments (further development of the set-up, measurements and data analysis) and theory (modelling development).

Applicants must hold a Master's degree or equivalent within physics, geophysics, mechanics or instrumentation. The applicants must be qualified for the PhD study at NTNU. The successful applicants are motivated and ambitious students with excellent grades. Proficiency to carry out independent and goal-oriented work, good skills to deliver oral and written presentation of research results, and good cooperation abilities will be emphasized. Experimental experience and interests are prerequisites.

Interested applicants are encouraged to contact: Adjunct Professor Andreas Bauer, Andreas.bauer@ntnu.no, +47 930 00 192.

Conditions of appointment:

PhD Candidates are remunerated in code 1017, and are normally remunerated at wage level 50, gross NOK 429 400 before tax. There will be a 2 % deduction to the Norwegian Public Service Pension Fund from gross wage. Engagement as a PhD Candidate is done in accordance with "Regulation concerning terms and conditions of employment for the posts of post-doctoral research fellow, research fellow, research assistant and resident", given by the Ministry of Education and Research of 19.07.2010. The goal of each of the announced positions is to obtain a PhD degree. Applicants will engage in an organized PhD training program, and appointment requires approval of the applicants plan for a PhD study within three months from the date of commencement. See <http://www.ntnu.edu/ivt/phd> for more information.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants. The positions adhere to the Norwegian Government's policy of balanced ethnicity, age and gender. Women are encouraged to apply.

According to the new Freedom of Information Act, information concerning the applicant may be made public even if the applicant has requested not to be included in the list of applicants.

The application must contain information of educational background and work experience. Certified copies of transcripts and reference letters should be enclosed.

Applications with CV, grade transcripts and other enclosures should be submitted electronically via this page (jobbno.no). Make your application with reference no **IVT-153/14**.

Application deadline: 20 October 2014

Jobbno-ID: 106176, Søknadsfrist: Avsluttet