

*The Norwegian University of Science and Technology (NTNU) in Trondheim represents academic eminence in technology and the natural sciences as well as in other academic disciplines ranging from the social sciences, the arts, medicine, teacher education, architecture to fine art. Cross-disciplinary cooperation results in innovative breakthroughs and creative solutions with far-reaching social and economic impact.*

**NTNU University Museum**  
**National Laboratory for Age Determination**

## **Two PostDoc Fellowships in $^{14}\text{C}$ /cosmogenic dating techniques and applications**

The NTNU University Museum invites applicants for two PostDoc Fellowships in  $^{14}\text{C}$ /cosmogenic dating techniques and applications. Both fellowships are for a period of two (2) years with the possibility of one year prolongation given available funding.

### **About the laboratory**

The National Laboratory for Age Determination consists of laboratories for radiocarbon- and dendrochronology. The carbon dating facilities include a mass spectrometer with an elemental analyzer used for stable isotope ( $^{13}\text{C}$ ) analysis, a HVEE AMS instrument for  $^{14}\text{C}$  measurements, and lines for  $^{14}\text{C}$  sample graphitization. The laboratory is undergoing a restructure and consolidation phase with regard to external services and research areas. These changes involve expansions in research areas, establishment of new preparation lines, web-solutions for customers, and new dating services. This offers a unique possibility to be a part of an interdisciplinary research group in applications and development of  $^{14}\text{C}$  and cosmogenic dating techniques for the years to come.

The National Laboratory for Age Determination is part of the NTNU University Museum, which has a strong research focus on archaeology, natural history and cross-disciplinary environmental topics. As the only facility of its kind in Norway, the laboratory offers age determination of archaeological and geological material by the  $^{14}\text{C}$  AMS technique. The laboratory is staffed with engineers and researchers ranging in specialties such as sample preparation, physics, dendrochronology/climatology, archaeology and Quaternary geology. The laboratory collaborates closely with other dating laboratories, research institutions, and governmental agencies through research projects and dating services.

### **Job descriptions and qualifications**

Both PostDoc Fellows will be part of the research group at the laboratory. They are expected to contribute to the research efforts in ongoing activities as well as initiate new fields of investigation.

PostDoc 1 will conduct basic and applied research in  $^{14}\text{C}$  dating techniques connected with the AMS instrument and preparation lines. He/she will also be responsible for investigating and setting up an automated preparation line for routine samples.

PostDoc 2 will perform research in applications of  $^{14}\text{C}$  dating in palaeoclimatic/geologic cross-disciplinary research. He/she will be responsible for establishing cosmogenic dating techniques as a field of research within the laboratory and as an external service to customers.

Both PostDoc Fellows are required to contribute in establishing an educational program in dating techniques and its applications. They are expected to apply for and obtain external funding for research projects and to interact in interdisciplinary collaborations with other departments at NTNU and other research institutions, as well as in national and international research programs.

The ideal candidate for PostDoc 1 must hold a PhD in physics or chemistry, whereas applicants for PostDoc 2 should preferably have a PhD in Quaternary/marine geology, or another relevant field of the earth sciences. Applicants should demonstrate professional qualifications within essential areas of  $^{14}\text{C}$  dating methodology and applications. Emphasis is strongly placed on cooperative and communicative skills. English language proficiency must be documented.

### **Application and other information**

Applications with motivation letter, CV including a full list of publications and other scientific works, certified copies of transcripts and certificates from Master, PhD and other relevant exams or experience, copies of maximum 5 publications, and a list of contact information for three references should be submitted electronically through this page ([jobbnorge.no](http://jobbnorge.no)).

NTNU is an equal opportunity employer and values diversity in the workforce. The appointments will be made according to the general regulations regarding university employees. Post Doc research positions are remunerated at wage code 1352 - levels 57 to 77 on the Norwegian State salary scale, with gross salary from NOK 473 100,- to NOK 696 300,- a year. Normal wage level is 57-62. There is a compulsory 2 % deduction to the pension fund.

Further details about the positions can be obtained from Head of laboratory, Professor Eiliv Larsen, email [eiliv.larsen@ntnu.no](mailto:eiliv.larsen@ntnu.no), phone +47 73593301/+47 95855051 and/or Associate Professor Marie-Josée Nadeau, email [mnadeau1964@yahoo.com](mailto:mnadeau1964@yahoo.com), phone +49 431 8805921.

Applications and enclosures are to be submitted electronically through this page (reference no. VM 2014/7863).  
For more information about the museum see <http://www.ntnu.edu/museum/organization>

Application deadline: 30.04.2014.

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