Norwegian University of Life Sciences

Jobbnorge-ID: 140160
Søknadsfrist: Closed
Nettside:
Omfang:
Varighet:

Postdoctoral fellow within Environmental Radioactivity/Radioecology - Metabolomics and effects in exposed fish - Ref.no. 17/02911

The Faculty of Environmental Sciences and Natural Resource Management (MINA) and Centre of Environmental Radioactivity (CERAD, Centre of Excellence) at the Norwegian University of Life Sciences (NMBU) has a vacant two year Post Doctoral-position (with possibilities for extension). The research field is within environmental radioactivity/radioecology with focus upon mechanisms of effects on fish using metabolomics. The position is funded by NMBU/CERAD CoE.

The Faculty of Environmental Sciences and Natural Resource Management (MINA) has about 200 employees and undertakes teaching, research and dissemination within the fields of geology, soil science, environmental chemistry, forestry, ecology, natural resource management, renewable energy, nature based tourism. The faculty has about 600 students, and approximately 90 PhD-students. The employees of the faculty are significant participants in their respective fields of expertise, both nationally and internationally and have a high level of scientific production. For more information: https://www.nmbu.no/en/faculty/mina

In 2013 the CERAD Center of excellence was established at MINA/Isotope Laboratory in collaboration with NRPA, MET, NIVA and NIPH. CERAD focuses on new scientific knowledge and tools for better protection of people and the environment from harmful effects of radiation. For more information see http://cerad.nmbu.no/

CERAD is in the middle of the Norwegian Research Council's midterm evaluation as to whether the funding of the centre is to continue for the entire 10-year period. Start up in this PostDoc position is on condition that CERAD CoE is continued for another 5 years.

Research Project
The project will be an integrated part of CERAD and the work will be performed in close collaboration with other projects on dynamic transfer and multiple effects, thus offering scientific synergy and stimulating environment to the researcher. The CERAD consortium provides expertise on different aspects and methodologies, including a large and advanced toolbox for identification of different biological endpoints. The research work will also be part of national and international project collaboration, including PhD projects.

Exposure to radionuclides (both manmade and natural) represents a potential risk to a number of aquatic invertebrates and vertebrates, due to radiological toxicity as well as chemical toxicity of the metal/element. Toxicity of radionuclides is highly dependent upon uptake in organisms, as well as from interactions by other stressors and external ionizing radiation. The work will focus on identification of toxic mode of action and affected mechanisms due to ionizing radiation and interacting chemical stressors, using metabolites and other relevant biomarkers.

Main tasks
The main tasks of the PostDoc position are to:

- Improve our understanding of the toxic mode of action of radionuclides in organisms such as fish due to ionizing radiation and interacting chemical stressors.
- Provide a detailed understanding of toxic mechanisms affected in exposed organisms due to ionizing radiation and possible interacting effects due to mixture exposure
- Identify dose - response relationship for exposed organisms using metabolites and other relevant biomarkers

Thus, the key issue is to link exposure of organisms such as fish to biological effects.

The work will include:

- Modell exposure experiments with fish in laboratory at NMBU and in observatory contaminated sites
- Utilization of metabolites and biomarkers to obtain information on toxic effects
- Identify metabolite responses connected to adverse outcome in exposed organisms (e.g. fish) at different life stages, including interacting responses of ionizing radiation and chemical stressors

The work will be carried out as part of a team of researchers, doctoral fellows and graduate students at the Centre of Environmental Radioactivity, The Faculty of Environmental Sciences and Natural Resource Management, and together with international partners.

Academic Qualifications
Applicants must have a PhD degree or equivalent qualifications in radioecology/ ecotoxicology/ molecular analysis of metabolism in fish or similar from a university or college.

For candidates without competence within radiation, the Radiation protection course (KJM350) offered at NMBU will be mandatory. Experience from work with ionizing radiation or radionuclides and from field or laboratory work with fish or aquatic organisms, including radiobiological biomarkers and metabolite techniques will be an advantage.

Applications will be evaluated according to the following criteria:

- Competence with respect to ionizing radiation or radionuclides
- Competence and experience analyzing and evaluating endpoint variables such as metabolites
- Experience with fish experiments
- Experience with biomarkers and effects.

In addition, the candidate must have:

- Good knowledge of the English language - both written and oral.
- Good communication skills, both related to research and presentations in general.

Personal skills
Personal characteristics important for the position are:

- Strong motivation
- Creativity and ability to work result-oriented, accurate and structured.
- Analytical ability
- Ability to work independently as well as ability to be a good team player.

NMBU offers:

- A progressive and ambitious academic institution with a focus on professional development, dissemination and competence.
- An interdisciplinary and inclusive environment that provides exciting research- and development opportunities.
- Inspiration through daily contact with students and skilled colleagues.
- Various welfare schemes.

Beautiful surroundings just outside Oslo

Remuneration
The position is placed in government pay scale position code 1352 Postdoctoral Fellow, wage framework 24 (salary grade 57-77), depending on qualifications. Seniority Promotion in position.

Further information
For further information, please contact Researcher Hans-Christian Teien
E-mail: hans-christian.teien@nmbu.no; phone +4767231893 or Researcher Dag Brede E-mail: dag.brede@nmbu.no, phone +4767231873

Application
To apply online for this vacancy, please click on the **'Apply for this job'** button above. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.
Application deadline: 13.08.2017

Key publications
Up to ten publications selected by the applicant as most relevant must be attached to the application. If it is difficult to identify the contribution of the applicant in multiple-author publications, a short explanation about the applicant’s part of the work is suggested.

Printed material which cannot be sent electronically should be sent by surface mail to Norwegian University of Life Sciences, Faculty of Environmental Sciences and Natural Resource Management (MINA), P.O. Box 5003, NO-1432 Ås, within 13.08.2017**.** Please quote reference number 17/02911.

Verified testimonies, certificates
Applicants invited for an interview will be asked to present verified copies of diplomas and certificates.

The position follows the Norwegian government pay scale A compulsory contribution of 2 % is made to the Norwegian Public Service Pension Fund. A good working environment is characterized by diversity. We encourage qualified candidates to apply, irrespective of gender, physical ability or cultural background. The workplace will if necessary be facilitated for persons with disabilities.

According to the Freedom of Information Act § 25 the list of applicants for this position may be made public irrespective of whether the applicant has requested that his/her name be withheld.

Tilleggsinformasjon

Arbeidssted: