

# Post-Doctoral Fellowship in risk assessment and prioritization and remediation of dumped munitions in the Baltic Sea

Are you interested in environmental science and risk analysis and protecting the marine environment from contamination from dumped munitions? We invite applications to a unique exciting opportunity to join new research projects. You can contribute to the development of the project MUNI-RISK and MineSweeper and work towards protecting the Baltic Sea and EU oceans. The Department of Environmental Science invites you to apply for a 2-year post-doctoral position at Aarhus University, in Roskilde, Denmark.

## Expected start date and duration of employment

We are looking for one or two postdocs and the position is a 2-year position from 1 June, 2025 or as soon possible thereafter. It may be possible to prolong the employment for up to another 12 months.

## Job description

In September 2023 during the Our Baltic II conference in Palanga Lithuania - the Ministers of the Environmental from the neighboring the Baltic Sea countries (except from Russia) identified the more than 300.000 of unexploded munitions from the past World Wars as a major threat towards the environmental wellbeing of the Baltic Sea. European waters are widely contaminated with underwater munition, which are causing pollution and preventing economic development in the region. The war remnants include conventional and chemical munitions and much of the conventional munitions can be found in relatively shallow waters, near fishing activities, major shipping routes, and offshore development locations. Two new EU-funded projects, MUNI-RISK (<https://muni-risk.eu/>) and MMinE-SwEEPER (<https://mminesweeper-munition.eu/>) seek to advance our understanding of the potential risks marine munition may have in the environment – and hence to support risk management of the risks. MUNI-RISK will generate detailed data on the extent of munitions-related chemical contamination in the Baltic Sea.

The projects will be conducted in close collaboration with a range of universities, research institutes, authorities, commercial companies, and offshore specialists. The project will develop a framework for prioritization of areas for enhanced risk management e.g. remediation, as well as develop how to include dumped munitions in Environmental Impact Assessments: We will ensure that the frameworks are transferable to other European seas - particularly the Black Sea.

## Your profile

The candidate will be part of the MUNI-RISK and MMinE-SwEEPER consortia that will advance scientific understanding on risks of munition in the marine environment and develop methods for risk prioritizing and implementing remediation actions of dumped munition and inclusion of dumped munitions in Environmental Impact Assessments of offshore wind turbine parks outside Denmark, Poland and Estonia. The candidate will be involved in case study work with stakeholders and assessment of risks based on collected data from the project activities from field measurements in munition dump sites in the Baltic Sea. The candidate will work on the general and site-specific risk assessment of dumped munitions in the Baltic Sea. The tasks of the candidate will also comprise working in the consortium as well as the presentation of results at national and international scientific meetings and the publication of the results in established peer-reviewed scientific journals.

- A PhD in chemical risk assessment and environmental toxicology, environmental science, or similar field is required
- Experience in stakeholder engagement and co-creation and collection and analysis of information and data from stakeholder processes
- Experience in risk assessment of organic compounds in marine environments
- Experience in the toxicological characterization of contaminants
- Excellent English language skills (written and spoken)
- Willingness to work efficiently with other members on the ongoing projects
- Willingness to contribute to the projects management

**Application Deadline:**  
07 April 2025

**Faculty:**  
Faculty of Technical Sciences

**Institute/Faculty:**  
Department of Environmental Science

**Academic contact person:**  
Hans Sanderson  
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+4587158632

**Hours per week:**  
37

**Number of months:**  
24

**Expected date of accession:**  
01/06/2025

## Who we are

ENVS: The Department of Environmental Science is an interdisciplinary department under the Faculty of Technical Sciences at Aarhus University. The expertise of the Department ranges from physics, chemistry, microbiology, social science, geography, economics, to policy analysis. Basic as well as applied research are conducted on some of the major challenges facing society, such as pollution and pollution control mechanisms, management of land, soil, water, air and biodiversity, protection of ecosystem services, and climate change. Advisory services within these areas are offered to ministries and other authorities. Currently, about 140 staff, postdocs and PhD students are working at the department. The Department believes in values of equality, diversity and inclusion, and creating an attractive work/life balance. Further information can be found at [www.envs.au.dk](http://www.envs.au.dk).

MITO: Section for chemistry and toxicology. The Environmental Chemistry and Toxicology (MITO) section conducts research and provides advisory work to better understand exposure sources, exposure levels, transformation routes, risks, and effective ways to reduce the danger posed by chemicals. Our aim is to increase knowledge of the fate and risk of organic pollutants in the environment and develop approaches to manage and remediate these risks in technical systems, such as water purification and soil remediation. The research section also performs environmental risk assessments for various organic pollutants, such as pharmaceuticals, pesticides, PCBs, flame retardants, fluorinated compounds, dioxins, PAHs, personal care products, plasticizers, chemical warfare agents, and their degradation products.

In addition, our research examines the sources, transport mechanisms, distribution patterns, bioaccumulation processes, and transformation pathways of contaminants in diverse environmental and human matrices. Our work involves conducting both environmental risk assessment and public health risk assessment (<https://envs.au.dk/en/about-the-department/environmental-chemistry-and-toxicology>).

## What we offer

The department/centre offers:

- A well-developed research infrastructure, laboratories and access to shared equipment
- An exciting interdisciplinary environment with many national, international and industrial collaborators
- A research climate encouraging lively, open and critical discussion within and across different fields of research
- A work environment with close working relationships, networking and social activities
- A workplace characterised by professionalism, equality and a healthy work-life balance.

## Place of work and area of employment

The place of work is at Aarhus University, Risø Campus, Frederiksborgvej 399, 4000 Roskilde, Denmark.

## Contact information

For further information, please contact: Sr Scientist and MUNI-RISK coordinator Hans Sanderson, T: +45-4189-3238; E: [hasa@envs.au.dk](mailto:hasa@envs.au.dk).

## Deadline

Applications must be received no later than 7 April, 2025.

## Application procedure

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the appointment committee if necessary, – the head of department selects the candidates to be evaluated. All applicants will be notified whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee, and each applicant is given the opportunity to comment on the part of the assessment that concerns him/her self. Once the recruitment process is completed a final letter of rejection is sent to the deselected

applicants.

### **Letter of reference**

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline.

Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

If you wish to add a referee **after** you have submitted your application, you must send this person's details (name, job title, place of work, and email address) as well as the name of the position you have applied for to: HR.Nattech@au.dk

### **Formalities and salary range**

Technical Sciences refers to the [Ministerial Order on the Appointment of Academic Staff at Danish Universities under the Danish Ministry of Science, Technology and Innovation](#).

The application must be in English and include a curriculum vitae, degree certificate, a complete list of publications, a statement of future research plans and information about research activities, teaching portfolio and verified information on previous teaching experience (if any). Guidelines for applicants can be found [here](#).

Appointment shall be in accordance with the collective labour agreement between the Danish Ministry of Taxation and the Danish Confederation of Professional Associations. Further information on qualification requirements and job content may be found in the [Memorandum on Job Structure for Academic Staff at Danish Universities](#).

Salary depends on seniority as agreed between the Danish Ministry of Taxation and the Confederation of Professional Associations.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

Aarhus University offers a broad variety of services for international researchers and accompanying families, including relocation service and career counselling to expat partners. Read more [here](#). Please find more information about entering and working in Denmark [here](#).

Aarhus University also offers a Junior Researcher Development Programme targeted at career development for postdocs at AU. You can read more about it [here](#).

*The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.*

### **Aarhus University**

*Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at [www.international.au.dk/](http://www.international.au.dk/)*