

## NKS R/B Call for Project Proposals 2025

This is an early reminder of your upcoming chance to apply for NKS funding for new R&D projects. We critically need your good ideas for projects starting in January 2025. The deadline for proposal submission will be the 15<sup>th</sup> of October 2024. It can be useful to discuss ideas and form the project groups in good time. Please refer to [www.nks.org](http://www.nks.org). Note that although the material will be routinely updated over the summer (new years on forms etc.), no essential changes are foreseen.

## Upcoming seminars

### NKS-R NORDIC SMART

#### Workshop on harmonizing SSZs and GR activity rate estimates - Summary of the Workshop

25 June 2024, Online in Teams (Link: [Join the meeting now](#)).

Seminar description: Public outreach of the NORDIC-SMART Workshop dedicated to harmonizing the seismic zones and catalogues in the Nordic. Project description here: [https://www.nks.org/en/nksr/current\\_activities/insole\\_02.htm](https://www.nks.org/en/nksr/current_activities/insole_02.htm). This section is open to project stakeholders and focuses on their perspectives and needs.

Organizers: VTT Technical Research Center of Finland (VTT), Uppsala Universitet, University of Helsinki, Universitet i Bergen, Geological survey of Denmark and Greenland (GEUS)

Coordinator: Ludovic Fülöp ([ludovic.fulop@vtt.fi](mailto:ludovic.fulop@vtt.fi))

### NKS-B MAREPR

#### Maritime Nuclear Emergency Preparedness and Response - Tools and Monitoring

22-23 August, Tromsø, Norway

The Nordic countries are surrounded by large ocean areas where there is frequent traffic of foreign nuclear-powered vessels both naval and civilian, and ships carrying nuclear or radiological materials. In addition, several Nordic countries receive visits from NATO nuclear-powered vessels and/or have traffic of nuclear-powered vessels in their territorial waters. This activity has increased the last years, and is expected to increase further due to the geopolitical situation and climate change. The expansion of NATO to Finland and eventually Sweden will have large implications on the geopolitical situation regionally for the Nordic countries, and may be expected to give increased traffic of nuclear-powered vessels also in the Baltic Sea, in addition to the existing traffic in Arctic waters.

The NKS-B MAREPR project will address emergency preparedness challenges, and aims to further develop, adapt or adjust coordinated tools for information exchange, request for assistance and measuring and monitoring standards for events related to nuclear-powered vessels or ships carrying radioactive material. There is a need in the Nordic countries for further development and harmonization of emergency response

measurement strategies, mobile measurements, environmental monitoring and shortcomings in the international recommendations under the International Maritime Organization (IMO) and IAEA for emergency response regarding nuclear and radiological hazards at sea. Utilization of newly developed tools, such as International Advanced Visualization and Integration of Data (iAVID) and Rapid Source Term Prediction (RASTEP), will be addressed.

During the project, we will have two workshops and the first workshop will be in the Tromsø area in Norway the 22-23 of August. It will be related to existing emergency preparedness and response systems in the Arctic and the High North, experiences from exercises and recommendations from earlier projects. The workshop will be open for registration.

#### **Workshop organizers:**

- The Norwegian Radiation and Nuclear Safety Authority (DSA), Norway
- The Finnish Radiation and Nuclear Safety Authority (STUK), Finland
- The Swedish Radiation Safety Authority (SSM), Sweden
- The Swedish Defence Research Agency (FOI), Sweden
- The Icelandic Radiation Safety Authority (IRSA), Iceland
- The Icelandic Coast Guard
- The Danish Emergency Management Agency (DEMA), Denmark

Coordinator: Inger Margrethe Eikermann ([inger.eikermann@dsa.no](mailto:inger.eikermann@dsa.no))

#### **NKS-B RADWORKSHOP 2024**

#### **Workshop on Radioanalytical Chemistry for Nuclear Decommissioning and Waste Management**

**9-13 September 2024, DTU Risø Campus, Frederiksborgvej 399, Roskilde, Denmark**

This is the fourth RadWorkshop supported by NKS, following three successful RadWorkshops at Risø, Denmark in 2009, 2013 and 2018, each with different focuses within the realm of radioanalytical chemistry. Different from previous ones, RadWorkshop 2024 will embrace a broader spectrum of topics in radioanalytical chemistry, reflecting the evolving landscape of this field.

The workshop is organised by the Technical University of Denmark (DTU), *in close collaboration with* Norwegian Life Science University (NMBU), University of Helsinki (UH), Swedish Food Agency (SLV), Norwegian Radiation and Nuclear Safety Authority (DSA), and Radiation and Nuclear Safety Authority, Finland (STUK).

RadWorkshop 2024 aims to enhance the education of MSc/PhD students and young scientists, bolster the expertise of staff in the field of radiochemistry, and foster effective radioanalytical output. The workshop topics include:

1. *Radiochemistry and measurement techniques*
  - Principles of radiochemical analysis
  - Radiochemical methods for hard-to-measure radionuclides
  - Measurement techniques (alpha, beta, gamma, LSC, mass spectrometry)
  - Development of new techniques/materials
2. *Radioanalytical Chemistry in Emergency Preparedness*
3. *Radioanalytical Chemistry in Nuclear Decommissioning*
4. *Radioanalytical Chemistry in Radioecology and Environmental Studies*

The workshop consists of two parts: *9-11<sup>th</sup> September*: Invited lectures and presentations from participants at Auditorium, building 112, Risø. A number of renowned experts in the field from around the globe will give insightful talks. *12-13<sup>th</sup> September*: Laboratory training in building 204, Risø. The lab training will

demonstrate the radiochemical analysis of selected difficult-to-measure radionuclides (e.g., Pu-239, 240, Sr-90) and provide practical instruction for performing ICP-MS measurements.

For more information, please visit the website: <https://www.conferencemanager.dk/radworkshop2024>

Coordinator: Jixin Qiao (DTU): [jjqi@dtu.dk](mailto:jjqi@dtu.dk)

## **NKS-B THREATSEM**

### **Threat and Hazard Assessment Seminar 2024**

**12-13 September 2024, Oslo, Norway**

There have been significant changes in both civilian and military nuclear and radiological threats and hazards relevant for the Nordic region the last years. Increased traffic of nuclear-powered vessels including more frequent military exercises, the ongoing war in Ukraine and its implication for nuclear safety, aging nuclear power plants, nuclear-powered weapons systems, including testing of the Skyfall missile on Novaya Zemlya, and other developing technologies are a few examples. For both authorities with responsibility for RN emergency preparedness and response, universities, research communities and other stakeholders, it is important to have a mutual understanding and exchange of views on assessments of current nuclear and radiological threats and hazards.

The THREATSEM seminar will be a two-day seminar in order to exchange knowledge and views on nuclear and radiological threats and hazards between authorities, research communities and other stakeholders. The seminar aims to provide a basis for understanding different approaches to assessing threats and hazards, especially regarding new challenges.

The seminar will be open for registration.

#### **Workshop organizers:**

- The Norwegian Radiation and Nuclear Safety Authority (DSA), Norway
- The Finnish Radiation and Nuclear Safety Authority (STUK), Finland
- The Swedish Radiation Safety Authority (SSM), Sweden
- The Swedish Defence Research Agency (FOI), Sweden
- The Icelandic Radiation Safety Authority (IRSA), Iceland
- The Danish Emergency Management Agency (DEMA), Denmark

Coordinator: Øyvind Gjølme Selnæs ([oyvind.selnæs@dsa.no](mailto:oyvind.selnæs@dsa.no))

## **NKS-R INSOLE**

### **International webinar on independent nuclear safety oversight (INSO)**

**Date to be announced - 4<sup>th</sup> Quarter of 2024 (online via Teams)**

The importance of licensee self-regulation and internal oversight is increasingly emphasized in the nuclear industry. For self-regulation to be effective, the licensees need to recognize how the different ways to organize and implement their internal independent nuclear oversight function affect their safety performance, and how safety culture affects and is affected by the oversight function. NKS-R INSOLE activity aims at collecting the best practices and lessons learned from organizations operating in various safety-critical industries, and facilitating participative development of INSO in the Nordic nuclear industry.

NKS-R INSOLE arranges an international webinar to disseminate research results and to facilitate information exchange internationally between organizations from the nuclear industry and other safety-critical industries.

The seminar will be open for registration.

Webinar organizers: VTT Technical Research Centre of Finland (Finland), Risk Pilot (Sweden), Lilikoi (Finland)

Coordinator: Kaupo Viitanen, [kaupo.viitanen@vtt.fi](mailto:kaupo.viitanen@vtt.fi) (VTT)

## New Publications

The following NKS-R reports are available free of charge: Download by clicking the appropriate link.

NKS-482	Jan 2024	K. Viitanen, T. Reiman, S. Karadeniz, M. Airola, F. Jakobsson, C. Sylvander, S. Lind: Internal nuclear safety oversight as part of organizational defence-in-depth – Lessons learned for the Nordic nuclear industry - Intermediate report from the NKS-R INSOLE activity	INSOLE	<a href="#">View document</a>
NKS-485	Mar 2024	Z. Que, N. Hytönen, Y. Ge, S. Lindqvist, A. Fazi, M. Thuvander, P. Efsing: Effect of Thermal Ageing and Microstructure on Fracture Mechanical Behaviour of Ni-based Alloy Dissimilar Metal Welds	FEMMA 2023	<a href="#">View document</a>
NKS-486	Mar 2024	P. Efsing, J. Faleskog, D. Klein, N. Hytönen, J. Lydman, S. Lindqvist, M. Thuvander, J. Roudén: Barsebäck as a Research and Development Platform, Extraction and Analysis of Service-aged and Irradiated Reactor Pressure Vessel Material	BREDA 2023	<a href="#">View document</a>

The following NKS-B reports are available free of charge: Download by clicking the appropriate link.

NKS-481	Jan 2024	M. Dowdall, T. Karhunen, E. Vikman, M. Eriksson, G. Jónsson: Principle Component Analysis as Applied to Qualitative Analysis of Mobile Measurement and Monitoring Data Sets (PRICOMOB)	PRICOMOB	<a href="#">View document</a>
NKS-483	Feb 2024	C.L. Rääf, R.R. Finck, C. Berhardsson, V.C. Baranwal, M.-C. Dinca, J. Drefvelin, M.-A. Dumais, P.O. Hetland, G. Jónsson, N.S. Rye Jørgensen, S.Karlsson, M. Lundgaard Davidsdóttir, B. Møller, C. Nilsson, F. Ofstad, J. Palmcrantz, H. Öberg: Development and testing methods to locate lost gamma-ray sources in ordinary environs by mobile gamma spectrometry, NKS-B REALMORC Report 2023	REALMORC	<a href="#">View document</a>

NKS-484	Feb 2024	J. Havskov Sørensen, K. Holten Møller, K. Skjold Tølløse, L. Robertson, J. Burman, L.Å. Persson, D. Vågberg, J. Pehrsson, H. Roed, E. Pagh Senstius, N. Ul Syed, A. Axelsson, A.M. Blixt Buhr, J. Lindgren, M. Moring, T. Peltonen, M. Voutilainen: DISpersion of radioActivity fRom nuclear boMbs (DISARM) – first-year report	DISARM	<a href="#">View document</a>
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## NKS Young Scientist Travel Assistance

Updated information that NKS offers travel assistance for young scientists wishing to attend NKS-R and NKS-B events as well as related non-NKS events even outside the Nordic countries - under certain conditions. More information on the conditions and how to apply for travel assistance can be seen on the NKS web site [here \(http://www.nks.org/en/nksr/travel\\_assistance/travel\\_assistance.htm\)](http://www.nks.org/en/nksr/travel_assistance/travel_assistance.htm) for NKS-R related events, and [here \(http://www.nks.org/en/nksb/travel\\_assistance/travel\\_assistance.htm\)](http://www.nks.org/en/nksb/travel_assistance/travel_assistance.htm) for NKS-B related events.

## NKS on LinkedIn

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