

## Nordic Nuclear and Radiation Risk Estimates - Advances and Uncertainties

Joint NKS-R and NKS-B Seminar, Finlandshuset ([www.finlandshuset.se](http://www.finlandshuset.se)), Snickarbacken 4, Stockholm, 15-16 January 2019 (FINAL CALL)

NKS proudly announces a new joint NKS-R and NKS-B seminar, which is scheduled to start at 13:00 on the 15<sup>th</sup> of January and end at 15:30 on the 16<sup>th</sup> of January 2019.

A newly updated complete version of the seminar program is available at the NKS website ([www.nks.org](http://www.nks.org)). There you can also have a preview of the abstracts for the presentations at the seminar. A printed Book of Abstracts will be available for those attending the seminar.

The seminar will provide an overview of the current state of development in Nordic risk evaluation, both in relation to nuclear power production and in relation to radiation exposure in different other contexts, and particularly discuss recent advances, uncertainties, ideas for improvement and potential future NKS activities.

In the longer perspective, ideas and thoughts for future work and follow up from, e.g., industries, authorities, expert communities and NKS should be the outcome of the seminar.

We cordially invite you to come and take part in the discussions.

To register for this seminar, please go to the main NKS web page [www.nks.org](http://www.nks.org). There is no registration fee.

## NKS-R Call for Proposals 2019

10 proposals for NKS-R activities were received before the deadline on October 15th. Of these, 2 were applications for continuation of ongoing activities.

The numbers of proposals submitted under the NKS-R areas of interest are as follows:

Area of Interest	No. of Proposals	Total budget for proposals under area of interest
Severe accidents	2	1159 kDKK
Risk analysis	2	1100 kDKK
Reactor physics	2	960 kDKK
Organisational issues and safety culture	1	600 kDKK
Thermal hydraulics	1	600 kDKK
Decommissioning	1	600 kDKK
Plant life management and extension	1	500 kDKK

The total amount requested was **5519 kDKK** from an expected budget of **3000 kDKK**.

# NKS-B Call for Proposals 2019

12 proposals for NKS-B activities were received before the deadline on October 15th. Of these, 2 were applications for continuation of ongoing activities.

The numbers of proposals submitted under the NKS-B areas of interest are as follows:

Area of Interest	No. of Proposals	Total budget for proposals under area of interest
Emergency Preparedness	6	2591 kDKK
Measurement Technology and Strategy	3	1360 kDKK
Radioecological Assessments	3	780 kDKK

The total amount requested was **4731 kDKK** from an expected budget of **3000 kDKK**.

## Recent Seminars

### NKS-B AVESOME

**Seminar: Uncertainties in Decision Support – on the use of meteorological and source-term data in nuclear emergency management**

**12 September 2018, Danish Meteorological Institute (DMI), Copenhagen, Denmark**

In the early phase of a nuclear accident where radionuclides are released to the atmosphere, two large sources of uncertainty in the assessment of the radiological consequences exist: one associated with the radionuclide source term itself, the other associated with the meteorological data. The seminar addressed practical methods for estimating and presenting these uncertainties in modelling atmospheric dispersion and deposition of radionuclides. The implication for real-time emergency management and the added value for decision support were discussed.

The seminar had 40 participants and was relevant for decision makers, for nuclear emergency management and for experts on source-term modelling and atmospheric dispersion. There were 14 presentations and fruitful discussions. The presentations are available on the NKS website.

Contact person: Jens Havskov Sørensen (DMI) ([jhs@dmi.dk](mailto:jhs@dmi.dk))

### NKS-B GAMMARAY

**Seminar/workshop for Users of Gamma-ray Spectrometry**

**25-26 September 2018, Reykjavik, Iceland**

As announced in NKS NewsLetter 29 the GAMMARAY seminar/workshop was held during 25-26 September 2018. There were 33 participants. Results of an intercomparison exercise were discussed, covering individual laboratory sample analyses as well as analyses of distributed gamma spectra.

The seminar/workshop provided a forum for information sharing and cooperation between Nordic users of gamma-ray spectrometry. Comprehensive presentations on various aspects of the method open up possibilities to develop expertise, competence and networking, and facilitates contacts between different end-users of the method. The scope of the seminar/workshop was broad allowing a range of topics in gamma-ray spectrometry to be addressed from basic to advanced aspects in order to attract users with different backgrounds in the field.

Detailed information on the seminar/workshop is available at the GammaWiki site ([https://www.gr.is/wiki/GammaWiki/index.php/GammaRay\\_2018](https://www.gr.is/wiki/GammaWiki/index.php/GammaRay_2018)).

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## **NKS-B RADWORKSHOP 2018**

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

**8-12 October 2018, DTU Risø Campus, Roskilde, Denmark**

*The workshop consisted of two parts:*

8-10th October: Invited lectures and presentations from participants at Auditorium, building 112, Risø. A number of highly reputed experts from authorities, research institutes and nuclear industries were invited to give state-of-the art lectures in different aspects in nuclear decommissioning and waste management with the focus on radioanalytical chemistry.

11-12th October: Lab practice building 202 and 204, Risø. The lab training demonstrated the radiochemical analysis of alpha emitters (Pu-239, 240 and Am-241) and beta emitters (Fe-55, Ni-63) in nuclear decommissioning materials.

#### *Workshop Objectives*

The workshop had 93 participants and aimed to strengthen the education of MSc/PhD students and young scientists and to increase competence of staff in the field of radiochemistry, with the focus on its application in nuclear decommissioning and waste management. The objectives of the workshop included: 1) Provide the participants with an overview of the nuclear decommissioning strategies and plans especially in Nordic countries, and the state-of-art of radio analytical methods developed and applied for nuclear decommissioning and challenges faced in the near future. 2) Provide an opportunity to the participants to get knowledge and practical experience in analytical experiment by participating the hands-on training in the laboratory. 3) Provide a forum to share knowledge, exchange experiences and explore solutions together overcome difficulties in analysis of various radionuclides with different approaches and techniques. There were 14 invited talks and 16 other oral presentations. All presentations are available on the NKS website.

#### *Topics of the workshop*

1. International and national legislation on decommissioning, waste management and clearance of materials, buildings and land
2. Strategies, experience and challenges in decommissioning of nuclear facilities
3. Radiological characterization and radiochemical analysis
  - Sampling technique and strategies
  - Radiological characterization methods
  - Principles of radiochemical analysis
  - Radiochemical methods for hard-to-measure radionuclides
  - Measurement techniques (alpha, beta, gamma, LSC, mass spectrometry)
  - Development of new techniques/materials

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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.