

## NKS-R Call for Proposals 2011

16 proposals for NKS-R activities were received before the deadline on October 15th. Of these, 1 was an application for continuation of ongoing activity and 1 application was considered as a cross-over activity between the NKS-R and NKS-B programmes.

The number 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
Thermo hydraulics/ Reactor physics	2	1032 kDKK
Risk analysis	7	2418 kDKK
Organisation and safety culture	2	1300 kDKK
Severe accidents	4	1800 kDKK
Plant life management and extension	1	350 kDKK

The total amount requested was **6900 kDKK** from an expected budget of **2500 kDKK**.

## NKS-B Call for Proposals 2011

12 proposals for NKS-B activities were received before the deadline on October 15th. Of these, 5 were applications for continuation of ongoing activities and 1 application was considered as a cross-over activity between the NKS-R and NKS-B programmes.

The number 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	5	1480 kDKK
Measurement technology and strategy	4	1390 kDKK
Radioecological assessments	2	1120 kDKK
Waste and discharges	1	420 kDKK

The total amount requested was **4410 kDKK** from an expected budget of **2500 kDKK**.

## Upcoming Seminars

### NKS-B MareNuc

**Nordic workshop for authorities, organisations and institutions relevant for assessing health and environmental consequences of accidents and incidents involving nuclear-propelled vessels and floating power reactors**

**Date to be confirmed, Denmark**

There is no well-defined system for classification of accidents associated with naval reactors in general as for civilian power plants. For civilian facilities of similar size, the reference accident used as a basis for further analysis varies between a Design Basis Accident describing complete and partial meltdown followed by water/ aluminium interaction and loss of mitigating systems. Considering the fact that neighbouring countries may soon embark upon construction of a new generation of naval reactors, there is a need to systemize the approach for assessing possible consequences of accidents in relation to these installations. Floating power reactors also involve new safety challenges that need to be discussed.

A first workshop was held in October 2010, from which results will be presented for further discussions and put into a larger context considering plans for further construction of new types of vessels, areas of operations, and types of facilities at a second workshop planned for 2011. More information on this second workshop will be made available shortly.

For more information on the events and the initiative as a whole, please contact the coordinator of the activity, Ole Reistad, [ole.reistad@nrpa.no](mailto:ole.reistad@nrpa.no), tel. +47 67 16 25 00.

More information on the NKS-B MareNuc activity can be obtained from <https://www.gr.is/nks-b/marenucl/>

## Recent Seminars

### NKS-B DepEstimates

#### Seminar on radionuclide deposition estimates, results from work in the Nordic countries, possibilities and limitations

13-14 of September 2010, Risø, Denmark

At the DepEstimates seminar at Risø results from previous NKS activities (in particular NKS-B ECODOSES) were summarised and description of recent published studies in individual Nordic countries were given by Tone D. Bergan, Mats Isaksson and Jussi Paatero. Sigurður Emil Pálsson presented a study that was carried out within DepEstimates. The study involved a statistical evaluation of the US EML global fallout data set as well as the UK AERE (Harwell) and the Risø data sets. The results showed that in the Northern hemisphere much of the variability in the data can be explained by using only precipitation data along with a general function of time (common for all locations). This simple relationship between precipitation and deposition rates makes it feasible to reconstruct deposition time series, which can be important when time dependent radioecological models are being validated using old data. Such work has for example been carried out within NKS-B PardNor. The model makes it easy to derive approximate fallout maps for radionuclides with a similar behaviour as Sr-90 (such as Cs and Pu). Such maps are important when background estimates are needed. They do not replace sampling at individual spots, they complement sampling. The non-linear behaviour of the model can possibly help to understand deposition better, since the behaviour has the same form as has been suggested for the scavenging coefficient.

Contact person Sigurður Emil Pálsson ([sep@gr.is](mailto:sep@gr.is))

### NKS-R DIGREL

September 14, 2010

A workshop was held in the NKS project DIGREL on "Guidelines for reliability analysis of digital systems in PSA context".

The aim with the workshop was to

- present results from the pre-project phase of the NKS project on "Guidelines for reliability analysis of digital systems in PSA context"
- plan the next phases of the project

The workshop was arranged September 14 2010 at VTT:s facilities in Espoo, Helsinki. Contact person [Jan-Erik Holmberg](#)

Pdfs of all the presentations made at this workshop can be downloaded [here](#).

### NKS-R Decom-Sem

September 14th-16th, 2010

A seminar on the theme "Decommissioning of nuclear facilities" was arranged in Studsvik, Nyköping, Sweden. The seminar was sponsored by NKS and arranged by Studsvik Nuclear AB and SKB. Contact person is [Anders Appelgren](#) and more information can be found at <http://www.studsvik.se/nksdecom2010>.

Presentations from the seminar can be found [here](#).

## **NKS-B GammaSem**

### **Nordic seminar for users of gamma spectrometry**

**28th-29th September 2010, Kjeller, Norway**

Organised by the Institute for Energy Technology (IFE), Risø National Laboratory for Sustainable Energy, Denmark; Radiation and Nuclear Safety Authority (STUK), Icelandic Radiation Safety Authority, National Institute of Radiation Protection, Denmark, Norwegian Radiation Protection Authority, Swedish Defence Research Agency, Malmö University Hospital, Sweden.

A Nordic seminar for users of gamma spectrometry took place in Norway 28-29 September 2010 with 65 participants. The seminar was the second seminar of this type and provided a forum for discussions and sharing of information on practical issues concerning gamma spectrometry. One of the aims of the seminars is to strengthen the Nordic collaboration through networking of scientists and gamma spectrometry users.

At GammaSem 2009 different key issues for follow-up were identified and working groups were established on various aspects of gamma spectrometry. The topics for the working groups formed the basis for the GammaSem 2010 agenda, where the groups presented results of their work and ideas/solutions to the different problems. The working group topics were

- Uncertainties and detection limits
- True coincidence summing corrections
- Monte Carlo simulations and efficiency transfer
- Absorption (density corrections and geometries)
- Mobile systems for gamma spectrometry
- Nuclear forensics (on special samples and special parts of the spectra)

In addition, Dr. Lars-Erik De Geer gave a presentation about the fundamentals of true coincidence summing correction and when/why it is important.

Contact person Elisabeth Strålberg ([elisas@ife.no](mailto:elisas@ife.no))

Pdfs of all the presentations made at this workshop can be downloaded [here](#).

## **NKS-B MareNuc**

### **Workshop: Impact assessment of accidents with nuclear-propelled vessels 4-5 of October 2010, Reykjavik**

At the workshop in Reykjavik presentations were given on Russian icebreakers and other surface vessels; operational experiences and design of nuclear-propelled vessels; review of incidents and potential release scenarios; safety assessments concerning nuclear powered vessels made by the International Safety Research, Canada and the IAEA generic modeling tool. Representatives from the Nordic authorities also gave presentations on methods, procedures and systems (such as ARGOS) that have been used for assessing atmospheric dispersion and possible consequences related to nuclear powered vessels (STUK, NRPA, IRSA and DEMA).

The workshop was attended by 20 persons, including representatives from IAEA, NATO and the Nordic radiation protection authorities.

Contact person Ole Reistad ([ole.reistad@nrpa.no](mailto:ole.reistad@nrpa.no))

## **New Publications**

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

NKS-225	December 2010	H. Li, P. Kudinov, W. Villanueva: <i>Modeling of Condensation, Stratification, and Mixing Phenomena in a Pool of Water</i>	POOL	<a href="#">Abstract</a>	<a href="#">Fulltext</a>
NKS-223	October 2010	Ola Bäckström, Anna Häggström and Ilkka Männistö: <i>Guidance to Risk-Informed Evaluation of Technical Specifications using PSA</i>	RiskEval	<a href="#">Abstract</a>	<a href="#">Fulltext</a>

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

NKS-224	November 2010	Elisabeth Strålberg (ed.) et al: <i>GammaSem Proceedings - A Nordic seminar for users of gamma spectrometry - Kjeller 28-29 September 2010</i>	GammaSem	<a href="#">Abstract</a>	<a href="#">Full text</a>
NKS-222	July 2010	Xiaolin Hou (ed.): <i>Radiochemical Analysis for Nuclear Waste Management in Decommissioning</i>	RadWaste	<a href="#">Abstract</a>	<a href="#">Full text</a>

---

This NewsLetter together with additional information on NKS and its activities can be found on [www.nks.org](http://www.nks.org).  
The NKS Secretariat can be contacted on [nks@nks.org](mailto:nks@nks.org).  
To unsubscribe to NKS NewsLetters, please contact the NKS Secretariat.