NKS NewsLetter 13 / May 2010

INKS

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

Autumn, 2010, The Culture House, Reykjavík, Iceland

Exact date of workshop will be confirmed shortly.

Assessing the consequences of an accident in a nuclear powered submarine or ship has been difficult for civilian authorities, since much of the required information on the source term is classified. In recent years more and more information has become publicly available. The aim of the workshop, and a follow-up seminar to be held in Denmark, is to assess the available data and to seek a consensus on how they can be best used assessing the consequences of an accident in a naval nuclear reactor.

Experts from the Nordic Countries, the IAEA and USA have now registered for the workshop. The target groups for the workshop are experts handling issues related to managing health and environmental consequences of reactor accidents, assessing the development of nuclear navies and Nordic cooperation on issues related to reactor safety and emergency preparedness.

For more information on the events and the initiative as a whole, please contact the coordinator of the activity, Ole Reistad, <u>ole.reistad@nrpa.no</u>, tel. +47 67 16 25 00 or the local organiser Sigurður Emil Pálsson, <u>sep@gr.is</u>.

More information on the NKS-B MareNuc activity, the workshop programme and related documents can be obtained from https://www.gr.is/nks-b/marenuc/

NKS-B DepEstimates

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

13th – 14th of September 2010, Risø, Denmark

The experience of the deposition from the Chernobyl accident and the atmospheric testing of nuclear weapons is fading into the past, most of the deposition monitoring programmes have stopped or been radically reduced, few are now actively conducting studies in this field. Deposition estimates continue, however, to be important, e.g. for emergency response planning. Estimation of background values is important for assessing potential additional deposition. When a suspected event occurs, there may be no background measurements available and even if they are, they may be too few to be representative for the place or region of concern.

The estimates of global fallout have often been based on the UNSCEAR compilation of fallout data, where the deposition has been summarised according to latitude bands. The papers on which the UNSCEAR compilation is based warn however against the use of the compilation as a model for a specific place or area. They stress that other factors must be used for such modelling, such as precipitation.

In recent years databases with compilation of nuclear fallout data have become available. Studies on fallout and deposition have been made in some of the Nordic countries, e.g. using precipitation as a basis for deposition estimates. The NKS-B activity DepEstimates has followed up the some of this Nordic work.

At the DepEstimates seminar in Reykjavík the results of the studies within DepEstimates will be presented as well as the studies that have been done in individual Nordic countries. One of the products of DepEstimates that will be presented is a simple model for assessing deposition based on precipitation data, but also taking latitude effects into account as well as dry deposition. The usefulness and limitations of these models for assessing deposition will also be discussed at the seminar.

The target group for the seminar are those working with deposition studies as well as those dealing with emergency preparedness, where assessing deposition is an important factor.

For updated information please contact the co-ordinator, Sigurður Emil Pálsson, <u>sep@gr.is</u> and/or visit the website: <u>https://www.gr.is/nks-b/depestimates</u>

NKS-B GammaSem

Nordic seminar for users of gamma spectrometry

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

Registration deadline is Monday 1st of June 2010

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 will take place in Norway 28-29 September 2010. The seminar is the second seminar of this type and provides a forum for discussions and sharing of information on practical issues concerning gamma spectrometry. The first seminar was held in 2009 and was attended by 75 participants from 34 organisations. 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 will form the basis for the GammaSem 2010 agenda, where the groups will present results of their work and ideas/solutions to the different problems.

The working group topics are:

- 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 will give a presentation about the fundamentals of true coincidence summing correction and when/why it is important.

Proposals for presentations within the scope of the seminar are very welcome. Abstracts (Maximum 500 words) should be sent to Elisabeth Strålberg (<u>elisas@ife.no</u>) by 20th of August 2010.

Further information on the seminar, how to register and how to submit an abstract can be found here:

NKS-R Decom-sem

14th - 16th of September 2010, Studsvik Nyköping, Sweden

A seminar on the theme "Decommissioning of nuclear facilities" will be arranged in Studsvik. The seminar is sponsored by NKS and arranged by Studsvik Nuclear AB and SKB.

Contact person is <u>Anders Appelgren</u> and more information can be found at <u>http://www.studsvik.se/nksdecom2010</u>.

GEN4FIN

A NOMAGE4 GenIV seminar

September 30th to October 1st 2010, Laappenranta, Finland

The objective of the NOMAGE4 project is to start and maintain a Nordic Nuclear Materials Forum for nuclear materials for Generation IV reactors (GenIV) within the Nordic countries.

Presentations are welcome! More information can be found here.

Please contact Sami Penttilä for further information and if you want to participate

Recent Seminars

NKS-R Safety Goals

Probabilistic Risk Criteria for Nuclear Power Plants

January 13, 2010, Arlanda Conference Center

The 4th and final project seminar within the NKS project "The Validity of Safety Goals" was held in Stockholm on January 13, 2010. This project was initiated in 2006 with the aim to discuss and document current views on the definition, application and use of probabilistic safety criteria, including both benefits and problems. The seminar gave an overview of the work performed during all four project years, with a focus on presenting the activities during the final project year and on the presentation and discussion of the guidance document prepared, "Guidance for the Definition and Application of Probabilistic Safety Criteria"

NKS-B FOOD workshop

Nordic workshop for authorities, organisations and institutions responsible for late phase countermeasures and safe food production in nuclear emergencies

14-15 April, 2010, Losby Gods, Norway

The purpose of the workshop was to share national practice and experience on the use of different tools (handbooks, late phase models etc.) during a crisis with focus on operational implementation and use, interpretation and verification of results and production of decision basis. The main goal was to establish a common ground to better understand how these are used in the different countries, identify differences and exchange knowledge to increase competence. Second goal was to gather stakeholders and authorities with interest or responsibility for countermeasures against radioactive contamination of food products to share experience in different topics as:

- Cooperation among stakeholders and organisations responsible for food safety in each country
- Adaptation of the Euranos handbook "Countermeasures for the management of food production systems" to national conditions and implementation of the handbook in each country
- Establishing a Nordic network for food authorities and radiation protection authorities responsible for food safety with respect to radioactivity

There were 23 participants representing all the Nordic countries. Some of the speakers present were Klas Rosèn (SLU), Kasper Andersson (RISØ), representatives from the Nordic food authorities and Ministries, representatives from the radiation protection authorities and one speaker from the food industry.

Concluding remarks from the workshop:

Tight and continuous cooperation between decision support system developers, radiation protection authorities and food authorities are necessary to succeed in an emergency situation. Systems for involving of stakeholders and food producers in decision making are essential. A Nordic cooperation will also contribute to harmonisation of the countermeasure strategies in food production in emergency situations. The workshop agreed that a Nordic network of representatives from the food- and radiation protection authorities will make an application to NKS for a new project on implementation of the Euranos handbook "Countermeasures for the management of food production systems" in the next program period.

Pdfs of all the presentations made at this workshop can be downloaded here.

Contact person:

Inger Margrethe H. Eikelmann

New Publications

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

| Report No. | Date | Author(s) and title J. Holm et al: | NKS activity | | |
|------------|-------------|---|--------------|-----------------|-----------|
| NKS-220 | May 2010 | Experimental study on iodine chemistry (EXSI) - Containment experiments with methyl iodine Weimin Ma et al: | NROI | <u>Abstract</u> | Full text |
| NKS-219 | May 2010 | In-vessel Coolability and Steam Explosion in Nordic BWRs | INCOSE | Abstract | Full text |

This NewsFlash together with additional information on NKS and its activities can be found on <u>www.nks.org</u>. The NKS Secretariat can be contacted on <u>nks@nks.org</u>.

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