NKS NewsLetter 22 January 6, 2015



NKS-R Call for Proposals 2015

16 proposals for NKS-R activities were received before the deadline on October 15th. Of these, 5 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
Thermal hydraulics	4	2166 kDKK
Severe accidents	2	950 kDKK
Reactor physics	2	570 kDKK
Risk analysis	4	1691 kDKK
Organisation and safety culture	3	2150 kDKK
Decommissioning and radwaste	0	0
Plant Life Management and extension	1	290 kDKK

The total amount requested was 7817 kDKK from an expected budget of 3400* kDKK.

NKS-B Call for Proposals 2015

13 proposals for NKS-B activities were received before the deadline on October 15th. Of these, 6 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	5	1780 kDKK	
Measurement Technology and Strategy	5	2330 kDKK	
Radioecological Assessments	3	1020 kDKK	
Waste and Discharges	0	0	

The total amount requested was 5130 kDKK from an expected budget of 3400* kDKK.

^{*}Note: the expected budget for each programme has been reduced from the previously announced 3750 kDKK to 3400 kDKK due to unforeseen substantial changes in inter-Nordic currency exchange rates at the end of 2014.

Recent Seminars

NKS-R Nordic-Gen4 Nordic-Gen4 seminar

4-5th September 2014, LUT, Lapeenranta, Finland

This was the 5th Nordic Seminar on Generation IV Nuclear Reactors. The Nordic-Gen4 seminars provide a forum for addressing current issues and perspectives related to Generation IV Nuclear Reactors. The seminar covered a wide range of Generation IV technologies with presentations on reactor concepts, research efforts and research results. The presentations can be found here: http://nordic-gen4-lappeenranta-2014/

For more information contact the activity leader: mattias.thuvander@chalmers.se (phone +46 (0) 31 772 3322).

NKS-B GAMMAUSER Workshop on Gamma Spectrometry

7-8 October 2014, Helsinki, Finland

The NKS-supported GammaUser 2014 workshop was the sixth meeting of the successful GammaSem series of workshops and seminars on gamma spectrometry.

There were about 35 participants from different Nordic and European organisations. Attendees were encouraged to participate in pre-workshop inter-comparison exercises (both with real spectra and physical samples), for which results were presented and evaluated at the seminar.

The program offered presentations from a diverse set of users of gamma spectrometry and participants gave short presentations on the specific challenges their use of gamma spectrometry entails. In addition, lectures were given by highly qualified invited speakers:

Tim Vidmar, SCK•CEN, and Marie-Christine Lépy, Laboratoire National Henri Becquerel

Students and young scientists in fields relevant to gamma spectrometry were particularly recommended to attend.

Further information is posted the GammaWiki web page (https://www.gr.is/wiki/GammaWiki/). Organizers can be contacted by sending an email to gammauser2014@gr.is.

The organising committee was: Elisabeth Strålberg (IFE) Henrik Ramebäck (FOI) Óskar Halldórsson (IRSA) Seppo Klemola (STUK) Sven Poul Nielsen (DTU) Trygve Bjerk (IFE)

NKS-B SEMUNARS Seminar on Unmanned Radiometry Systems

2-3 October 2014, Linköping, Sweden

Linköping University, STUK, NRPA and NKS arranged a Seminar on Unmanned Radiometric Systems – SemUnaRS. Participants included experts and authorities from Sweden, Norway, Finland and Denmark, and a Swedish SME manufacturing unmanned airborne radiometric system platforms.

The objective of this seminar was to present and discuss the progress of the Nordic use of unmanned platforms for radiation detection. This start-up seminar was an effort to build an inventory of the Nordic capacity of radiation surveillance equipment using unmanned vehicles and an initiative to build informal Nordic networks within the topic in question.

Topics for presentations and discussions included: Unmanned platforms, Detectors, Air sampling using unmanned systems, Envisaged applications/scenarios for unmanned radiometry, Methods and strategies, Calibration/validation, Demonstrations, Joint exercises and Future Nordic collaboration.

The use of unmanned systems in radiation detection is an area in which no joint Nordic activities have previously been established. The technology of unmanned systems has now developed to the point of readiness which enables their exploitation in different safety- and security-related applications.

The activity leader was magnus.gardestig@liu.se (phone +46 (0)10 103 1775).

NKS-B THYROIDSEM

Seminar on thyroid I-131 monitoring capacity in the Nordic countries

29 September 2014, Copenhagen, Denmark

This one-day seminar followed up on the results of the NKS-B THYROID activity, which comprised an extensive calibration program and proficiency test for thyroid monitoring instruments in the Nordic countries. There were 31 participants from 21 institutions in Nordic countries. The seminar was aimed at stakeholders from laboratories, hospitals, emergency preparedness and governmental organization etc.

Results of the comprehensive THYROID NKS activity from 2013 were shared and discussed. Presentations and discussions took place relating to thyroid screening and emergency preparedness, and differences and similarities in Nordic preparedness organisations. Dr. George Etherington from PHE, UK gave a lecture on dose assessment and the use of the IMBA internal dose model. A problem was identified from a questionnaire as lack of consistency in calculation methods for internal dose (leading to the CfP 2015 proposal entitled IDEA).

The organizing group consisted of: NIRP/SIS (DK): Henrik Roed, Asser Nyander Poulsen; SSM (SE): Lilian del Risco Norrlid. NRPA (NO): Bjorn Lind; IRSA (IS): Óskar Halldórson. Göteborg Uni. (SE): Mats Isaksson. Further information can be obtained from Henrik Roed (hro.org/hr

New Publications

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

Pavel Kudinov, Sargey Calushin, Sebastian Paul

NKS- 315	July 2014	Viet-Anh Phung, Kaspar Kööp, Ilkka Karanta, Taneli Silvonen, Yvonne Adolfsson, Ola Bäckström, Anders Enerholm, Pavel Krcal, Klas Sunnevik: Feasibility Study for Connection Between IDPSA and conventional PSA Approach to Analysis of Nordic type BWR's	DPSA	View document
NKS- 316	Oct. 2014	Hua Li, Walter Villanueva, Pavel Kudinov: Effective Models for Simulation of Thermal Stratification and Mixing Induced by Steam Injection into a Large Pool of Water	ENPOOL	View document
NKS- 317	Nov. 2014	Pavel Kudinov, Alexander Konovalenko, Dmitry Grishchenko, Sergey Yakush, Simone Basso, Nazar Lubchenko, Aram Karbojian: Analysis of Debris Bed Formation, Spreading, Coolability, and Steam Explosion in Nordic BWRs	DECOSE	View document

NKS- 318	Nov. 2014	Sachin Thakre, Weimin Ma, Sevostian Bechta: Study and comparison of data on Coolability of Particulate Beds Packed with Irregular Multi-size Particles	DECOSE	View document
NKS- 319	Nov. 2014	Sachin Thakre, Weimin Ma: Sensitivity Study of Steam Explosion Energetics in Reference Nordic BWR using MC3D Code	DECOSE	View document
NKS- 321	Dec. 2014	Ann Britt Skjerve, Christer Axelsson: Human- Performance Tools in Maintenance Work - A Case Study in a Nordic Nuclear Power Plant	HUMAX	View document
NKS- 322	Dec. 2014	Patrick van Hees, Jonathan Wahlqvist, Simo Hostikka, Topi Sikanen, Bjarne Husted, Tommy Magnusson, Fredrik Jörud: Prediction and validation of pool fire development in enclosures by means of CFD Models for risk assessment of nuclear power plants (Poolfire) – Final Report	POOLFIRE	View document

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

NKS- 320	Dec. 2014	M. Dowdall, J. K. Behring, Yu. Bondar, K. Guðnason, C. Israelson, G. Jónsson, S. E. Karlsson, P. K-J. Kock, B. Moller, P. M. Møller, J. Nilssen, J. M. C. Nilsson, V. Zabrotski: Mobile Measurement: Field Exercise in Fallout Mapping in the Belarusian Exclusion Zone (MOBELRAD)	MOBELRAD	View document
NKS- 323	Dec. 2014	Petty Cartemo, Jenny Nilsson, Anders Nordlund, Mats Isaksson: Building a generic voxel phantom of IRINA for Monte Carlo simulations	PIANOLIB	View document
NKS- 324	Dec. 2014	Asser Nyander Poulsen, Lilián del Risco Norrlid, Mats Isaksson, Bjorn Lind, Óskar Halldórsson Holm, Henrik Roed: THYROIDSEM: Seminar: Assessment of accidental uptake of radioiodine in emergency situations	THYROID- SEM	View document
NKS- 325	Dec. 2014	Seppo Klemola (ed.), Óskar Halldórsson Holm, Elisabeth Strålberg, Aleksi Mattila, Sven P. Nielsen, Henrik Ramebäck, Gísli Jónsson, Trygve Bjerk: GammaUser 2014 Proceedings, 6–8 October 2014 Helsinki, Finland	GAMMA- USER	View document