NKS NewsLetter 18 January 2, 2013



NKS-R Call for Proposals 2013

10 proposals for NKS-R activities were received before the deadline on October 15th. Of these, 5 were applications for continuation of ongoing activities and 3 applications were considered as cross-over activities between NKS-R and NKS-B programmes.

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	
Risk Analysis	4	1390 kDKK	
Organisation and safety Culture	2	1160 kDKK	
Thermal Hydraulics	2	1032 kDKK	
Severe Accident	1	500 kDKK	
Decommissioning	1	200 kDKK	

The total amount requested was 4282 kDKK from an expected budget of 3500 kDKK.

NKS-B Call for Proposals 2013

8 proposals for NKS-B activities were received before the deadline on October 15th. Of these, 3 were applications for continuation of ongoing activities. None of the proposals submitted for the NKS-B CfP were cross-over proposals.

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 719 kDKK		
Emergency preparedness	3			
Measurement technology and strategy	3	965 kDKK		
Radioecological assessments	2	880 kDKK		
Waste and discharges	0	0 kDKK		

The total amount requested was 2564 kDKK from an expected budget of 3500 kDKK.

It should be noted that the 3 proposals submitted as NKS-R with the 'cross-over' flag raised in total request a funding of 950 kDKK, and since these were submitted as NKS-R proposals, they are in the above two tables included fully in the NKS-R budgets, and not in the NKS-B budgets. However, 'cross-over' activities are traditionally co-financed by the two programmes.

Recent Seminars

NKS-R DIGREL

Seminar on failure modes taxonomies for the reliability analysis of digital I&C systems 6th November 2012, Stockholm, Sweden

The seminar included presentations of the WGRisk (Working Group on Risk assessment) Task Group, DIGREL, which develops best practice guidelines on failure modes taxonomy for reliability assessment of

DIC (digital instrumentation and control) systems for PSA. The seminar was continued with a 3-day meeting of the task group members working with the guidelines documents.

The seminar program and proceedings can be downloaded from here http://www.nks.org/en/seminars/presentations/nks-r digrel 6 november 2012.htm
Contact person for the DIGREL activity is Jan-Erik Holmberg (jan-erik.holmberg@vtt.fi).

NKS-R Nordic-Gen4 4th Nordic Seminar on Generation IV Nuclear Reactors 29-31 of October 2012, Risø, Denmark

The seminar brought together researches from academia and industry working within the different disciplines of nuclear technologies, related to the development of the next generation of nuclear power reactors.

The main topics covered were:

- Generation IV reactor concepts
- · Structural materials and fuel cladding
- Reactor physics, dynamics and diagnostics
- Core design and fuels
- Experimental facilities and instrumentation
- Reactor safety
- Radioactive waste and environmental aspects

Visit the seminar website for program and presentations (http://nordic-gen4.org/)
Futher information on the Nordic-Gen4 network contact Dr. Rudi Van Nieuwenhove (Rudi.Van.Nieuwenhove@hrp.no).

NKS-B GammaWorkshops

A series of linked workshops on gamma spectrometry, following up issues identified at the two GammaSem seminars, held in 2009 and 2010, and the GammaWorkshop in 2011. 11-12 September 2012, Hotel Örk, Hveragerði, Iceland

The aim of the GammaWorkshops was to enable Nordic users to address common problems in gamma spectrometry, through a series of lectures and practical exercises in addition to sharing their experience with others in a similar position. The workshop was attended by 37 persons from 20 organisations in the Nordic and other European countries. Most of the persons were young scientists who work with gamma spectrometry. The main topics covered were:

- Lessons learned from Fukushima including work on real spectra
- In-situ gamma spectrometry, theory and practice
- Alternative types of detectors
- Background components in gamma spectra
- User experience with new techniques

Contact persons for the NKS-B GammaWorkshops activity are Elisabeth Strålberg (<u>elisas@ife.no</u>) and Sigurður Emil Pálsson (<u>sep@gr.is</u>)

NKS-B MOMS

A seminar and a workshop on mobile measurement systems 22-23 May 2012, Clarion Hotel Bastion, Oslo, Norway

The seminar had 23 participants from 11 institutions from all the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). The seminar was divided in 3 sessions:

- Session 1 was dedicated to presentations on the status of mobile measurement capacities in the Nordic countries. All countries gave presentations on available instrumentation and capabilities in the field of gamma spectrometry. Invited manufacturers of mobile detection systems presented their latest developments.
- Session 2 was a presentation by Prof. Tyler from the University of Stirling on developments in gamma ray spectrometry, with focus on in situ measurements. This included a comparison of soil sample analysis, in-situ and airborne gamma spectrometry performed in Scotland.

 Session 3 was held in two groups, focusing on data exchange and measurement strategies, to establish common ground for data exchange and to see if measurement strategies could be harmonised within the Nordic countries.

The presentations from the seminar are available on http://workspace.nrpa.no/doc/moms, but password protected on request from the participants.

The workshop was held on the 22-23 September in Revingehed, Sweden, in connection with the Swedish REFOX exercise. The meeting took place on the 22 September, with participants from NRPA, DEMA and IRSA. On the 23 September, a practical MOMS activity was held, where participants carried out an exercise with one fallout spot (provided by the University of Lund) and three mixed gamma, one beta, and one neutron source.

For further information on the NKS-B MOMS activity contact the activity leader Johannes Nilssen (johannes.nilssen@nrpa.no).

New Publications

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

		3	.,	http://plsp.pre/pre/
NKS- 266	June 2012	Hua Li, Walter Villanueva, Pavel Kudinov: Effective Momentum and Heat Flux Models for Simulation of Stratification and Mixing in a Large Pool of Water	ENPOOL	http://nks.org/en/ nks_reports/view_document.htm?id=111010111170 575
NKS- 267	Septem- ber 2012	Michael Knochenhauer, Vidar Hedtjärn Swaling, Per Alfheim: Using Bayesian Belief Network (BBN) Modelling for Rapid Source Term Prediction - RASTEP Phase 1	RASTEP	http://www.nks.or g/en/nks_reports/ view_document.h tm?id=11101011 1272164
NKS- 270	December 2012	Rudi Van Nieuwenhove, Bent Lauritzen, Erik Nonbøl: Nordic Forum for Generation IV Reactors, Status and activities in 2012	Nordic- Gen4	http://nks.org/en/ nks_reports/view _document.htm?i d=111010111374 670
NKS- 272	December 2012	S. Tietze, T. Kärkelä, M.R.StJ. Foreman, C. Ekberg, A. Auvinen, U. Tapper, S. Lamminmäki, J. Jokiniemi: Adsorption and revaporisation studies on iodine oxide aerosols deposited on containment surface materials in LWR	AIAS	http://nks.org/en/ nks_reports/view document.htm?i d=111010111391 769

The following NKS-B reports are available free of charge: Download by clicking the appropriate link. Klas Rosén, José-Luis Gutiérrez Villanueva, Synnöve

NKS- 265	June 2012	Klas Rosén, José-Luis Gutiérrez Villanueva, Synnöve Sundell-Bergman, Dina Solatie, Eila Kostiainen, Tuukka Turtiainen, Per Roos, Sigurður Emil Pálsson, Lavrans Skuterud, Håvard Thørring, Lindis Skipperud, Jelena Mrdakovic Popic: Natural Radionuclides in Meadow and Pasture land in the Nordic countries	RADPAST	http://nks.org/en/ nks_reports/view _document.htm?i d=111010111170 521
NKS- 268	November 2012	Ole Reistad, Styrkaar Hustveit, Sigurður Emil Pálsson, Steen Hoe, Juhani Lahtinen: A Nordic Approach to Impact Assessment of Accidents with Nuclear-Propelled Vessels	MARENUC	http://www.nks.or g/en/nks_reports/ view_document.h tm?id=11101011 1326527
NKS- 269	December 2012	Sigurður Emil Pálsson, Tone D. Bergan, Brenda J. Howard, Tarja Ikäheimonen, Mats Isaksson, Sven P. Nielsen, Jussi Paatero: New simple deposition model based on reassessment of global fallout data 1954 – 1976	DEPESTI- MATES	http://www.nks.or g/en/nks_reports/ view_document.h tm?id=11101011 1374601
NKS- 271	December 2012	M. Dowdall, A. Mattila, H. Ramebäck, H.K. Aage, S.E. Pálsson: Gamma Spectrometric Discrimination of Special Nuclear Materials	GASMAT	http://nks.org/en/ nks_reports/view_document.htm?i d=111010111383