NKS NewsLetter 16 January 4, 2012



NKS-R Call for Proposals 2012

14 proposals for NKS-R activities were received before the deadline on October 14th. Of these, 7 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-R areas of interest are as follows:

| Area of Interest | No. of Proposals | Total budget for proposals under area of interest | | |
|-------------------------------------|---------------------|--|--|--|
| Thermal hydraulics/ Reactor physics | 4 | 1707 kDKK | | |
| Severe accidents | 3 | 1800 kDKK | | |
| Risk analysis | 3 | 1200 kDKK | | |
| Organisation and safety culture | 2 | 1280 kDKK | | |
| Decommissioning | 1 | 210 kDKK | | |
| Plant life management and extension | 1 | 340 kDKK | | |

The total amount requested was 6537 kDKK from an expected budget of 3250 kDKK.

NKS-B Call for Proposals 2012

14 proposals for NKS-B activities were received before the deadline on October 14th. Of these, 2 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 | 7 | 2230 kDKK | | |
| Measurement technology and strategy | 3 | 1310 kDKK | | |
| Radioecological assessments | 3 | 1050 kDKK | | |
| Waste and discharges | 1 | 200 kDKK | | |

The total amount requested was 4790 kDKK from an expected budget of 3250 kDKK.

Recent 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

25-26 of August 2011, Reykjavik, Iceland

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.

This second workshop with 16 participants followed the earlier workshop in October 2010. Results from the first workshop were discussed in the larger context of plans for further construction of new types of vessels, areas of operations and types of facilities.

More information on the NKS-B MareNuc activity can be found at https://www.gr.is/nks-b/marenuc/

NKS-B PIANOLIB

Phantom-based intercomparison among Nordic whole body counters

15-16 of September 2011, University of Gothenburg

During 2010 and 2011 the Nordic Nuclear Safety Research has sponsored the NKS-B activity PIANOLIB with the aims of evaluating the quality status of whole body counting and setting up a library website for sharing calibration phantoms in the Nordic region.

The PIANOLIB workshop was attended by 25 participants to review and discuss the results of the whole body counting intercomparison exercise. The PIANOLIB workshop also featured presentations by the invited speaker Rodolfo Cruz Suárez (IAEA).

Presentations from the seminar can be found here.

Further information on the NKS-B PIANOLIB activity contact the co-ordinator, Lilián del Risco Norrlid, lilian.delrisco.norrlid@ssm.se

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.

26-28 of September 2011, Risø National Laboratory for Sustainable Energy, Roskilde, Denmark

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 50 participants from various backgrounds across the five Nordic countries.

The main topics covered were:

- Natural radionuclides
- Matrix and absorption corrections
- Uncertainties and detection limits
- True Coincidence Summing corrections

Technical background material from the workshop is available on the GammaWiki web site: https://www.gr.is/wiki/GammaWiki/

Contact persons for the NKS-B GammaWorkshops activity are Henrik Ramebäck (henrik.ramebeck@foi.se) and Sigurdur Emil Pálsson (sep@gr.is)

NKS-R DIGREL

Seminar on failure modes taxonomies for the reliability analysis of digital I&C systems

25th October 2011, Espoo, Finland

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. Results from the workshop organised in Washington DC in May 2011 was presented. The aim was to get feedback from the end users of the guidelines to support the work of the task group. The seminar was continued with a 3-day meeting of the task group members working with the guidelines documents.

Link to seminar proceedings.

NKS-R NOMAGE4 Nordic Nuclear Materials Forum for Generation IV Reactors

31st October – 1st November 2011, Halden, Norway

A seminar with a focus on material challenges for Generation IV nuclear energy systems was held at Halden, Norway, 31st October – 1st November 2011. Visit the seminar <u>website</u> for program and presentations.

Contact Dr. Rudi Van Nieuwenhove for more information on the Nordic GenIV network.

New Publications

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

| NKS- 255 | January 2012 | P. Vierstraete, R. V. Nieuwenhove, B. Lauritzen: NOMAGE4 activities 2011, Part II, Supercritical water loop | NOMAGE4 | Abstract | Full text |
|-------------|-----------------|---|---------|-----------------|-----------|
| NKS- 254 | January 2012 | Rudi Van Nieuwenhove: NOMAGE4 activities 2011, Part I, Nordic Nuclear Materials Forum for Generation IV Reactors: Status and activities in 2011 | NOMAGE4 | <u>Abstract</u> | Full text |

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

| NKS- 253 | November 2011 | Inger M. H. Eikelmann: NKS FOOD Final report | FOOD | Abstract | Full text |
|-------------|------------------|--|-------|-----------------|-----------|
| NKS- 252 | October 2011 | M. Dowdall et al: Orphan Sources and Fresh Fallout: Virtual Exercise in Mobile Measurement (ORPEX) | ORPEX | <u>Abstract</u> | Full text |

This NewsLetter together with additional information on NKS and its activities can be found on $\underline{\text{www.nks.org}}$. The NKS Secretariat can be contacted on $\underline{\text{nks@nks.org}}$.

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