NKS NewsLetter 25
June 14, 2016

Upcoming Seminars

NKS-R SC_AIM
Safety culture assurance and improvement methods in complex projects

Preliminary announcement: The activity is planning for an international workshop to be held in Finland, 27-28 September 2016.

For further information contact:
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NKS-B NORDUM
Intercomparison of Nordic unmanned aerial monitoring platforms

August/September 2016 (exact timing not yet decided), Oslo, Norway

The NORDUM activity will be held over two days: One exercise day and one workshop day, with one extra buffer day in case of bad weather.

Due to lack of space on the exercise field and processes around permissions from Norwegian National Security Authority and Civil Aviation Authority, there is no room for new participants (RPAS team), only few available spots for observers.

Participating Organisations:
Norwegian Radiation Protection Authority
Finnish Defence Research Agency FDRA
Department of Electrical and Information Engineering, University of Oulu
Linköping University
Danish Emergency Management Agency

Overall Objective:
To test unmanned aerial platforms in use in the Nordic countries with respect to locating, identifying and estimating the activity of radioactive sources under field conditions.

Contact information:
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Linköping University,Magnus Gårdestig, e-mail: magnus.gardestig@liu.se
Danish Emergency Management Agency,Jeppe Vöge Jensen, e-mail: jvj@brs.dk

REGISTRATION:
For registration (only as observer) or information about the activity, please contact the activity coordinator Kasra Tazmini, Norwegian Radiation Protection Authority, e-mail: Kasra.Tazmini@nrpa.no
Deadline for registration (Only as Observers): 01.06.2016

NKS-B GAMMASPEC 2016
Seminars for users of gamma spectrometry

13-14 September 2016, Rømskog Spa & Resort (ca. 40 km from Oslo, Norway)

We hereby announce the NKS GammaSpec seminar, the 7th instance of the successful NKS GammaSem series. This seminar will be held at Rømskog Spa & Resort (http://www.romskogspa.no).

We aim to offer presentations from a diverse set of users of gamma spectrometry covering from basic to advanced aspects and encourage participants to give presentations on their applications of gamma spectrometry. The seminar is useful for sharing experiences among users of gamma spectrometry. Speakers will be invited from the forefront of gamma spectrometry.

Attendees are also encouraged to participate in intercomparison exercises that include exercises based on evaluating gamma spectra as well as laboratory analyses of physical samples distributed. Results of the exercises will be presented, discussed and evaluated at the seminar.

Further information and a registration form will be posted in May on the GammaWiki web page, http://www.gr.is/wiki/GammaWiki/. The site will give updated information on the intercomparison exercises and the seminar.

Feel free to contact the organizers with inquiries or suggestions by sending an email to gammaspec2016@gr.is.

We look forward to seeing you in Oslo in September!

The Organizers
Elisabeth Strålberg (IFE)
Trygve Bjerk (IFE)
Henrik Ramebäck (FOI)
Róbert Karl Lárusson (IRSA)
Roy Pöllänen (STUK)
Sven Nielsen (DTU)

MSc Thesis

A master thesis “Reliability of fire barriers” has been completed within the NKS-R project FIREBAN “*Determination of fire barriers's reliability for fire risk assessment in NPP”* at Lund University*.*
Fire barriers are widely used in the industry as a passive fire protection system. Fire barriers are built according to specifications from manufacturer after the construction was tested in full scale furnace in accordance to the appropriate codes. Those tests are made private and the test results are not published apart from the failure/success of the tested sample. In order to accurately protect the life of the occupants and the property, the fire barriers need to be built exactly as its counterpart tested in the furnace test or better. However, it is unknown how a barrier will react to having some higher leakage or lesser insulation property. This study looks at the effect of those two parameters on the fire resistance rating of fire barrier. Numerical tools, ABAQUS and FDS, were used to reproduce the furnace test. Results showed that presence of the insulation material in the cavity can improve the reliability of fire-resistant barrier with regards to the insulation criterion, especially when the fire-exposed gypsum board is breached or altered. Also, results demonstrated that for partitions with equal air tightness, leakage through holes causes earlier failures due to integrity criterion, comparing to leakage through joints or cracks.

The thesis can be downloaded from Lund University’s webpage*:*
http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=8876398&fileOId=8876406

New NKS related journal papers

A number of international journal papers have been published on work done in the NKS activity SPARC "Scenarios and Phenomena Affecting Risk of Containment Failure and Release Characteristics":

Takasuo, E.: An experimental study of the coolability of debris beds with geometry variations. Annals of Nuclear Energy 92, pp. 251-261, 2016.
Konovalenko A., Basso S., Kudinov P., Yakush S. E.: Experimental Investigation of Particulate Debris Spreading in a Pool, Nuclear Engineering and Design, Volume 297, pp. 208-219, 2016.
Basso, S., Konovalenko, A., Kudinov, P.: Empirical Closures for Particulate Debris Bed Spreading Induced by Gas-Liquid Flow, Nuclear Engineering and Design, 297, pp. 19-25, 2016.

NKS Young Scientist Travel Assistance

Updated information that NKS offers travel assistance for young scientists wishing to attend NKS-R and NKS-B events as well as related non-NKS events even outside the Nordic countries - under certain conditions. More information on the conditions and how to apply for travel assistance can be seen on the NKS web site here (http://www.nks.org/en/nksr/travel_assistance/travel_assistance.htm) for NKS-R related events, and here (http://www.nks.org/en/nksb/travel_assistance/travel_assistance.htm) for NKS-B related events.