

NKS-B Status Report  
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NKS-B Programme Manager

Overall the work in NKS-B is progressing well

- Since last NKS-B status report
  - *5 final reports published on website (from 3 activities)*
- Delayed activities (from before 2016)
  - *None*
- Activities commencing in 2016
  - *6 (of 9) completed, 3 nearing completion (EFMARE, MOMORC, NORCO)*
- Activities commencing in 2017
  - *All 8 contracts signed, work on schedule*

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## Final reports published on NKS website (since last Board Meeting):

- 3 reports on COASTEX
  - Report 1: “*COASTEX Scenario Report: nine maritime accident scenarios*”,
  - Report 2: “*COASTEX Exercise guide*”,
  - Report 3: “*Final Report from the NKS-B Project COASTEX*”.
- 1 final report on MESO
  - ”*MEteorological uncertainty of ShOrt-range dispersion (MESO)*”
- 1 final report on Nordic ICP
  - ”*An inter-comparison exercise on the application of ICP-MS techniques for measurement of long-lived radionuclides*”

## EFMARE

Activity leader – Per Roos (DTU)

- Final report was according to contract due by 31/12-2016.
- More time granted for further detailed analyses in relation to preliminary results.
- Will be finalised before NKS Board meeting in June.
- Budget 395 kDKK.

## MOMORC

Activity leader – Christopher Rääf (Lund University)

- Report officially due on 31/12-2016, according to contract.
- Highly advanced draft report (ca. 120 pages) received in late April. However some small parts are still missing.
- The final report will be ready for the next Board meeting.
- Budget 525 kDKK.

## NORCO

Activity leader – Tanya Hevrøy (NRPA)

- Report officially due on 31/12-16, according to contract.
- Due to scheduling conflicts with the FIGARO facility at the University of Life Sciences, Ås, Norway, some important work had to be postponed for nearly 6 months. The activity was thus already in December 2016 extended until the end of May 2017. Progress reported to be according to new schedule.
- The final report will be ready for the Board meeting.
- Budget 435 kDKK

## NKS-B Seminars 2017

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**EPHSOGAM:** Workshop on early phase source term estimation from gamma spectra. To be held in the autumn, probably in Oslo. Only open to specially invited participants nominated by the activity group.

**GAMMASPEC:** Two-day seminar on gamma spectrometry issues. To be held at Risø, 19-20 September 2017. Announcement made on NKS website / in NKS NewsFlash + NewsLetter. Further information has been posted on [www.gr.is/wiki/GammaWiki/](http://www.gr.is/wiki/GammaWiki/).

**NEXUS:** Nordic exercise for unmanned systems. To be held near Lund on 31 October – 2 November 2017. Observers (limited number) will be welcome. Announcement made on NKS website / in NKS NewsLetter.

**NORDIC ICP:** Two-day seminar plus one-day lab practice on inductively coupled plasma spectrometry. To be held at Risø, 25-27 September 2017. Announcement made on NKS website / in NKS NewsFlash + NewsLetter.

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## USER SEMINAR



### Seminar Objectives:

The workshop aims to strengthen the education of MSc/PhD students and young scientists and to increase competence of staff involved to explore the application of ICP techniques for different purposes in nuclear and radiochemistry fields.

- 1) To provide the participants with an overview of state-of-the-art fundamental aspects and instrumental developments of ICP techniques, and the applications of these techniques in interdisciplinary contexts.
- 2) To provide an opportunity to the participants getting hands-on experience of ICP instrument operation, maintenance, data acquisition and software instruction by participating in practical training in the laboratory.
- 3) To provide a forum for knowledge and experience exchange on various aspects related to ICP techniques and stimulate international collaborations.

### Getting there:

You can find all information you need about getting to the seminar venue at Risø near Roskilde from the following link: <http://www.dtu.dk/english/about/campuses/dtu-risoe-campus>.

### Accommodation:

For accommodation in the Roskilde area, the following hotels can be recommended:

Zleep Hotel (<https://www.zleephotels.com/da/hotel/roskilde/>)

Scandic (<https://www.scandichotels.dk/hoteller/danmark/roskilde>)

Comwell (<http://www.comwellroskilde.dk/>)

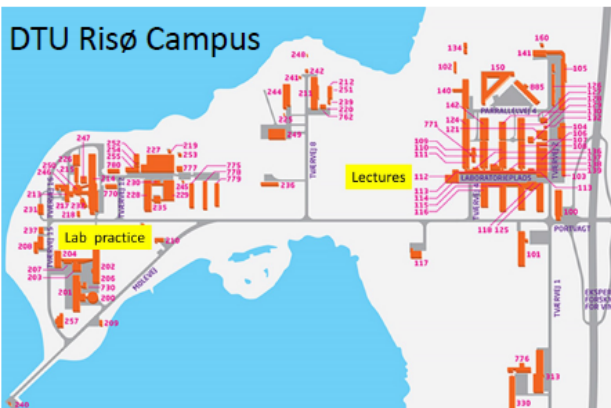
Danhostel (<http://www.danhostelroskilde.dk/>)

### Practical Information for Visitors:

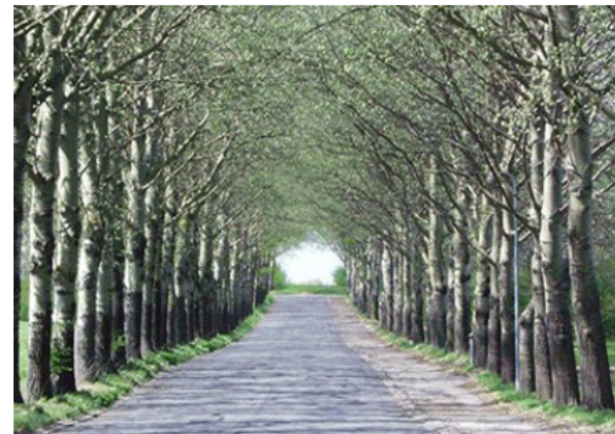
You can find a lot practical information for your visit to Roskilde here:

<http://www.visitroskilde.com/in-int/roskilde-lejre/tourist>

If you would like to visit Copenhagen, you can find a lot practical information here: <http://www.visitcopenhagen.com/copenhagen/transportation/practical-information>



## USER SEMINAR



### Development and Exploration of Inductively Coupled Plasma Spectrometry

25-27 September 2017

DTU Risø Campus  
Frederiksborgvej 399, Roskilde, Denmark

## Welcome !

Dear colleagues,

I am delighted to welcome you to the NKS-B ICP User Seminar (ICP User 2017). It will take place during September 25-27, 2017 near the historic town of Roskilde, Denmark.

This is the first Nordic Nuclear Safety Research (NKS) supported seminar with focus on development and application of inductively coupled plasma (ICP) techniques. The seminar is organised by the Technical University of Denmark, in collaboration with Swedish Defence Research Agency; University of Helsinki; ALS Scandinavia AB; Swedish Radiation Safety Authority and Norwegian University of Life Sciences.

Over the past years, the inductively coupled plasma technique has become the technique of choice in nuclear industry, nuclear forensics, radioactive waste disposal and management, environmental monitoring, emergency preparedness and radioecology for providing accurate and precise measurements. Proficient application of different ICP techniques requires long-term dedicated effort and experiential learning. Facing the worldwide challenges related to nuclear safety, disposal of radioactive wastes, decontamination and decommissioning of closed nuclear facilities, we have seen increased demands for applying ICP techniques in various sectors for effective radiochemical analysis as an alternative to traditional radiometric measurements.

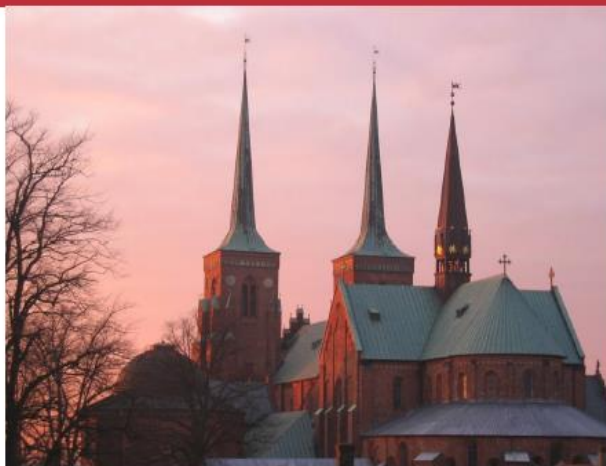
I hope that the ICP User Seminar will be successful in sharing knowledge, exchanging experience and further promoting international collaborations, while you also enjoy the lovely early autumn in Denmark!

With best regards,

Dr. Jixin Qiao

Technical University of Denmark

Chair, ICP User 2017 Organizing Committee



## Seminar Venue:

The seminar will take place at DTU Risø Campus, located on the peninsula Risø in Roskilde Fjord 7 km north of the historic Cathedral town of Roskilde and 40 km west of Copenhagen.

Address: Technical University of Denmark  
Risø Campus  
Frederiksborgvej 399  
DK-4000 Roskilde  
Denmark

## The seminar consists of two parts:

26<sup>th</sup> and 27<sup>th</sup> September: Invited lectures and presentations from participants at H.H. Koch, building 112, Risø. Prof. Frank Vanhaecke (Ghent University, Belgium) will give the opening lecture and several highly reputed experts will give invited talks.

28<sup>th</sup> September: Lab practice in room S15-17, building 204, Risø

## Registration:

Please fill in the registration form for ICP User 2017 you will find at [http://www.nks.org/en/seminars/upcoming\\_seminars/nks-b-nordic-icp.htm](http://www.nks.org/en/seminars/upcoming_seminars/nks-b-nordic-icp.htm), and send to [htho@dtu.dk](mailto:htho@dtu.dk). Registration deadline 15<sup>th</sup> August 2017.

## Invitation for presentations:

If you wish to give an oral presentation, please supply a presentation title in the registration form. The presentations should relate to one or several of the following seminar topics:

### Fundamental aspects and instrumental developments:

- ◆ ICP fundamentals and mechanisms
- ◆ sample preparation and matrix effect
- ◆ sample introduction and transport phenomena
- ◆ removal of interferences
- ◆ software and data analysis

### Applications of ICP techniques in the analysis of:

- ◆ natural and anthropogenic radionuclides
- ◆ isotopic ratio of radioactive and stable elements
- ◆ environmental studies
- ◆ forensic analysis
- ◆ geological dating
- ◆ biological / clinical / pharmaceutical materials



## NKS-B CfP 2018

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44 selected potential activity leaders contacted (by telephone, mail or meeting in person) in May, urging them to send in proposals. A number of positive responses came promptly.

Will follow up on this systematically in the autumn when the CfP is announced.

May be useful to ask for Board members' assistance also this year.

Lobbying for CfP2018 will also be made at the GAMMASPEC and NORDIC ICP seminars in September 2017 (NEXUS seems too late).

## Young scientist travel applications 2017

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Joonas Tikkanen (STUK) for GAMMASPEC seminar

I have been informed that a further 2 STUK people will apply for the same seminar (all have accepted oral presentations):

- Ms. Sinikka Virtanen: Sample preparation for the intercomparison exercise and preliminary results (Phd. student)
- Ms. Tiina Torvela: Recent development of the STUK's whole body measurement system (Phd. thesis 2015)
- Mr. Joonas Tikkanen: Efficiency calibration of a well-type HPGe detector (MSc. student)

+ Mila Pelkonen, MSc Student, University of Helsinki - Laboratory of radiochemistry has applied for funding to go to Nordic ICP seminar.