

Conference 2015

Proceedings

Full proceedings of the conference.

Scientific program

NSFS 2015 Final Scientific Program

Individual contributions

Opening and Bo Lindell Award

International Perspectives

Nordic Perspectives

Emergency, Preparedness and Response

Radioecology

Technologies and Safety

Medical Applications

Policy, Regulations and Inspections

Natural Radioactivity

Opening and Bo Lindell Award

S1-01

Bo Lindell Lecture: Nordic co-operation in an international context

Sigurður M. Magnússon, Icelandic Radiation Safety Authority

S1-01 – Bo Lindell Lecture 2015 – Magnússon

The Bo Lindell book translation project

Jack Valentin, Former ICRP Secretary

S1-02 – Valentin

International Perspectives

S2-01

INVITED: New developments and growing international cooperation in the field of emergency preparedness and response

Patrick Majerus, Ministry of Health, Department of Radiation Protection, Luxembourg

S2-01 – Majerus

Nordic Perspectives

S3-01

INVITED: ESS status – focusing on the perspectives for international research, and the challenges related to radiation protection for the staff, the public and the environment

Peter Jacobsson, European Spallation Source ESS AB, Environment, Safety & Health (ESH) Division

S3-01 – Jacobsson

S3-02

Current and emerging challenges for Nordic nuclear safety: cooperation through the NKS-R programme

Karin Andgren, NKS

S3-02 – Andgren

Emergency, Preparedness and Response

S4-01

Current and emerging challenges for Nordic nuclear/radiological emergency preparedness: cooperation through the NKS-B programme

Kasper Andersson, NKS / DTU

S4-01 – Andersson

S4-02

Societal dimensions in post-accident recovery – return of

experience from Fukushima and Chernobyl experience
*Inger Margrethe Eikermann, Norwegian Radiation Protection
Authority*
S4-02 – Eikermann

S4-03

Uncertainties of Atmospheric Dispersion Calculations for
Emergency Preparedness
*Jens Havskov Sørensen, Danish Meteorological Institute
(DMI)*
S4-03 – Sørensen

S4-04

Uncertainty in predictions of the ambient dose equivalent
rates for 30 years following the Fukushima Daiichi nuclear
power plant accident
Sakae Kinase, Japan Atomic Energy Agency
S4-04 – Kinase

S4-05

Dispersion model based dose-rate measurement simulation for
exercises
*Tuomas Peltonen, Radiation and Nuclear Safety Authority
(STUK)*
S4-05 – Peltonen

S4-06

DEMAs experiences with unmanned aerial vehicles for
radiological measurements
*Carsten Israelson, Danish Emergency Management Agency
(DEMA)*
S4-06 – Israelson

S5-01

Measurement requirements to maximise recovery phase dose
reduction in large contaminated land areas
Kasper Andersson, DTU
S5-01 – Andersson

S5-02

An accidental exposure to I-131

Wendla Paile, Radiation and Nuclear Safety Authority (STUK)

S5-02 – Paile

S5-03

Scenario Based Nuclear and Radiological Emergency Preparedness in a Non-Nuclear Country (Norway)

Øyvind Gjølme Selnæs, Norwegian Radiation Protection Authority

S5-03 – Selnæs

S5-04

Online courses in radiation protection

Mattias Jönsson, Lund University

S5-04 – Jönsson

S5-P1

Elemental Composition and Structure of Commercial Available Personal Radiation Shielding Protective Clothing

Radek Cerny, National Institute for Nuclear, Chemical and Biological Protection

S5-P1 – Cerny

S5-P2

Probabilistic Off-site Consequences Analysis – development of a guiding document

Karin Fritioff, Vattenfall AB

S5-P2 – Fritioff

S5-P3

Characterization of HPGe detectors using Computed Tomography

Angelica Hedman, FOI

Not available

S5-P4

Impact of atmosphere on the transport of Ruthenium in the primary circuit of nuclear power plant

Ivan Kajan, Chalmers University of Technology

Not available

Radioecology

S6-01

Radiochemical analysis of important radionuclides in Nordic nuclear industry

Xiaolin Hou, Technical University of Denmark, Center for Nuclear Technologies

S6-01 – Hou

S6-02

Multivariate analysis of release data and environmental monitoring data from Swedish nuclear facilities

Charlotte Lager, Swedish Radiation Safety Authority

S6-02 – Lager

S6-03

Application of Rapid and Automated Techniques in Radiochemical Analysis – Inspirations from NKS-B Rapid-Tech Project

Jixin Qiao, DTU Nutech

S6-03 – Qiao

S6-04

Canopy interception and accumulation of Fukushima Dai-ichi derived radiocaesium by forest trees.

Stefan Bengtsson, Institute of Environmental Radioactivity, Fukushima University

S6-04 – Bengtsson

S6-05

Concentrations and inventories of Cs-137 in dated sediments sampled in the Swedish Marine Environmental Monitoring Program

Mats Eriksson, Swedish Radiation Safety Authority

S6-05 – Eriksson

S6-06

Effects of dynamic behaviour of Nordic marine environment to radioecological assessments (the EFMARE project)

Mikhail Iosjpe, Norwegian Radiation Protection Authority
S6-06 – Iosjpe

S6-07

Really long term radiological assessment of ecosystems
Ulrik Kautsky, SKB
S6-07 – Kautsky

S6-P1

Radioactivity in fertilizers
Tuukka Turtiainen, Radiation and Nuclear Safety Authority (STUK)
S6-P1 – Turtiainen

Technologies and Safety

S7-01

Uranium Aerosol Characteristics at a Nuclear Fuel Manufacturing Site – The regulators perspective
Nils Addo, Swedish Radiation Safety Authority
S7-01 – Addo

S7-02

Uranium Aerosol Characteristics at a Nuclear Fuel Manufacturing Site – Particle Size, Morphology and Chemical Composition
Edvin Hansson, Linköping University, Westinghouse Electric Sweden AB
S7-02 – Hansson

S7-03

Performance of a new NIRP TL-dosemeter. Uncertainty and detection limit estimation
Henrik Roed, National Institute of Radiation Protection
S7-03 – Roed

S7-04

The start of the decommissioning of the inner parts of the DR3 reactor

Jens Søgaard-Hansen, Danish Decommissioning
S7-04 – Søgaard-Hansen

S7-05

Radioactive Waste Management in Denmark
Heidi Sjølin Thomsen, Dansk Dekommissionering
S7-05 – Thomsen

S7-P1

Establishing a method for a more accessible and reliable verification of medical radiation shielding
Ibtisam Yusuf, Department of Radiation Physics and Department of Medicine and Health Sciences, Linköping University, Linköping, Sweden
Not available

Medical Applications

S8-01

INVITED: Developments and justification of applications using ionizing radiation in the medical field
Steve Ebdon-Jackson, Public Health England, Medical Exposure Regulatory Infrastructure Team
S8-01 – Ebdon-Jackson

S8-02

Radiation safety aspects of the Danish Center for Proton Therapy
Lars Hjorth Praestegaard, Department of Medical Physics, Aarhus University Hospital
S8-02 – Preaestegaard

S8-03

New Danish research laboratory for medical dosimetry
Claus E. Andersen, Technical University of Denmark
S8-03 – Andersen

S8-04

The National System for the Introduction of New Health

Technologies within the Specialist Health Service
*Eva Godske Friberg, Norwegian Radiation Protection
Authority*
S8-04 – Friberg

S9-01

Computed paediatric tomography exposure and radiation-
induced cancers: Results from a national cohort study in
France

Marie-Odile Bernier, IRSN

S9-01 Bernier

S9-02

Pediatric protocols and dose reduction devices in CT
scanners where few examinations are performed

Jonina Gudjonsdottir, Icelandic Radiation Safety Authority

Not available

S9-03

Population doses from x-ray and nuclear medicine procedures
in Nordic countries

Ritva Bly, Radiation and Nuclear Safety Authority (STUK)

S9-03 – Bly

S9-04

Sunbeds and sunburns in Iceland

Þorgeir Sigurðsson, Icelandic Radiation Safety Authority

S9-04 – Sigurðsson

S10-01

The importance of implementing radiation protection in the
national eHealth-strategy

*Eva Godske Friberg, Norwegian Radiation Protection
Authority*

S10-01 – Friberg

S10-02

Clinical audits for breast cancer radiotherapy in Norway

*Ingrid Espe Heikkilä, Norwegian Radiation Protection
Authority*

S10-02 – Heikkila

S10-03

Inspection of Cardiology departments in Norway: Are they making it great in radiation protection?

Reidun D. Silkoset, Norwegian Radiation Protection Authority

S10-03 – Silkoset

S10-04

Measurement of eye lens radiation doses to staff during percutaneous coronary interventional procedures

Ibtisam Yusuf, Department of Radiation Physics and Department of Medicine and Health Sciences, Linköping University, Linköping, Sweden

S10-04 – Yusuf

S10-P1

Frequency of Medical X-ray Examinations in Iceland in 2013

Nelly Petursdottir, Icelandic Radiation Safety Authority

S10-P1 – Petursdottir

S10-P2

Ra-223 planar whole body scan and SPECT of surgically removed bone

Robin de Nijs, Rigshospitalet, Nuclear Medicine and PET

S10-P2 – de Nijs

S10-P3

Whole body counting of radium-223 for monitoring of staff in radionuclide therapy.

Søren Holm, Rigshospitalet, Nuclear Medicine and PET

S10-P3 – Holm

S10-P4

Developments in first choice from conventional X-rays to CT for selected studies

Britta Højgaard, National Institute of Radiation Protection

S10-P4 – Højgaard

Policy, Regulations and Inspections

S11-01

Swedish Radiation Safety Authority: Systematic monitoring and evaluation of work practices an important aspect of improving radiation safety for patients.

Camilla Larsson, Swedish Radiation Safety Authority

S11-01 – Larsson

S11-02

Inspections of x-ray equipment at Danish public hospitals

Peter Kaidin Frederiksen, National Institute of Radiation Protection

S11-02 – Frederiksen

S11-03

Electronic inspection of industrial radiography companies in Norway

Bjørn Helge Knutsen, Norwegian Radiation Protection Authority

S11-03 – Knutsen

S11-04

Inspections in non-medical use of radiation in Finland in 2010-2014

Siiri-Maria Aallos-Ståhl, Radiation and Nuclear Safety Authority (STUK)

S11-04 – Aallos-Ståhl

S11-05

New procedures for disposal of ionisation chamber smoke detectors

Jannie Kalør Svendsen, National Institute of Radiation Protection

S11-05 – Svendsen

S11-P1

Regulatory Authority Records from the 2014-2015 Blood Irradiator Inspection Campaign

Charlotte Nielsen, National Institute of Radiation Protection
Not available

S11-P2

Norway has phased out gamma based blood irradiators
Øivind Syversen, Norwegian Radiation Protection Authority
Not available

S11-P3

Results from an All-inclusive IAEA-based Inspection Approach for Industrial Irradiation Facilities
Charlotte Nielsen, National Institute of Radiation Protection
Not available

S11-P4

NORGIR
Þorgeir Sigurðsson, Icelandic Radiation Safety Authority
S11-P4 – Sigurdsson

S11-P5

Survey on needs for changes in the Finnish radiation legislation and on regulatory oversight – The perspectives of practitioners
Ritva Bly, Radiation and Nuclear Safety Authority (STUK)
S11-P5 – Bly

S11-P6

Nordic Working Group on Medical Applications
Hanne N Waltenburg, National Institute of Radiation Protection
S11-P6 – Waltenburg

S11-P7

Focused inspections in IR – Tool for improvement of occupational radiation protection in industrial radiography (IR) – IAEA/ISEMIR IR Road Map
Uffe Torpenholt Jørgensen, Danish Health and Medicines Authority

Natural Radioactivity

S12-01

Indoor and outdoor radon levels in Iceland

Gísli Jónsson, Icelandic Radiation Safety Authority

S12-01 – Jónsson

S12-02

NORM in Norwegian Mineral Industry

Paula Nunez, Institute for Energy Technology

S12-02 – Nunez

S12-03

TENORM in geothermal applications in Iceland

Porgeir Sigurðsson, Icelandic Radiation Safety Authority

S12-03 – Sigurðsson

S12-P1

NKS: Developing Methods for Reliable and Efficient Radiological Characterization of NORM Contaminated Objects

Charlotte Nielsen, National Institute of Radiation Protection

Not available

S12-P2

The Swedish Radiation Safety Authority's Radioanalytical Laboratory: who are we and what do we do?

Mats Eriksson, Swedish Radiation Safety Authority

Not available

S12-P3

Gross alpha and beta radioactivity levels measurement in mining ponds in Jos Metropolis-Plateau State, Nigeria

Daniel Jwanbot, University of Jos

S12-P3 – Jwanbot