



6th NERIS Workshop

"Operational and research achievements and needs to further strengthen preparedness in emergency management, recovery and response"

20-22 October 2021
Online

Programme

Objectives of the workshop

Thematic

The NERIS Workshop 2021 will focus on **“Operational and research achievements and needs to further strengthen preparedness in emergency management, recovery and response”** as well as on common topics of the NERIS SRA.

This will be an opportunity to **discuss and exchange views** with NERIS Members, international organisations and European research communities on research developments and priorities for the European NERIS Platform.

Main topics

Plenary sessions will be organised on topics related to the following challenges:

- ▶ **Operational aspects: source identification, monitoring, from theory to practice**
- ▶ **Holistic emergency and recovery management**
- ▶ **Progress in supporting decision making**

Programme

The NERIS workshop will last **3 days**. The **NERIS Young Scientist Award** ceremony will mark the end of the workshop. The candidates to this award are identified by a special icon (🏆) in the detailed program.

Target audience

The target audience for this workshop are **researchers and organisations involved or interested in emergency and recovery preparedness and management** from all levels and sectors.

Working language

The working language of the workshop will be **English**.

Programme Committee

Kasper ANDERSSON – DTU (*Denmark*)

Johan CAMPS – SCK CEN (*Belgium*)

Damien DIDIER – IRSN (*France*)

Eduardo GALLEGO – UPM (*Spain*)

Deborah OUGHTON –NMBU (*Norway*)

Antony BEXON – PHE (*United Kingdom*)

Marie-Claire CANTONE – UMIL (*Italy*)

Wolfgang RASKOB – KIT (*Germany*)

Catrinel TURCANU – SCK CEN (*Belgium*)

Milagros MONTERO PRIETO – CIEMAT (*Spain*)

Important dates

→ 15 October 2021 : registration deadline

→ 18 October 2021 : presentation deadline

→ 20th – 22 October 2021, 10:00-12:00* : NERIS Workshop

* All times given in this document are Central European Time

Wednesday 20th October 2021

13:00 - 13:15 **Introducing words from the chair of the platform**

Olivier Isnard - IRSN (France)

13:15 - 15:00 **Session A (1) "Operational aspects: source identification"**

Chair: Johan Camps - SCK CEN (Belgium)

Introduction of the session

Probabilistic inverse model for identification of atmospheric contamination source in an continental-scale based on the 106-Ru 2017 event. 🏆

Piotr Kopka - National Centre for Nuclear Research (Poland)

Inverse modeling method for source identification: Application to the selenium detection event in May 2019

Olivier Saunier - IRSN (France)

Method of source identification following an accidental release at an unknown location using a Lagrangian atmospheric dispersion model

Spyros Andronopoulos - NCSR Demokritos (Greece)

Bayesian source reconstruction: overview, applications and the importance of model error. 🏆

Pieter De Meutter - SCK CEN (Belgium)

Discussion

15:00 - 15:15 **Coffee Break**

15:15 - 17:00 **Session A (2) "Operational aspects: monitoring"**

Chair: Wolfgang Raskob - Karlsruhe Institute of Technology (KIT) (Germany)

Introduction of the session

Sea Eagle Radiation Monitoring Exercise 2019

Peder Kock - Swedish Radiation Safety Authority (SSM) (Sweden)

Evaluation of the Polydisperse Gaussian Model for Atmospheric Dispersion of Multiphase Flows

Lucian Ivan - Canadian Nuclear Laboratories (Canada)

Development of CANDU-Specific Operational Intervention Levels 🏆

Luke Lebel - Canadian Nuclear Laboratories (Canada)

Development of a field test for molten core concrete interaction in reactor accidents 🏆

Luke Lebel - Canadian Nuclear Laboratories (Canada)

Discussion

17:00 **Closing words**

Olivier Isnard - IRSN (France), Eymeric Lafranque - CEPN (France)

Thursday 21st October 2021

09:00 - 10:30

Session A (3) "Operational aspects: from theory to practice"

Chair: Kasper Andersson - DTU (Denmark)

Introduction of the session

NLWKN - the radiation protection competence center of the German federal state Lower Saxony for measurement and expert advice

Hauke Brüggemeyer - NLWKN (Germany)

EMPIR project "Preparedness" and study on the uncertainty of passive area dosimetry systems for environmental radiation monitoring in the aftermath of a nuclear or radiological event

Fabio Alessio Vittoria - ENEA- Radiation Protection Institute (Italy)

Using ensemble forecasting for uncertainty quantification of the Se-75 concentration and comparison with observations made in May 2019 in Europe 🏆

Christophe Gueibe - Belgian Nuclear Research Centre (SCK CEN) (Belgium)

Discussion

10:30 - 10:45

Coffee Break

10:45 - 12:30

Session B (1) "Holistic emergency and recovery management"

Chair: Pascal Crouail - CEPN (France)

Introduction of the session

A Study on the REPP for DVP in Nuclear Disaster Situation 🏆

Seokki Cha - KIRAMS (Korea Institute of Radiological and Medical Science) (Republic of Korea)

Preliminary Study on 2 Types of Conception of Pre Distribution of KI for Nuclear Emergency 🏆

Seokki Cha - KIRAMS (Korea Institute of Radiological and Medical Science) (Republic of Korea)

Strategy Optimization in Portuguese Radiological Emergency Scenarios using the European Model for Inhabited Areas (ERMIN)

Paulo Nunes - APA – Portuguese Environment Agency (Portugal)

Social, ethical and communication aspects of uncertainty management- Findings from the CONFIDENCE project

Catrinel Turcanu - SCK CEN (Belgium)

Discussion

12:30 - 13:30

Lunch break

13:30 - 15:15

Session B (2) "Holistic emergency and recovery management"

Chair: Catrinel Turcanu - SCK CEN (Belgium)

Introduction of the session

Stakeholder engagement in emergency preparedness, response and recovery

Robbe Geysmans - SCK CEN (Belgium)

Getting people involved: Recommendations on mobile apps use (doses & health) for a better recovery after nuclear accidents

Liutsko Liudmila - ISGlobal (Spain)

Participatory stakeholders' engagement through national panels and surveys to address the issues and uncertainties arising in the preparedness and management of the transition phase

Milagros Montero - CIEMAT (Spain)

Public perceptions and attitudes to residual radioactivity in food

Yevgeniya Tomkiv - Norwegian University of Life Sciences, Centre for Environmental Radioactivity (Norway)

Discussion

15 :15

Closing words

Olivier Isnard - IRSN (France), Eymeric Lafranque - CEPN (France)

Friday 22nd October 2021

09:00 - 10:20 Session C (1) "Progress in supporting decision making"

Chairs: Milagros Montero - CIEMAT (Spain)

Introduction of the session

TERRITORIES guidance on radioecological models to support decision making in post-accident situations

Marie Simon-Cornu - IRSN (France)

Ensuring robust and successful composition and implementation of recovery countermeasure strategies

Kasper Andersson - Technical University of Denmark (Denmark)

Towards an improved decision-making process to better cope with uncertainties in the early and transition phases

Vanessa Durand - IRSN (France)

Discussion

10:20 - 10:30 Coffee Break

10:30 - 11:50 Session C (2) "Progress in supporting decision making"

Chair: Liudmila Liutsko - ISGlobal (Spain)

Introduction of the session

Radiological Protection of People and the Environment in the Event of a Large Nuclear Accident: a new ICRP publication taking into account the lessons learned from the Fukushima accident

Thierry Schneider - CEPN (France)

TERRITORIES guidance to support decision making in post-accident situations

Jérôme Guillevic - IRSN (France)

Achievements and research needs identified in the CONFIDENCE dissemination workshop

Wolfgang Raskob - Karlsruhe Institute of Technology (KIT) (Germany)

Discussion

11:50 - 12:00 Closing remarks and Neris Young Scientist Award

Olivier Isnard - IRSN (France)