

 NERIS



# NERIS Workshop 2015

*State-of-the-art and needs for further research for emergency and recovery preparedness and response*

**27-29 April 2015, Milano, Italy**

---

Organised in cooperation with the University of Milano



UNIVERSITÀ  
DEGLI STUDI  
DI MILANO

# Second ANNOUNCEMENT

---

## Objectives and structures of the Workshop

The NERIS Workshop 2015 will cover the **State of the art and Needs for further research for emergency and recovery preparedness and response**. It will provide an opportunity to **discuss and exchange with NERIS Members, international organisations and European Research communities on research developments and priorities for the European NERIS Platform**.

**Plenary sessions will be organised on topics related to the 3 research areas of the NERIS Strategic Research Agenda:**

New challenges in atmospheric & aquatic modelling – Needs for improvement.

New challenges for better dose assessments and decision support based on improved knowledge: source term, scenarios, etc.

New challenges in stakeholder involvement and local preparedness and communication strategies.

---

## Targeted audience

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

---

## Venue and accommodation

The Workshop will be held at **Palazzo Greppi, room “Sala Napoleonica”** - Via S. Antonio 12 – 20122 Milano

*Underground stops: DUOMO (MM1, red line; MM3, yellow line); MISSORI (MM3, yellow line)*

*For further information, please see on [Google Maps](#)*

Below, you will find a list of hotels where you can make your own booking by clicking on the link. If you have any questions, please contact the NERIS Secretariat ([sec@eu-neris.net](mailto:sec@eu-neris.net)).

\*\*\*\* [Hotel Canada, Via S. Sofia 16, Milano](#)

\*\*\*\* [Hotel Best Western Ascot, Via Lentasio 3, Milano](#)

\*\*\* [Hotel Lloyd, Corso di Porta Romana 48, Milano](#)

\*\*\* [Hotel Zurigo, Corso Italia 11, Milano](#)

\*\*\* [Hotel Ariston, Largo Carrobbio 2, Milano](#)

\*\* [Hotel Gritti, Piazza S. Maria Beltrade 4, Milano](#)

---

## Working language

The working language of the workshop will be English.

---

## Registration and fees

Participation fees\* will be requested for the organization and the Workshop dinner:

**200€ for NERIS supporting organisations**

**250€ for NERIS members or other organisations**

*Participation fees include lunches, coffee breaks and the Workshop dinner organised on April 28, 2015.*

Registration form is available on the [NERIS Website](#).

**Registration deadline: March 31, 2015.**

**Limited number of participants: 90.**

**Registration will be taken into account on receipt of payment.**

(\* NERIS Association is not submitted to VAT)

---

## Call for posters

You are encouraged to submit poster presentations on emergency and recovery preparedness and response. All topics related to the 3 research areas of the NERIS SRA or related to the implementation of BSS on emergency and recovery issues are welcomed to our session dedicated to "posters" (see Programme below).

---

## Further information

For further information please contact the hosted Coordinator (Marie-Claire Cantone – [marie.cantone@unimi.it](mailto:marie.cantone@unimi.it)) or the NERIS Secretary (Sandra Lafage – [sec@eu-neris.net](mailto:sec@eu-neris.net)).

You can also visit the NERIS web page [www.eu-neris.net](http://www.eu-neris.net)

### IMPORTANT DATES



**Registration deadline:  
March 31, 2015**



**Full papers submission  
deadline:  
April 1, 2015**

# Day 1 - Monday 27 April 2015

## NERIS Workshop Opening Ceremony

**Chair: Marie-Claire Cantone & Thierry Schneider**

**12.00 – 13.30** Registration (no lunch foreseen)

**13.30 – 14.00** Welcome & Introduction

*Marie-Claire Cantone - University of Milano (Italy) – Local Organizer*

**The NERIS Platform and the NERIS Strategic Research Agenda**

*Thierry Schneider - CEPN (France) – President of NERIS*

**14.00 – 15.45** **Session 1: Challenges in atmospheric and aquatic modelling**

**Chair: Wolfgang Raskob & Florian Gering**

**Atmospheric dispersion modelling to locate the source of airborne radioactivity – do we use all the knowhow we have?**

*Raimo Mustonen, Aleksi Mattila – STUK – Radiation and Nuclear Safety Authority (Finland)*

**The needs for improvement of atmospheric dispersion capabilities for decision support systems**

*Slawomir Potemski – NCBJ – National Centre for Nuclear Research (Poland)*

*Stephano Galmarini – JRC-Ispra – Institute for Environment and Sustainability, Joint Research Centre (Italy)*

**Assessment of possible consequences from severe accidents at nuclear power plants in Europe**

*Petra Seibert, Delia Arnold, Nikolaus Arnold, Klaus Gufler, Radek Hofman*

*Helga Kromp-Kolb, Gabriele Mraz, Anne Philipp, Steven Sholly*

*BOKU-Met - Institute of Meteorology, University of Natural Resources & Appl. Life Sciences (Austria)*

**Is the consideration of different types of atmospheric dispersion model likely to impact on the extent of the estimated countermeasures that may be used as an input for site emergency plans?**

*Peter Bedwell, Hannah Gaskell, Stephanie Haywood – PHE – Public Health England (UK)*

**Real-time simulation of the near-range atmospheric dispersion using Computational Fluid Dynamics**

*Lieven Vervecken<sup>1,2</sup>, Christophe Gueibe<sup>1</sup>, Johan Camps<sup>1</sup>, Johan Meyers<sup>2</sup>*

*<sup>1</sup>SCK•CEN, Belgian Nuclear Research Centre (Belgium)*

*<sup>2</sup>KU Leuven, Department of Mechanical Engineering (Belgium)*

**Challenges in aquatic modeling in case of accidental radioactive discharges in the marine environment**

*Bruno Fievet - IRS[N]/PRP-ENV/SERIS, Laboratoire de Radioécologie de Cherbourg - Octeville (France)*

# Day 1 - Monday 27 April 2015

## 14.00 – 15.45 (...)

### Integration of short- and long-term radionuclide transport models for freshwater bodies and coastal waters into JRODOS

*Eduardo Gallego<sup>1</sup>, M. Zhelezniak<sup>1,2</sup>, L. Papush<sup>3</sup>, R. Bezhenar<sup>1,2</sup>, A. Boyko<sup>1,2</sup>, I. Levdin<sup>1,2</sup>, I. Brovchenko<sup>1,2</sup>, V. Koshebutsky<sup>1,2</sup>, I. Kovalets<sup>1,2</sup>, V. Maderich<sup>1,2</sup>, W. Raskob<sup>4</sup>, D. Trybushnyi<sup>4</sup>*

<sup>1</sup>UPM – Universidad Politécnica de Madrid (Spain)

<sup>2</sup>Institute of Mathematical Machines & Systems, National Academy of Sciences, Kiev (Ukraine)

<sup>3</sup>Private consultant, Nyköping (Sweden)

<sup>4</sup>Karlsruhe Institute of Technology, Institut für Kern- und Energietechnik, Eggenstein-Leopoldshafen (Germany)

## 15.45 – 16.15

### Coffee & Posters

## 16.15 – 17.30

### Session 2: Improvement of existing decision support systems

**Chair: Florian Gering & Wolfgang Raskob**

#### Implementation of a method for source term estimation based on measurements and atmospheric dispersion modelling for use in decision support systems

*S. Andronopoulos<sup>1</sup>, I. Kovalets<sup>2</sup>, R. Hofman<sup>3</sup>, P. Seibert<sup>3</sup>*

<sup>1</sup>National Centre for Scientific Research “Demokritos” (Greece)

<sup>2</sup>Ukrainian Centre for Environmental and Water Projects (Ukraine)

<sup>3</sup>Department of Meteorology and Geophysics, University of Vienna (Austria)

#### Improving the decision support system JRodos according to customer requirements

*C. Landman<sup>1</sup>, W. Raskob<sup>1</sup>, D. Trybushnyi<sup>1</sup>, I. Levdin<sup>2</sup>*

<sup>1</sup>KIT- Karlsruhe Institute of Technology (Germany)

<sup>2</sup>UCEWP- Ukrainian Center for Environmental and Water Projects (Ukraine)

#### SYMBIOSE: A Simulation Platform for post-accidental risk assessment, applications in the terrestrial landscape of the Fukushima region

*M.A. Gonze, C. Murlon, V. Nicoulaud, S. Le Dizes, L. Garcia-Sanchez, J.M. Métivier, P. Calmon, M. Sy, M. Simon-Cornu*

IRSN - French Institute for Radiological Protection and Nuclear Safety (France)

#### How to use decision support systems in a nuclear emergency?

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

## 17.30 – 18.00

### Discussion: Sessions 1 & 2

*Moderators: Wolfgang Raskob & Florian Gering*

*Rapporteur: Eduardo Gallego*

## Day 2 - Tuesday 28 April 2015

9.00 – 10.30

### **Session 3: Improvement of the decision-making-processes and the implementation of the Basic Safety Standards**

**Chair: Kaj Vesterbacka & Christophe Murith**

#### **Implementation of BSS in Germany**

*Florian Gering - BfS- Federal Office for Radiation Protection (Germany)*

#### **Consideration of emergency situations in the new Swiss ordinance on radiation protection**

*Christophe Murith - FOPH - Federal Office of Public Health, Radiological Protection (Switzerland)*

#### **Strategy for Radioactivity Measurements in Radiological Emergency to Improve Decision-Making Processes**

*T.K. Ikäheimonen, P. Vesterbacka, K. Vesterbacka, J. Lahtinen, S. Klemola, J. Huikari, K. Peräjärvi  
STUK - Radiation and Nuclear Safety Authority (Finland)*

#### **Measurement uncertainties and their impact on decision support**

*Johan Camps - SCK•CEN - Belgian Nuclear Research Centre (Belgium)*

#### **Assessing Personal Doses from External Radiation Using Personal Dosimeters with GPS and GIS technologies in Fukushima**

*Wataru Naito<sup>1</sup>, Motoki Uesaka<sup>1</sup>, Hideki Ishii<sup>2</sup>*

*<sup>1</sup>- Research Institute of Science for Safety and Sustainability (RISS), National Institute of Advanced Industrial Science and Technology (AIST) (Japan)*

*<sup>2</sup>- Fukushima Future Center for Regional Revitalization, Fukushima University (Japan)*

#### **The OPERRA Project: First Period Main Achievements**

*Jean-René Jourdain - IRSN - French Institute for Radiological Protection and Nuclear Safety (France)*

10.30 – 11.00

### **Coffee & Posters**

11.00 – 12.00

### **Session 3 (con't): Improvement of the decision-making-processes and the implementation of the Basic Safety Standards**

**Chair: Kaj Vesterbacka & Christophe Murith**

#### **The importance of operational optimisation in recovery of contaminated terrestrial areas**

*Kasper G. Andersson - DTU - Technical University of Denmark (Denmark)*

#### **Soil vulnerability maps for predictive purposes in decision making processes for post-accident recovery in Spain**

*C. Trueba, M. Montero, B. García-Puerta - CIEMAT (Spain)*

#### **INEX 5 Exercise on Notification, Communication and Interfaces Related to Catastrophic Events involving Radiation or Radiological Materials**

*H. Burcin Okyar - OECD Nuclear Energy Agency  
Radiological Protection and Radioactive Waste Management Division*

# Day 2 - Tuesday 28 April 2015

11.00 – 12.00 (...)	<b>Scenario Based Nuclear and Radiological Emergency Preparedness in a Non-Nuclear Country (Norway)</b> <i>Øyvind Gjølme Selnæs - NRPA, Norwegian Radiation Protection Authority (Norway)</i>
12.00 – 12.30	<b>Discussion: Session 3</b> <i>Moderators: Kaj Vesterbacka &amp; Christophe Murith</i> <i>Rapporteur: Anthony Bexon</i>
12.30 – 13.30	<b>Lunch</b>
13.30 – 15.30	<b>Session 4: Stakeholder engagement and dialogue</b>
	<b>Chair: Inger Eikermann &amp; Marie-Claire Cantone</b>
	<b>Societal Deliberation: Formal and Informal Behaviours</b> <i>Simon French<sup>1</sup>, Nikolaos Argyris<sup>2</sup></i> <i><sup>1</sup>University of Warwick (UK)</i> <i><sup>2</sup>University of Loughborough (UK)</i>
	<b>Effective management of nuclear emergencies: which social factors may play a key role?</b> <i>C. Turcanu, T. Perko, B. Carlé</i> <i>SCK•CEN - Belgian Nuclear Research Centre (Belgium)</i>
	<b>Health surveillance &amp; practical radiological protection culture: two complementary pillars for improving living conditions in a contaminated territory</b> <i>Pascal Croüail<sup>1</sup>, Sylvie Charron<sup>2</sup>, Makoto Miyasaki<sup>3</sup>, Raïssa Misyura<sup>4</sup></i> <i><sup>1</sup>CEPN - Nuclear Evaluation Protection Centre (France)</i> <i><sup>2</sup>IRSN - French Institute for Radiological Protection and Nuclear Safety (France)</i> <i><sup>3</sup>Fukushima Medical University (Japan)</i> <i><sup>4</sup>Stolin Central District Hospital (Belarus)</i>
	<b>Stakeholder engagement and dialogue and their role in the improvement of the decision-making process</b> <i>Tatiana Duranova, Jarmila Bohunova - VUJE (Slovak Republic)</i>
	<b>The involvement of experts in post-accident management at the service of population: lessons from the Fukushima accident</b> <i>Thierry SCHNEIDER<sup>1</sup>, Jacques LOCHARD<sup>1</sup>, Sylvie CHARRON<sup>2</sup>, Jean-Christophe GARIEL<sup>2</sup>, Jean-François LECOMTE<sup>2</sup>, François ROLLINGER<sup>2</sup></i> <i><sup>1</sup>CEPN - Nuclear Evaluation Protection Centre (France)</i> <i><sup>2</sup>IRSN - French Institute for Radiological Protection and Nuclear Safety (France)</i>
	<b>Management of contaminated goods in post-accident situations</b> <i>Sylvie CHARRON<sup>1</sup>, Sandra LAFAGE<sup>2</sup>, Bruno CESSAC<sup>1</sup>, Pascal CROUAIL<sup>2</sup>, Laurent DESTACAMP<sup>1</sup>, Jean-François LECOMTE<sup>1</sup>, Christophe MURITH<sup>3</sup>, Vanessa PARACHE<sup>1</sup>, Thierry SCHNEIDER<sup>2</sup></i> <i><sup>1</sup>IRSN - French Institute for Radiological Protection and Nuclear Safety (France)</i> <i><sup>2</sup>CEPN - Nuclear Evaluation Protection Centre (France)</i> <i><sup>3</sup>FOPH - Federal Office of Public Health, Radiological Protection (Switzerland)</i>

# Day 2 - Tuesday 28 April 2015

15.30 – 16.00

**Coffee & Posters**

16.00 – 17.00

**Session 4: Stakeholder engagement and dialogue (con't)**

**Chair: *Inger Eikermann & Marie-Claire Cantone***

**Stakeholder Engagement in Ireland on Radioactive Contamination of Food**

*Veronica Smith, Catherine Organo, Ciara McMahon*

*EPA - Environmental Protection Agency (Ireland)*

**Stakeholder involvement and local preparedness and communication strategies – views and experiences from Portugal (a non-nuclear country)**

*M. Baptista<sup>1</sup>, O. Monteiro Gil<sup>1</sup>, I. Lopes<sup>1</sup>, M.J. Madruga<sup>1</sup>, J. Oliveira Martins<sup>2</sup>, I. Paiva<sup>1</sup>, L. Portugal<sup>1</sup>, M. Reis<sup>1</sup>, P. Teles<sup>1</sup>, P. Vaz<sup>1</sup>*

*<sup>1</sup>IST - Instituto Superior Técnico, Universidade de Lisboa (Portugal)*

*<sup>2</sup>APA - Agência Portuguesa do Ambiente (Portugal)*

**Local-national forum for emergency and recovery strategies – tool for local emergency and recovery plans**

*I.M.H Eikermann, A. Liland*

*NRPA - Norwegian Radiation Protection Authority (Norway)*

**Fukushima: Four Years of Academic Community Support to the State Efforts of Improving People's Lives in the Post Accident Conditions**

*Kenj Nanba, Mark Zheleznyak and Thomas Hinton*

*Institute of Environmental Radioactivity, Fukushima University (Japan)*

17.00 – 17.30

**Discussion: Session 4**

*Moderators: Inger Eikermann & Marie-Claire Cantone*

*Rapporteur: Pascal Croûail & Catrinel Turcanu*

20.00 – 23.00

**Dinner**



# Day 3 - Wednesday 29 April 2015

9.00 – 9.45

## Session 5: Information and social media

Chair: *Deborah Oughton & Raimo Mustonen*

**Managing the complexity of societal needs in a nuclear emergency situation: towards further experts collaboration for the “enlightened protection of populations”**

*Julie Hazemann<sup>1</sup>, Yves Maignac<sup>2</sup>*

<sup>1</sup>*EnerWebWatch*

<sup>2</sup>*WISE-Paris*

**Information and participation of local populations in a post-accident situation: a social path for recovery - insights from the PREPARE European research project**

*Stéphane Baudé<sup>1</sup>, Gilles Hériard Dubreuil<sup>1</sup>, David Boilley<sup>2</sup>, Thierry Schneider<sup>3</sup>*

<sup>1</sup>*MUTADIS (France)*

<sup>2</sup>*ACRO - NGO in charge of radioactivity measurement in the West of the France*

<sup>3</sup>*CEPN - Nuclear Evaluation Protection Centre (France)*

**Information on Radiation through Social media. A case study and a proposal for a semantic web system to help for Nuclear Post-Accident resilience**

*Federico Tajariol, Antonin Segault, Ioan Roxin*

*UFC – University of Franche-Comté (France)*

9.45 – 10.15

## Discussion: Session 5

*Moderators: Deborah Oughton & Raimo Mustonen*

*Rapporteur: Catrinel Turcanu & Pascal Croüail*

10.15 – 10.45

## Coffee & Posters

10.45 – 12.30

## Session 6: Research coordination and round table discussion

Chair: *Thierry Schneider*

**MELODI / CONCERT** (*Thomas Jung, BfS*)

**ALLIANCE** (*T.K. Ikäheimonen, STUK*)

**EURADOS** (*Paola Fattibene, ISS*)

12.30 – 13.30

## Coffee & Posters

13.30 – 16.30

## NERIS GENERAL ASSEMBLY