



General Information

The EAN_{NORM} interconnects experts and provides feedback experience for the implementation of the ALARA principle into the European industry and research. During the 4th workshop of the EAN_{NORM}, examples of the different approaches regarding to the main topics of the workshop will be in the focus of several presentations and discussions. According to the needs of easy to handle methods and solutions for the practical implementation of the respective guidelines, they will focus on a practical point of view and be held in **round table sessions**. **Case studies for different NORM industries** with emphasis on practical approaches for measurement and strategies as well as for transportations of NORM and NORM in building materials will be the major topics. In addition, the participants will have the possibility to visit an exhibition of measurement devices designed for NORM assessment and Radiation Protection in the NORM industry.

Conference Address and Accommodation

Accommodation and Conference Venue are at the same place. Accommodation has been reserved for participants at a special discounted rate. Reservations should be made directly to the hotel by the participant **using the keyword 'ALARA' until October 15, 2011 at latest.**

Radisson Blu Hotel

Torenplein 8, B-3500 Hasselt (Belgium)
<http://www.radissonblu.com/hotel-hasselt>
Reservation per email :
reservations.hasselt@radissonblu.com
Tel.: +32 (0) 11 77 00 74
Fax.: +32 (0) 11 77 00 20

Hotel rates per day incl. breakfast:

Single room: 105 or 110 euro (depending on the duration of your stay)
Double room: 120 or 125 euro (depending on the duration of your stay)

Registration and Abstract Template

For registration please fill in the attached **registration form**.

It is still possible to contribute to the program. If you're interested, please use the **abstract template**.

Please return these forms to
sonja.schreurs@xios.be

Registration fee: 300,00 EURO (including social events and workshop dinner)

Exhibition costs: 450,00 EURO (includes participation of 1 person for the workshop)

Organisation by:



Chairperson of Organising Committee

dr. Sonja Schreurs (NuTeC, Diepenbeek)
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Supported by:



*“Transportation of NORM,
NORM Measurements and
Strategies, Building Materials”*

**Nov. 29th - Dec. 1st 2011,
Hasselt (Belgium)**

**European ALARA
Network for NORM
4th workshop**

**ROUND TABLE
WORKSHOP**

Scientific Committee

- A. Janssens (EC, Luxembourg)
- B. Michalik (Central Mining Institute, Katowice)
- C. Nuccetelli (ISS, Rome)
- A. Poffijn (FANC, Brussels)
- H. Schulz (IAF, Dresden)
- W. Schroeyers (NuTeC, Diepenbeek)
- P. Varskog (NORSE DECOM, Kjeller)
- F. Vermeersch (SCK, Mol)
- D. Weiss (GRS, Köln)
- J. Welbergen (COVRA, Vlissingen)

Preliminary Program

29 Nov 2011, Tuesday (topic: Transportation of NORM)

- 9:00 AM: registration
- 9:30 AM: opening of the workshop
- From 10:00 AM: scientific program
- 12:00 – 14:00: exhibition
- 17:00 round table: panel discussion
- 17:30 – 19:00 PM: exhibition
- In the evening: social event and workshop dinner

30 Nov 2011, Wednesday (topic: NORM measurements and strategies)

- From 9:00 AM: scientific program
- 12:00 – 14:00: exhibition
- 17:00 round table: panel discussion
- 17:30 – 19:00 PM: exhibition
- In the evening: social event and workshop dinner

1 Dec 2011, Thursday (topic: NORM in building materials)

- From 9:00 AM: scientific program
- 12:00 – 14:00: exhibition
- 15:00 round table: panel discussion
- 16:00: Summary of the workshop and how we proceed in the future

Presentations (so far submitted)

Transportation of NORM

- A. Janssens (EC)*: Current status of the revision of the BSS
- P.P.Haridasan (IAEA)*: Implications of the revised international basic safety standards on natural sources
- M. Nilsen (NRPA, Norway)*: Transfrontier shipment of NORM waste
- J. Welbergen (COVRA, The Netherlands)*: International transport of NORM
- P. Fias, S. Pepin (Controlatom - FANC, Belgium)*: NORM transportation in the port of Antwerp: overview and lessons
- D. Weiss (GRS, Germany)*: Exposure of Workers from the Transport of NORM in Germany
- U. Schwela (Tantalum-Niobium International Study Centre, Belgium)*: Denial of transport of NORM'
- E-M. Steffan (EXXON MOBILE, Germany)*: Classification, Labeling and Packaging of NORM Production Residuals from Crude Oil and Natural Gas Production

NORM Measurements and Strategies

- S. Pepin (FANC, Belgium)*: Belgian acceptance criteria for NORM residues: theory and practice
- A. Kunte (LfU, Germany)*: Industrial uses of zircon and zirconia and the related exposure in Bavaria
- H. Natvig (NRPA, Norway)*: Measurements of NORM in the Oil and Gas Industry
- J. P. Bolivar (Universidad de Huelva, Spain)*: Minimization and elimination of NORM waste from titanium dioxide industry through their valorization in final commercial products
- P. Hiller (NNL, UK)*: NNL's Systematic Approach to the Characterisation, Treatment and Disposal of Radioactive Wastes and its Application to NORM.
- E. Botezatu (CNCAN, Romania)*: Radiological characterization of stocked phosphogypsum from former phosphate fertilizers factories (Romania)
- I. Prlic (IMI, Croatia)*: title not yet defined

- R. Gellermann (FUGRO Consult, Germany)*: Control of masses, activities and doses during remediation measures at a radioactive contaminated site in Hannover
- N. Casacuberta (University of Barcelona, Spain)*: Study of a dicalcium phosphate industrial plant in the NORM context and within the regulatory Spanish framework
- R. García Tenorio (University of Seville, Spain)*: Occupational and Public Exposure Assessment in a Spanish Titanium Dioxide industry: a case study

NORM in Building Materials

- C. Nuccetelli (ISS, Italy)*: Natural radioactivity in building materials in the European Union: a database and an estimate of radiological significance
- M. Stals (NuTeC-XIOS, Belgium)*: The use of portable equipment for the Activity Concentration Index determination of building materials: Methodology and first results
- B. Hoffmann (BfS, Germany)*: Radon Exhalation Measurement and Assessment of Building Materials: why and how?
- A. Poffijn, H. Vanmarcke, R. Wiegiers (FANC, SCK-CEN, Belgium, IBR, The Netherlands)*: The revision of the EU-BSS and its implications for the building industry and the EU-society
- Y. Pontikes (KULeuven, Belgium)*: Radioactive elements in Bayer's process bauxite residue and their impact in valorization options
- B. Quintana Arnés (University of Salamanca, Spain)*: Galea, an expert gamma analyzer for NORM at environmental level
- J.C. Mora (CIEMAT, Spain)*: Radiological impact of fly ashes from coal combustion
- P. Vuorinen (CEN/TC 351/WG 3, Finland)*: A method for the determination of the activity concentrations of the radionuclides ²²⁶Ra, ²³²Th and ⁴⁰K in construction products using semiconductor gamma-ray spectrometry
- Per Varskog, Hartmut Schultz (Norse Decom AS, Norway- IAF, Germany)*: Radon in an underground NORM Repository

The detailed program is coming at the end of September, please check at our web-site: