

NORM4BUILDING COST Action: possibilities and challenges for young scientists

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1. Introduction The main objective of the NORM4Building COST Action is the exchange of multidisciplinary knowledge and experience among the scientists, industries and regulators in order to stimulate the reuse of NORM (naturally occurring radioactive materials) residues in new tailor-made sustainable building material, but considering the exposure to external gamma radiation and the resulting indoor air quality. Nowadays, the NORM4Building COST Action promotes the network collaboration among the 116 experts from 28 countries.

Some of the NORM representatives which are of interest for the NORM4Building COST Action are: fly ash, phosphogypsum, metal slag or red mud which can be potentially used as building materials like ceramics, cements, concrete or geopolymers.

The scientific focus of the COST Action is divided in four working groups with the following outcomes:

1. To build a new database with good practice;
2. To develop new options for NORM containing building materials;
3. To improve measurement capacity and standardization of the experimental methods to evaluate radon (possibly thoron) emanation and escalation rate in building materials;
4. To improve radiological impact assessment models for the reuse of NORM residues in building materials.

2. Possibilities and challenges for young scientists in the frame of the COST Action

Two kinds of possibilities are particularly available for the young scientists in the frame of the COST Action: training schools and short term scientific missions (STSM).

In the frame of the COST Action NORM4Building,

the first training school on reuse of NORM in building materials was organized in Hasselt, Belgium in the period from 31st August to 4th September, 2015. This year COST Action NORM4Building supported students for the two training schools: the first one titled "Building Materials and Indoor Environment" was in the frame of the Rilem conference at Technical University of Denmark from 15th to 19th August, 2016 in Lyngby, Denmark and the second one was organized at National Technical University of Athens, Greece in the period 12th -16th September, 2016.

STSM are exchange visits for supporting individual mobility in order to strengthen existing networks and fostering collaboration between researchers. Each STSM should specifically contribute to the scientific aims of the COST Action, but in the same time allowing to the applicant to learn new techniques, gain accesses to the new data, instruments and /or methods which are not available in their own institutions. COST Action particularly encourages the PhD and postdoc students to realize the mobility through short term scientific missions.

COST Action NORM4Building supports more than 15 STSM up to now, but there are more free places up to the end of the Action.

More details for the STSM application in the frame of the COST Action NORM4Building is available on the web side : www.norm4building.org

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