

# **Programme of the 11<sup>th</sup> International Workshop on the Geological Aspects of Radon Risk Mapping**

**Monday, September 17th : Registration 17,30 – 20,30**

**Tuesday, September 18th : Registration 8,00 – 9,30**

**Opening of the Workshop, Welcome, Introduction - do not miss .....** 9\*30

**Morning session (chairing – Ivan Barnet, Boris Dehandschutter)**

**Barnet I., Pacherová P.**

New version of radon index maps 1 : 50 000 of the Czech Republic..... 10\*00

**Dehandschutter B.**

Radon Risk Mapping based on OneGeology-Europe geological units..... 10\*15

**Gruber V., Bossew P., Tollefse T., De Cort M.**

A first version of a European Geogenic Radon Map (EGRM)..... 10\*30

**Bossew P.**

Classification of geological types according to the radon potential..... 10\*45

**Bossew P.**

The influence of observation protocols on reported values of Rn in soil air ..... 11\*00

**Vasilyev A., Onishchenko A., Yarmoshenko A., Zhukovsky M.**

Radon mapping based on indoor radon survey results and geological aspects ..... 11\*15

**Sainz-Fernandez C., Fernandez-Villar A., Fuente-Merino I., Gutierrez Villanueva J.L.,**

**Matarranz J.L., Quindos Lopez L., Quindós-Poncela L. S.**

Latest news about radon mapping in Spain ..... 11\*30

**Matolín M., Neznal M., Neznal M.**

International intercomparison measurement of soil-gas radon concentration  
(RIM 2010)..... 11\*45

**Lunch break 12\*00 – 13\*30**

**Afternoon session (chairing – Martin Jiranek, Peter Bossew)**

**Bartzis J., Zeeb H., Bochicchio F., Mc Laughlin J., Colligan B., Gray A., Kalimeri K.**

An overview of the activities of the RADPAR (Radon Prevention and Remediation)  
Project..... 13\*30

**Jiránek M.**

Design and application of radon-proof courses ..... 13\*45

**Immé G., Catalano R., Mangano G., Morelli D.**

Indoor radon concentrations and its exhalation rates from building materials  
used in Sicily (Italy)..... 14\*00

<b>Smethurst M.A., Watson R.J., Finne I., Ganerød G.V., Rudjord A.L.</b>	
Norwegian bedrock and drift geology as a predictor of indoor radon concentrations.....	14*15
<b>Pantinakis A., Markopoulos Th., Manoutsoglou E.</b>	
The effect of sample thickness and grain size in the determination of the exhalation rate of radon from soil, in the laboratory.....	14*30
<b>Aït-Ziane M., Cherchali H., Grine R., Mokrani-Lounis Z., and Allab M.</b>	
Some investigations about radon in groundwater from El-Hodna Chott region (Algeria).....	14*45

**Break and poster session 15\*00 – 15\*30**  
**Afternoon session (chairing – Matej Nezna, Paola Tuccimei)**

<b>Harley N.H., Chittaporn P., Fisenne I.M.</b>	
Earthquake Prediction with Unattached Radon Decay Products.....	15*30
<b>Alonso H., Rubiano J. G., Arnedo M. A., Tejera A., Gil J. M., Rodríguez R., And Martel P.</b>	
Mapping radon gas concentration in soils in Fuerteventura island.....	15*45
<b>Arnedo M. A., Alonso H., Rubiano J. G<sup>a</sup>, Tejera A., Gil J. M., Rodríguez R., and Martel P.</b>	
Mapping radon gas concentration in soils in Lanzarote island.....	16*00
<b>Gregorič I., Kovács T., Szeiler G., Fábián F., Kardos A., Kobal K., Vaupotič J.</b>	
Natural radioactivity of Slovenian soils.....	16*15
<b>Barbosa S.M., Correia D., Nero J.M., Pereira A.C. and Neves L.F.</b>	
Soil-gas radon monitoring in rehabilitated tailings from uranium ore processing: the case of the Urgeiriça old dam, Central Portugal.....	16*30
<b>Capaccioni B., Cinelli G., Mostacci D., Tositti L.</b>	
Natural radioactivity and radon risk assessment in the Vulsini volcanic district.....	16*45
<b>Castelluccio M., Lucchetti C., Tuccimei P.</b>	
Assessing the relationships between soil radon concentrations and the occurrence of shallow underground caverns .....	17*00
<b>De Cicco F., Buompane R., Marseglia U., Mattone C., Pugliese M., Quarto M., Roca V., Sabbarese C., Giudicepietro F., De Cesare W., Aquino I., Del Gaudio C., Ricco C.</b>	
Methods for the characterization of a seismo-volcanic area using radon, thoron and their parents.....	17*15
<b>Feyzullayev A.A.</b>	
About seismotectonic control of a ground radon flux.....	17*30

## Wednesday, September 19<sup>th</sup>

### Morning session (chairing – Petra Pacherova, Valeria Gruber)

<b>Fujiyoshi R., Okabayashi M., Sakuta Y., Okamoto K., Sumiyoshi T., Kobal I., Vaupotič J.</b>	
Soil radon in winter months under cool temperate deciduous stands in Hokkaido, Japan.....	9*00
<b>Essaouif Z., Ouguidi J., Misdaq M.A., Outeqablit K., Chaouqi A., Mortassim A., Erramli H.</b>	
The influence of lithology and granulation on radon emanation in a sedimentary phosphatic deposit using solid state nuclear track detectors .....	9*15
<b>Lucchetti C., Castelluccio M., Tuccimei P.</b>	
Using $^{222}\text{Rn}/^{220}\text{Rn}$ activity ratio and CO <sub>2</sub> concentration in soil gas to trace advective fluxes .....	9*30
<b>Ouguidi J., Misdaq M.A., Chaouqi A., Mortassim A., Erramli H.</b>	
$^{222}\text{Rn}$ , $^{220}\text{Rn}$ and their progeny measured inside a karstic cave and resulting radiation dose to speleologists .....	9*45
<b>Täht-Kok K., Štokalenko M., Petersell V.</b>	
High concentrations of Rn in soil air reveal a fracture zone in the bedrock of the Tapa area, Estonia .....	10*00
<b>Otahal P., Burian I., Vosahlík J., Merta J., Fialová E.</b>	
Standardisation of radon in soil measurements .....	10*15

### Short break 10\*30 – 10\*45

<b>Thinova L., Fronka A., Navratilova Rovenska K., Johnova K.</b>	
Brief information about hidden fault systems investigation at the Etna volcano vicinity .....	10*45
<b>Tommasino L., Cardellini F., Kozak K., Mazur J.</b>	
New measurement-strategies for radon in water and in soil .....	11*00
<b>Vaupotič J., Gregorič A., Kobal I., Fujiyoshi R., Okabayashi M., Sakuta Y., Ichikawa T., Neznaš M., Neznaš M.</b>	
Radon in soil gas at selected sites in Hokkaido, Japan .....	11*15
<b>Friedmann H.</b>	
The indoor Rn-concentration: schools, kindergartens and official buildings versus homes .....	11*30
<b>Cucos Dinu A., Cosma C., Dicu T., Burghele B.</b>	
First preliminary indoor radon map in Romania and future perspectives.....	11*45

**Lunch break 12\*00 – 13\*30**  
**Afternoon session (chairing – Martin Neznal, Francois Tondeur)**

<b>Guatieri S., Simone L., Faure-ragani M., Chmill V., Caccia M., Defilippis I.</b> Development of a ZigBEE based wireless data transmission system for radon concentration measurement devices .....	13*30
<b>Kropat G., Bochud F., Gruson M., Murith C., Laedermann J.-P., Baechler S.</b> Kernel regression based mapping of indoor radon concentrations in Switzerland .....	13*45
<b>Mazur J., Kozak K.</b> The problems of determining annual effective dose due to radon inhalation .....	14*00
<b>MorenoV., Bach J., Baixeras C., Font LI.</b> Influence of volcanic subsoil on indoor radon levels in Olot (NE Spain).....	14*15
<b>Nakajima T., Niida T., Esumi S., Chujo T., Inaba M., Miake Y., Tanaka N.</b> Radiation Education with Radon Detector - Detector Development and Implementation at High School .....	14*30
<b>Panero L.M. , Chmill V., Caccia M., Chiaberto E.M., Serena E. , Magnoni M.</b> Indoor radon entry rates in areas of Piedmont (North-Western Italy) with high natural radioactivity levels .....	14*45

**Break and poster session 15\*00 – 15\*30**  
**Afternoon session (chairing Ales Fronka, Ryoko Fujiyoshi)**

<b>Tondeur F., Cinelli G.</b> A software for indoor radon risk mapping .....	15*30
<b>Fronka A., Jiranek M., Rovenska K., Moucka L.</b> Radon diagnosis in the context of energy savings technologies: case studies .....	15*45
<b>Cryer S.</b> Status update of radon measurement and mitigation in Canada.....	16*00
<b>Veliyeva F.F., Aliyev Ch.S., Feyzullayev A.A., Baghirli R.J., Pampuri L., Hoffmann M. and Valsangiacomo C.</b> Indoor radon mapping in Azerbaijan.....	16*15
<b>Yarmoshenko I., Onishchenko A., Zhukovsky M.</b> Approach to establish indoor radon local reference level based on radon survey.....	16*30
<b>Zhukovsky M., Yarmoshenko I., Kiselev S.</b> Analysis of the possible radon protection strategies in Russia .....	16*45
<b>Csordas A., Kovacs T., Fabian F., Jonas J.</b> Preliminary results from an indoor radon thoron survey in V4 countries .....	17*00
<b>Ghilane M., Ouguidi J., Misdaq M.A., Outeqablit K., Chaouqi A., Mortassim A., Erramli H., Karime M.</b> Radon, thoron and their decay products measured inside two Moroccan thermal stations and resulting radiation doses to the bathers and working personnel .....	17*15

## **Posters – poster sessions on Tuesday and Wednesday 15:00–15:30**

**Amrane M., Misdaq M.A., Ouguidi J., Chaouqi A., Mortassim A., Karime M.,Essaouif Z.**

Concentrations of  $^{222}\text{Rn}$ ,  $^{220}\text{Rn}$  and their decay products measured in outdoor air in various rural zones (Morocco) by using solid state nuclear track detectors and resulting radiation dose to the rural populations

**Essaouif Z., Ouguidi J., Chaouqi A., Mortassim A., Outeqablit K., Misdaq M.A., Chaib A., Erramli H.**

Measurement of radon, thoron and their progeny in soil gas in a semi-arid area (Marrakech region, Morocco) by using CR-39 and LR-115 II track detectors

**Kozak K., Mazur J., Grzadziel D., Polednik B., Dudzinska M.R.**

The influence of indoor air parameters on the variability of radon and its decay products – preliminary results in the lecture hall at Lublin University of Technology, Poland

**Nakajima T., Niida T., Esumi S., Chujo T., Inaba M., Miake Y., Tanaka N.**

Radiation Education with Radon Detector - Detector Development and Implementation at High School

**Thinova L., Fronka A., Navratilova Rovenska K.**

Radon in soil gas concentration and gamma spectrometry in situ – dependencies

**Watson R.J., Ganerød G., Erichsen E., Finne T.E., Neeb P.R., Rønning J.S., Tangstad R.**

Reducing radon risk by monitoring building materials

**Burghel B., Cucos-Dinu A., Stojanovska Z. Cosma C.**

Thoron/radon measurements in Romania and comparison with Macedonian schools

**Buerkin W., Dielmann R.**

Discrimination of radon from thoron using appropriate evaluation algorithm

**Kula A., Przylibski T.A.**

226, 228Ra and 222Rn isotopes in groundwater in southern Poland – limitations and benefits of the use of water

**Workshop dinner 19,30**

**Thursday, September 20<sup>th</sup>**

**Roundtable discussions**

**starting 9\*00**

**EUROPEAN GEOGENIC RADON MAP –GEOLOGICAL CLASSIFICATION AND GEOGENIC RADON DATABASE**

**starting 11\*00 (.... in parallel)**

**RADON IN SOIL GAS – METHODS OF SOIL GAS SAMPLING AND THEIR IMPACT ON MEASUREMENT RESULTS, PROTOCOLS FOR SOIL RADON**

**starting 13\*00 (.... maybe still in parallel)**

**EARST initiative**

**Friday, September 21<sup>st</sup> (+ Saturday, September 22<sup>nd</sup>)**

**Field excursion**

**Departure: Friday 8,30 - in front of hotel DAP**