

# Programme of the 10<sup>th</sup> International Workshop on the Geological Aspects of Radon Risk Mapping

**Tuesday, September 21<sup>st</sup> : Registration 17,00 – 20,00**

**Wednesday, September 22<sup>nd</sup> : Registration 8,00 – 9,30**

**Opening of the Workshop, Welcome, Introduction - do not miss ☺..... 9\*40**

## **Morning session (chairing – Matej Neznal, Luis Quindos)**

### **Barnet I., Pacherová P.:**

Generalised geological units as a background for European Geogenic Radon Potential  
Map – an example from the Czech Republic ..... 10\*00

### **Appleton J.D.A., Miles J.H.C.:**

Soil uranium, soil gas radon and indoor radon empirical relationships in the UK  
and other European countries..... 10\*15

### **Fuente I., Sainz C., Gutierrez J.L., Quindos L., Soto J., Quindos J.:**

Radon and geology in Spain: Past, Present and Future activities ..... 10\*30

### **Gruson M.:**

Predictive mapping of radon in Switzerland..... 10\*45

### **Ford K. L., Chen J., Harvey B. J. A.:**

Studies of Soil Gas Radon and Natural Radioactivity related to Canada's National Radon  
Program ..... 11\*00

### **Guida D., Guida M., Cuomo A., Guadagnuolo D., Siervo V.:**

Radon-prone Areas Assessment by means of a Multi-Scale Hierarchical Approach.  
Case study of the Campania Region, Southern Italy ..... 11\*15

### **Dehandschutter B., Ciotoli G.:**

Detailed-scale radon hazard mapping combining indoor, soilgas and geological data ..... 11\*30

### **Kemski J., Klingel R., Preuße W., Busch H.:**

The new geogenic radon map of Saxony ..... 11\*45

**Lunch break 12\*00 – 13\*30**

## **Afternoon session (chairing – Ivan Barnet, Ralf Klingel)**

### **Bossew P., Meyer W., Bleher M.:**

Towards multivariate modelling of geogenic radon. Part 1: The variables ..... 13\*30

### **Bossew P., Meyer W., Bleher M.:**

Towards multivariate modelling of geogenic radon. Part 2: Estimation ..... 13\*45

### **Gruber Valeria, Tollefsen Tore:**

Status of the European Atlas of Natural Radiation..... 14\*00

**Szabó K. Zs., Horváth Á, Szabó C.:**  
Geogenic radon potential mapping in Pest and Nógrád counties in Hungary ..... 14\*15

**Cosma C., Papp B., Niță D.C., Dinu A., Sainz C.:**  
Soil radon measurements in radon prone-area Stei-Băița (Romania) ..... 14\*30

**Castelluccio M., Moroni M., Tuccimei P., Neznal M., Neznal M.:**  
Soil Gas Radon Concentration and Permeability at “Valle della Caffarella” Test Site  
(Roma, Italy). Evaluation of Gas Sampling Techniques and Radon Measurements  
Using Different Approaches ..... 14\*45

### **Short break 15\*00 – 15\*15**

#### **Afternoon session (chairing – Paola Tuccimei, Ken Ford)**

**Pereira A.J.S.C, Neves L.J.P.F.:**  
Geogenic controls of indoor radon in Western Iberia ..... 15\*15

**Pacherová P., Barnet I.:**  
Radon in Quaternary sediments covering the geological basement with contrasting  
radon index – summary of present results ..... 15\*30

**Merta J., Burian I.:**  
Thoron concentration measurement in soil air ..... 15\*45

**Neznal Matěj, Neznal Martin:**  
Experience with the Czech approach to preventive measures against radon  
– analysis of failures ..... 16\*00

**Gregorič A., Žvab P., Vaupotič J., Mazur J., Kozak K.:**  
Radon levels in outdoor air and soil gas related to geology of Slovenia ..... 16\*15

**Kümmel M., Dushe C., Gehrcke K.:**  
Outdoor radon in Germany ..... 16\*30

**Poster session (for posters see Thursday afternoon)..... 16\*45**

### **Thursday, September 23<sup>rd</sup>**

#### **Morning session (chairing – Janja Vaupotič, Boris Dehandschutter)**

**Fonseca H., Reis M.:**  
Mapping indoor radon in Portugal: sampling design and multivariate analysis ..... 9\*30

**Cinelli G., Tondeur F.:**  
Log-normality of indoor radon data: pragmatic approach ..... 9\*45

**Daraktchieva Z., Miles J.H.C.:**  
Deviations from the lognormal distribution of indoor radon ..... 10\*00

**Miles J. H. C., Daraktchieva Z.:**  
Radon and the lognormal distribution ..... 10\*15

## Short break 10\*30 – 10\*45

### Morning session (chairing – Roselyne Améon, Martin Neznal)

- Alonso H., Rubiano J. G., Arnedo M. A., Gil J. M., Florido R., Rodríguez R., Sancho P., Martel P. :**  
Preliminary results of radon level in dwellings and public buildings of Las Palmas de Gran Canaria, Canary Island. Spain..... 10\*45
- Valmari T., Mäkeläinen I., Reisbacka H., Arvela H.:**  
House characteristics in the Finnish indoor radon database ..... 11\*00
- Sengupta D.:**  
Indoor radon and its geochemical relationship with the lithology from the uranium mineralised Singhbhum shear zone, Jharkhand, India ..... 11\*15
- Sarma H. K., Deka P. C., Sarkar S., Goswami T. D., Sarma B. K.:**  
Study of indoor radon / thoron concentrations and their progeny levels in some dwellings by using solid state nuclear track detectors..... 11\*30
- Jiránek M.:**  
Radon protective and remedial measures in the Czech Republic ..... 11\*45

## Lunch break 12\*00 – 13\*30

### Afternoon session (chairing Constantin Cosma, Nanping Wang)

- Améon R., Diez O., Doursout T., Kimmel M., Hadadou R.:**  
Impact of underground cavities on soil-building radon transfer ..... 13\*30
- Wang N., Xiao L., Li C., Liu S., Huang Y., Liu D.:**  
The level of soil gas radon in a high radiation background city in China ..... 13\*45
- De Cicco F., Pugliese M., Roca V., Sabbarese C., Avino R., Moretti R., Aquino I., Del Gaudio C., Ricco C.:**  
The application of the alpha spectrometry to the continuous radon monitoring in the soil gas: limits and perspectives ..... 14\*00
- Fujiyoshi R., Okamoto K., Sumiyoshi T., Kobal I., Vaupotič J.:**  
Some difficulties in radon monitoring for predicting earthquakes ..... 14\*15
- Wysocka M.:**  
Radon changes in coal beds prone to outbursts of CH<sub>4</sub> and CO<sub>2</sub> - preliminary results ..... 14\*30
- Roaldset E., Juve G., Semb K.E.:**  
Radon Emissions from Cambrian black Alum Shal, Oslo Region..... 14\*45

## Short break 15\*00 – 15\*15

## Afternoon session (chairing Antoine Kies, Ryoko Fujiyoshi)

**Kies A., Hengesch O., Tosheva Z., Jania J., Nawrot A.:**

Natural Radioactive Isotopes in Glacier Studies..... 15\*15

**Alonso H., Rubiano J. G., Arnedo M. A., Gil J. M., Rodríguez R., Florido R., Martel**

**P. :** Determination of the radon potential for volcanic materials  
of the Gran Canaria Island ..... 15\*30

**Sengupta D.:**

Radon measurements in contaminated ground waters in parts of West Bengal, India ..... 15\*45

**Jüriado K., Petersell V.:**

Relationship between the concentration of radon directly measured in soil air  
and calculated after radium ..... 16\*00

**Horváth Á., Szabó K. Zs., Freiler Á., Orbán I., Boráros V., Ádány T.:**

Relationship of radon concentration of subsurface waters and geological formations at  
Hungarian sites..... 16\*15

**Poster session** ..... 16\*30

**posters**

**Wach P., Bonczyk M., Wachniew P., Gorczyca Z., Gąsiorek M.:**

Annual variations of <sup>222</sup>Rn concentration in soils in Krakow, Poland

**Hovhannisyan H.:**

Measurement of the diffusion coefficient of radon in the RTD facility

**Giovani C., Garavaglia M., Cucchi F.:**

Geological parameters affecting indoor radon concentration distribution: first results for different  
homogeneous set of buildings

## Workshop dinner 19,30

## Friday, September 24<sup>th</sup>

### Roundtable discussions

starting 9\*30 (in parallel)

- ❑ Geogenic radon potential map of Europe
- ❑ Radon measurements and earthquake prediction

starting 13\*00 (in parallel)

- ❑ Classification of radon risk and radon mapping based on radon potential and on indoor radon, advantages and disadvantages
- ❑ Radon in soil gas and indoor radon, temporal changes in various geological and climatic conditions