

# Programme of the 16<sup>th</sup> International Workshop on the Geological Aspects of Radon Risk Mapping- GARRM, Prague, September 2023

## Registration:

Monday, September 18<sup>th</sup>, 18,00 – 21,00 ... workshop venue

Tuesday, September 19<sup>th</sup>, 8,00 – 9,30 ... workshop venue

(registration for RIM + PIM will be also on Monday morning at the reference areas)

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

9,30

Opening of the Workshop, Welcome, Introduction

**Morning session (chairing – Zornitza Daraktchieva, José Luis Gutiérrez-Villanueva)**

9,40 – 10,00

**A. Ferreira, Z. Daraktchieva, R. Lawley, D. Rees**

The New GB Radon Map. The Geology perspective.

10,00 – 10,20

**Z. Daraktchieva, A. Ferreira, D. Rees, R. Lawley**

Updated Radon Map of Great Britain- the UKHSA input

10,20 – 10,35

**J. L. Gutierrez-Villanueva, T. Rönnqvist, Z. Podgórska**

Current state of radon action plans in the EU

**Coffee break 10\*35 – 11\*00**

**Morning session (chairing – Sofija Forkapić, Peter Bossew)**

11,00 – 11,20

**A. Yule**

Geological aspects of radon management in Australia

11,20 – 11,40

**A. Brandýšová, K. Holý, M. Bulko, M. Müllerová, J. Masarik**

Prediction of the radon-prone areas in the Slovak Republic and its experimental verification

11,40 – 12,00

**P. Vukotic, V. Radolic, R. Svrkota, D. Stanic, T. Andjelic, R. Mrdak, B. Fustic, M. Bensic**

Radon in a high karst area of Montenegro – a case study

12,00 – 12,20

**S. Forkapić, M. Zečević, J. Knežević Radić, D. Velimirović, J. Hansman, R. Lakatoš, S. Samardžić, K. Kalkan**

Geogenic radon mapping and detailed analysis of indicative parameters for radon risk assessment in Niška Banja as a potential RPA in Serbia

**Lunch break 12\*20 – 14\*00**

**Afternoon session (chairing – Tracy Gooding, Lluís Font)**

14,00 – 14,20

**D. Rábago, J. G. Rubiano, H. Alonso, Ll. Font, B. Frutos, M. García-Talavera, P. Martel, V. Moreno, L. Quindós, J. T. Santana, I. Sicilia, A. Tejera, C. Sainz**

Parameters monitorization in a Pilot House to provide data for indoor radon simulation and prediction purposes

**14,20 – 14,40**

**J. G. Rubiano, H. Alonso, Ll. Font, B. Frutos, M. García-Talavera, P. Martel, V. Moreno, L. Quindós, C. Sainz, J.T. Santana, D. Rábago, I. Sicilia, A. Tejera.**

Overview and new advances of RADSIM, a research project for the generation and validation of numerical models for the prediction of radon entry into buildings based on a characterization of the terrain and a typological definition of construction in Spain

**14,40 – 15,00**

**Ll. Font, B. Frutos, I. Sicilia, H. Alonso, M. García-Talavera, P. Martel, V. Moreno, J. G. Rubiano, L. Quindós, C. Sainz, J.T. Santana, D. Rábago, A. Tejera**

Comparison of a lumped-parameter and a distributed-parameter radon transport models adapted to an experimental radon accumulation chamber within the frame of the Spanish RADSIM project

**15,00 – 15,20**

**C. Briones, H. Alonso, A. Arriola-Velásquez, N. Miquel, A. Tejera, P. Martel, J. Olaiz, J.T. Santana, N. Rodríguez-Brito, J. Jubera, E. González-Díaz, J. G. Rubiano**

Identification of radon risk areas based on geological data and terrestrial gamma radiation maps on the island of Tenerife

**15,20 – 15,40**

**M. Portaro, P. Tuccimei, G. Galli, M. Soligo, G. Ciotoli, C. Longoni, R. Pasquali, D. Vasquez, I. Rocchetti, F. Sola**

Indoor radon surveying and mitigation in a dwelling of Celleno town (central Italy) located in a medium geogenic radon potential area

**Coffee break 15\*40 – 16\*05**

**Afternoon session (chairing – Alexandra Cucos, Eric Petermann)**

**16,05 – 16,25**

**E. Petermann, P. Bossew, N. Suhr, B. Hoffmann**

A new high-resolution residential radon map for Germany using a machine learning based probabilistic exposure model

**16,25 – 16,45**

**Ş. Grecu, T. Dicu, A. Cucos, M. Botoş, G. Dobrei**

Anomaly detection using time series analysis in the variation of radon concentration

**16,45 – 17,05**

**P. Bossew, G. Cinelli, E. Petermann, P. Kuča, J. Helebrant**

Relationship between *Safecast* ambient dose rate and indoor radon concentration

**17,05**

**Presentations by exhibitors**

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

**Morning session (chairing – Jadwiga Mazur, Matej Neznal)**

**9,00 – 9,20**

**M. Kaschner**

Investigating radon exhalation: Parallels between waste-rock dumps and mountain screes

**9,20 – 9,40**

**S. Baumann, S. Antignani, J. F. Rey, V. Gruber, C. di Carlo, J. Goyette Pernot, F. Bochicchio**

Statistical methods for the identification of buildings and areas with high radon levels – a review

**9,40 – 10,00**

**S. Baumann, O. Alber, V. Gruber, W. Ringer**

Assessment of the population-weighted radon exposure from geographically based data in Austria

**10,00 – 10,20**

**N. Kapanadze, G. Melikadze, A. Tchankvetadze, M. Todadze, T. Jimsheladze, E. Chikviladze, Sh. Gogichaishvili, L. Chelidze, J. Vaupotič**

Radon in soil gas in crystalline shales and volcanic grounds in selected regions of Georgia

**Coffee break 10\*20 – 10\*45**

**Morning session (chairing – Filipa Domingos, Boris Dehandschutter)**

**10,45 – 11,05**

**T. Dicu, A. Cucos, M. Moldovan, G. Dobrei, B. Ștefan**

Factors affecting residential radon concentration in Romania

**11,05 – 11,25**

**F. Domingos, A.J.S.C. Pereira, L.C. Dias, S. Rodrigues, C. Alexandre, L. Simas**

Can radon in drinking water be useful for predicting the geogenic radon potential?

**11,25 – 11,45**

**B. Dehandschutter**

Radon in workplaces: geological controls of radon in groundwater supply facilities

**11,45 – 12,05**

**P. Bossew, J. Elío, M. Janik**

Some remarks to the current debate on the validity of the Linear-No Threshold (LNT) model of radon risk

**Lunch break 12\*05 – 13\*45**

**Afternoon session (chairing – Paola Tuccimei, Carlos Sainz)**

**13,45 – 13,55**

**ERA anniversary – to be specified**

**13,55 – 14,15**

**M. Portaro, P. Tuccimei, G. Galli, M. Soligo, C. Longoni, D. Vasquez, F. Sola, I. Rocchetti**

The properties of airtight membranes to control indoor radon levels using a scale model-room and a new approach to calculate radon diffusion coefficients

**14,15 – 14,35**

**S. Celaya, D. Rábago, C. Sainz, L. Quindós, I. Fuente**

Two ongoing projects on radon sponsored by the Spanish Nuclear Safety Council

**14,35 – 14,55**

**K. Johnova**

The optimization of calibration procedures for field gamma spectrometers

**14,55 – 15,10**

**Z. Podgórska, T. Rönnqvist, J. L. Gutierrez-Villanueva**

To which extent do we need a radon measurement service accredited according to ISO 17025?

## Coffee break 15\*10 – 15\*35

### Afternoon session (chairing – Petra Pacherova, Alcides Pereira)

15,35 – 15,55

**M. Erdogan, O. Altay Yönet, İ. Genç, K. Manisa, A.Reha Botsali**

Determination of radon activity in well and natural spring water sources in the granite rich region of Central Anatolia, (Turkey)

15,55 – 16,15

**G.S. Luís, A.J.S.C. Pereira, S.L.R. Sêco, J.E. Filho, L.J.F. Neves**

Behaviour of radon gas in the interaction of groundwater and Surface Water

16,15 – 16,35

**M. Mattia, P. Tuccimei, G. Ciotoli, M. Soligo, C. Carusi, E. Rainaldi, A. Briganti, M. Voltaggio**

Combining radon deficit, NAPLs concentration and groundwater table dynamics to assess soil and groundwater contamination by NAPLs and related attenuation processes

### 16,35 – 17,25 Poster session

**M. Herbella, G. Valles**

Spanish radon action plan: Current status

**P. Bossew**

Measuring outdoor radon with the *RadonEye*

**I. Dimitrova, K. Mitev, V. Todorov, S. Georgiev**

Study on Parameters Influencing Radon Activity Concentration in Buildings

**E. Fialova**

Personal dosimetry of Radon decay products

**D. Grządziel**

Radon calibration chamber at IFJ PAN – upgrades and measurements

**J. Mazur**

Indoor radon in public utility buildings and workplaces

**A.J.S.C. Pereira, G.S. Luís, J.L. Carvalho, S.L.R. Sêco, J.E. Filho**

Correlating the variability of soil gas radon concentrations and air permeability with ground penetrating radar data in a small-scale study

**J.T. Santana, H. Alonso, Ll. Font, B. Frutos, M. García-Talavera, P. Martel, V. Moreno, L. Quindós, I. Sicilia, J. G. Rubiano, C. Sainz, A. Tejera**

Monitoring of the spatial and temporal variation of radon in an inhabited house, subjected to an underground source of radon from a well. Case study of Valsequillo in Gran Canaria.

**S. Seco, D. Rábago, A. Pereira, L. Quindós, I. Fuente, S. Celaya, F. Domingos, C. Sainz, J. Quindós, G. Santiago**

Bilateral proficiency test on the evaluation of the radon permeability in soils

**Y. Wang, H. Paasche, V. C. Baranwal, M.-A. Dumais, A. Stampolidis, F. Ofstad, M. Brønner**

Extrapolating a Country-Scale Uranium Map for Radon Risk Mapping in Norway

## Workshop dinner 19,30 – Wednesday !!

## **Thursday, September 21<sup>th</sup>**

**Morning – ERA workshop followed by GARRM&ERA programme**

### **Morning – ERA WORKSHOP - EFFICIENCY INDICATORS FOR THE EVALUATION OF RADON ACTION PLANS**

**9,00 – 9,30**

**Heloisa Fonseca (APA, Portugal)**

An overview of HERCA/WG NAT activities on Radon: NRAP indicators

**9,30 – 10,00**

**Tracy Gooding (UKHSA, UK)**

UK National Radon Action Plan – The First 5 Years

**10,00 – 10,30**

**Maria Larsson (DSA, Norway)**

Evaluation and indicators in the Norwegian radon strategy

**Coffee break 10\*30 – 10\*55**

### **Morning – ERA WORKSHOP - EFFICIENCY INDICATORS FOR THE EVALUATION OF RADON ACTION PLANS**

**10,55 – 11,40**

**ERA workshop discussion**

### **GARRM&ERA PROGRAMME**

**11,40 – 12,15**

**Roundtable discussion – Gas Permeability Measurements**

**Lunch break 12\*15 – 14\*00**

### **Afternoon – GARRM&ERA PROGRAMME**

**14,00 – 15,00**

**ERA award: announcement, pictures with the winner, oral presentations of their careers**

**15,00 – 15,50**

**World Café – revisited – Interactive group exercise on GARRM&ERA workshop topics**

**15,50 – 16,00**

**Summary and ending of GARRM & ERA workshops**

**Coffee break 16\*00 – 16\*25**

### **ERA AGM**