

Second circular

15th

GARRM

RADON v.o.s. and Czech Geological Survey organize the

15th INTERNATIONAL WORKSHOP

GARRM

(on the GEOLOGICAL ASPECTS OF RADON RISK MAPPING)

September 22nd – 24th(25th), 2020

Prague, Czech Republic

and

RIM – Radon Intercomparison

Measurements at Radon Reference Sites

September 21st, 2020

(it is certainly possible to participate both in the Workshop and in RIM, or only in the Workshop or only in the RIM)

WEBPAGE: www.radon.eu/workshop2020

ORGANIZING COMMITTEE:

Workshop: Matej NEZNAL (RADON), Ivan BARNET & Petra PACHEROVA (CGS)

RIM: Milan MATOLIN (Charles University in Prague), Matej NEZNAL (RADON)

IMPORTANT DATES AND DEADLINES

Second announcement: March/April 2020

Deadline for paper submission: July 24, 2020

Deadline for lower registration fee: July 24, 2020

PROGRAMME

September 21st (Monday): Registration for RIM (in the field in the morning, will be arranged via e-mail with all participants / participating groups) + Field measurements
Registration for Workshop (18,00-21,00) - venue

September 22nd (Tuesday): Registration for Workshop (8,00-9,30), Sessions

September 23rd (Wednesday): Sessions, workshop dinner

September 24th (Thursday): Sessions, Roundtable discussions, conclusions

September 25st (Friday): Field excursion, optional

WORKSHOP GARRM - GENERAL INFORMATION

TOPICS

RADON RISK MAPPING AND RADON ACTION PLANS

- **NATIONAL STRATEGIES, RADON ACTION PLANS, APPROACHES TO RADON RISK; RADON RISK MAPPING ON VARIOUS SCALES INCLUDING GEOGENIC MAPPING & DETAILED MEASUREMENTS; DELINEATION OF RADON PRONE/PRIORITY AREAS; RESEARCH ACTIVITIES AND RESULTS**

RADON IN GEOLOGICAL ENVIRONMENT

- **METHODS OF MEASUREMENTS AND CLASSIFICATION OF RADON RISK; PASSIVE AND ACTIVE SOIL GAS SAMPLING; PERMEABILITY AS THE SECOND DECISIVE PARAMETER FOR RADON POTENTIAL ASSESSMENT; UNDERSTANDING RADON TRANSPORT MECHANISMS IN THE SOIL AND FROM THE SOIL INTO THE BUILDINGS; RESEARCH ACTIVITIES AND RESULTS, MULTIPARAMETRICAL MODELS; EARTHQUAKE PREDICTION; RADON AS A NATURAL TRACER; RADON IN KARST AREAS, RADON IN MINING AREAS**

Due to our common experiences from last workshops, we would like to ask you for oral presentations (15 min) or posters.

For the closing day of the workshop, we would like to prepare meaningful roundtable discussions, where we would like to discuss following topics:

MACHINE LEARNING/RADON MAPPING – possible predictors, assignment of geological data to a grid cell;
RADON & ANTHROPOGENIC EFFECTS;
LESSON LEARNED FROM THE EUROPEAN ATLAS OF NATURAL RADIATION PUBLICATION

VENUE

The conference will be held in the beautiful city of Prague, capital of the Czech Republic, at the conference hall of the Masarykova College, the Czech Technical University (the same as in 2006 and 2018). The Masarykova College is located in the western part of central Prague, near the Prague Castle, the dominant symbol of Prague, in the direction to the Ruzyne airport, close by to the Dejvicka underground station (line A). It is also well served by tram and buses. The best way to reach the venue from the airport is to use the bus No. 119 (it has a stop at terminal 1 and 2 as well), which goes from the airport to the Veleslavin underground station and then use the underground line A (two stations) to the mentioned Dejvicka underground station.



Masarykova college

Thakurova street No.1, 160 41
Prague 6



ACCOMMODATION

On site accommodation (i.e. directly at the Masarykova College, medium/low price) is possible but limited in number.

You can try to book via e-mail: masarykova-kolej@hotel.cz or via booking.com

The direct neighbourhood has also a large number of excellent hotels, pensions, hostels, which you can find via internet (we recommend to concentrate on accommodation in the central parts of Prague – Prague 1 and/or Prague 6).

RIM - GENERAL INFORMATION

Compare your radon measurement with the international community in friendly field environment - comparison measurement of radon in soil gas at radon reference sites in the Czech Republic

Radon comparison measurement at reference sites in the Czech Republic, RIM 2020, will be organized as an independent part of the International Workshop on the Geological Aspects of Radon Risk Mapping on September 21st, 2020. Comparison measurements at reference sites serve for verification of field radon measurements performed by single organizations.

Radon intercomparison measurement will be organized at two reference sites Cetyne and Buk established in 2000, located 60 km SW of Prague near the city Milín in the Czech Republic. Both reference sites are accessible for cars. Radon reference sites are situated on meadows, their soil cover enables soil gas sampling at the depth of 0.8 m, and their mutual total distance is 12 km. Each reference site implies 10 stabilized stations, which are marked by numbers. Single reference sites differ in radon activity concentration in soil gas, the radon distribution within the reference site is relatively homogeneous.

Radon comparison measurements at reference sites are organized for single participants or groups of participants. **Results of tests will be anonymous, each participant (group) will be denoted by a code.**

Note: the fee for the intercomparison measurement depends on the number of resultant sets of radon data from single equipment for testing and on the number of

participants in one measuring group (more detailed info in REGISTRATION FEE and INSTRUCTIONS for PAYMENT).

During this RIM we would like to focus not only on comparison of resulting soil-gas radon concentrations, but on the sampling methods themselves.

Benefits of participation in radon comparison measurement are:

- Radon comparison with international expert community.
- Radon comparison with radon site databases derived using measurements of 288 successful Czech organizations.
- The use of two well documented radon reference sites fulfilling geological requirements.
- Based on more than 25-year experience in periodical radon comparison measurement 1992-1999, and 2000-2020.
- Three tests by computer programme TestMOAR based on statistics, compiled by the Institute of Applied Mathematics and Computer Technique, Faculty of Science, Charles University in Prague.

Working plan for the comparison measurement: Instruction (via e-mail), transport from Prague (provided on request, we recommend to arrange the transport to the reference sites on an individual basis), meeting at the reference area, measurement of radon in soil gas, reporting of resultant data (kBq/m³) from measured stations and reporting results by 2 weeks after RIM measurement by e-mail. Data processing and evaluation by TestMOAR will follow after all participants provide the data. For those who will collect a lower number of measurements at reference sites, programme TestMOAR accepts their number of data.

There is no electrical power supply at radon reference sites, however a power supply generator can be provided on the request. We expect we will meet with all participants in the field in the morning, but transport from Prague can be provided as well.

Accommodation: Please, take into consideration, that this year "only" one-day intercomparison is hold. Suitable accommodation, just in the area of radon reference sites, is available in "Hotel u Milina" (www.hotelumilina.cz).

Organizers of the RIM 2020 offer the consultation for your participation in radon comparison measurement through e-mail address matolin@natur.cuni.cz or radon@comp.cz

More detailed information will be available at the workshop webpage, details will be discussed with all participants of RIM via e-mail.

WORKSHOP FIELD EXCURSION

Workshop field excursion will be organized on Friday at the end of the workshop (an optional activity with a special fee).

Expected time of departure – Friday, September, 25th, at about 8,30 in the morning; expected time of arrival to Prague - Friday, September 25th at about 17,00 – 18,00 in the evening.

More detailed information will be available at the workshop webpage and will follow in the second circular.

REGISTRATION FEE and INSTRUCTION for PAYMENT

The registration fee for the workshop (**390 €** if paid after July 24, 2020, **340 €** if paid before) covers the workshop program, the book of abstracts, refreshments during the sessions and the workshop dinner. Accommodation is not included in the registration fee.

The fee for the field excursion – optional activity – (**90 €** if paid after July 24, 2020, **80 €** if paid before) covers the whole excursion.

The fee for RIM – (**370 €** if paid after July 24, 2020, **330 €** if paid before) means a fee for an independent participant or for two participants in one measuring group using one equipment/measurement and sampling technique. The fee for each another one (third, fourth ..., participant in the same measuring group) is **60 €**. The fee for each another measurement/equipment/sampling technique used by the same participant/group (involved in final testing) is **280 €**. Accommodation is not included in the registration fee.

VAT is 21% and is included in the fees. VAT number of the beneficiary is CZ00473316

In order to confirm your registration, a proof of payment (photocopy of bank transfer) should be sent to RADON v.o.s. (via e-mail: radon@comp.cz), accepting the given conditions of payment and cancellations. Participants are kindly asked to indicate clearly the name of the person for whom the services are booked in the bank document sent. Payments can only be accepted in Euros.

Cancellation and requests for refunds should be made in writing and sent to RADON v.o.s.. Those made before 30 August 2020, will be refunded at 80 % of the original sum. After that date no refunds will be possible. All bank charges will be deducted from the refund. Refunds will be issued after the Workshop (15th October 2020).

Payment - by bank transfer (the payee name ... RADON v.o.s.)

The bank name: KOMERCNI BANKA

The bank address: POBOCKA PRAHA - PODVINNY MLYN, EXP. PALMOVKA
ZENKLOVA 12/351
180 00 PRAHA 8
CZECH REPUBLIC

Account number: 35-6485850237/0100

Swift (BIC): KOMBCZPPXXX

IBAN code: CZ9501000000356485850237

Var.symbol/details of payment: 340120

There would be also a possibility to pay cash at the registration, but those participants should also send us the registration form in advance (the number of participants, especially in case of RIM and the field excursion, is limited!).

CALL FOR PAPERS AND INSTRUCTIONS FOR AUTHORS

The language of the conference will be English.

Authors are kindly asked to send their contributions (extended abstracts) as camera ready file, e-mail attachment (best in Word 6. or higher, for high quality print, black+white, A4 format, 2.5 cm margins on all sides). Please do not number the pages. The papers should not extend 7 pages including figures, tables and references.

Contributions (extended abstracts) should be submitted by the 24th of July, 2020. The volume of the extended abstracts will be made available during the workshop.

For further contacts, please, send us the registration form (via e-mail, or – the easiest way - directly through the workshop webpage). Please fill in your e-mail with attention as it is the most effective way how to contact you (participants without e-mail will be contacted via fax or post mail).

REGISTRATION FORM

I shall take part in - the workshop - field excursion - RIM

Name.....Mr/Mrs

Full address.....

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Fax.....

Phone.....

e-mail.....

Title of my contribution(s):

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**Names of participants and number of instruments in one measuring group
(in case of RIM participation):**

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Contact addresses of the organizing committee:

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