



THE HENRYK NIEWODNICZAŃSKI
INSTITUTE OF NUCLEAR PHYSICS
POLISH ACADEMY OF SCIENCES



PROGRAMME

2nd International Conference



under the official patronage
of the President of the National Atomic Energy Agency



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REGISTRATION at Hotel GALAXY****

Kraków, Gęsia str. 8

Sunday, May 24 ***17:00 , 20:00***

Monday, May 25 ***from 08:15***

MONDAY, May 25, 2015

09:00 ÷ 09:20 **OPENING CEREMONY**

SESSION 1 Chairpersons: *Mirosław JANIK, Luis S. Quindos PONCELA*

09:20 ÷ 10:00		INVITED PRESENTATION: Vanja RADOLIĆ The radon levels in Istrian Peninsula
10:00 ÷ 10:20	A01	Peter BOSSEW Radon concentrations in schools and in dwellings: a study on association, co-regionalisation and bivariate modeling
10:20 ÷ 10:40	A02	Fabio BARAZZA The possible impact of weather conditions on indoor radon concentrations
10:40 ÷ 11:00	A03	Zdenka STOJANOVSKA Dose assessment due to radon exposure in dwellings, schools and kindergarten
11:00 ÷ 11:20		COFFEE BREAK
11:20 ÷ 11:40	A08	Zdenka STOJANOVSKA Long-term measurements of radon, thoron and their airborne progeny in 25 schools in Republic of Srpska
11:40 ÷ 12:00	A05	Stephanie LONG Factors underlying persistently high radon levels in a house in a karst limestone region of Ireland
12:00 ÷ 12:20	A06	Sarata SAHOO Natural radioactivity survey on soils originated from selected sites of Thailand as potential sites for nuclear power plants from radiological viewpoint
12:20 ÷ 12:40	A17	Guo LU Upgrade of the unattended battery-operated thoron progeny measurement device
12:40 ÷ 13:00	A51	Chingiz ALIYEV Indoor and outdoor radon levels in Azerbaijan
13:00 ÷ 14:00		LUNCH

SESSION 2 Chairpersons: *Carlos SAINZ FERNANDEZ, Bo CHEN*

14:00 ÷ 14:20	A09	Istvan CSIGE Influence of geogas seepage on indoor radon
14:20 ÷ 14:40	A10	Dominik GRZĄDZIEL Air conditioning impact on the dynamics of effective dose due to radon and its short-lived decay products
14:40 ÷ 15:00	A11	Jose Luis GUTIERREZ VILLANUEVA Contribution of radon progeny to the external gamma dose: the experience at LNR
15:00 ÷ 15:20	A12	Jamal AL-HUBAIL Comparative analysis of radon concentrations derived from separate indoor radon surveys conducted in dwelling and school sites in Kuwait
15:20 ÷ 15:40	A14	Josef IRLINGER Development of an electronic monitor for the determination of individual radon and thoron exposure
15:40 ÷ 16:00		COFFEE BREAK
16:00 ÷ 16:20		Eric HULBER <i>Gold Sponsor's presentation – Radosys Dosimetric Microscopy, Hungary</i>
16:20 ÷ 16:40	A15	Thomas STREIL PoCAMon - Personal Online Continuous Air Monitor not only for radon and thoron decay products
16:40 ÷ 17:00	A13	Wang NANPING The characteristics of ²²² Rn/ ²²⁰ Rn concentration from soil gas in Shenzhen City (Southern part of China)

TUESDAY, May 26, 2015

SESSION 3 Chairpersons: Zora S. ZUNIČ, Peter BOSSEW

09:00 ÷ 09:40		INVITED PRESENTATION: Luis S. QUINDOS PONCELA Radon: A good tracer and an invisible enemy
09:40 ÷ 10:00	A18	Krzysztof FORNAŁSKI Radon and the lung cancer - a real effect or just an assumption?
10:00 ÷ 10:20	A19	Ilia YARMOSHENKO Lung cancer mortality and radon exposure in Russia
10:20 ÷ 10:40	A20	Azeddine MORTASSIM Radiation doses to doctors, nurses and patients due to radon short-lived progeny from the inhalation of air in urban health centres
10:40 ÷ 11:00	A..	Predrag UJIC High indoor radon variation induced by geological factors
11:00 ÷ 11:20		COFFEE BREAK
11:20 ÷ 11:40	A22	Stanisław CHAŁUPNIK Simultaneous measurements of radon and thoron decay products in air
11:40 ÷ 12:00	A23	Miroslaw JANIK Analysis of simultaneous time series of indoor and outdoor radon concentrations, meteorological and seismic data
12:00 ÷ 12:20	A24	Thomas NEUGEBAUER Radon emission rate and analysis of its influencing parameters
12:20 ÷ 12:40	A25	Zakaria SAADI Numerical modelling of radon transport from soil to a house basement under variable weather conditions
12:40 ÷ 13:00	A26	Miroslaw ZIMNOCH Temporal variability of near ground atmospheric radon over central Europe
13:00 ÷ 14:00		LUNCH

SESSION 4 Chairpersons: Concepción DUEÑAS, Jadwiga MAZUR

14:00 ÷ 14:20	A27	Peter BOSSEW The suitability of ambient gamma dose rate as predictor of the geogenic radon potential
14:20 ÷ 14:40	A28	Valeria GRUBER Mapping radon and defining radon prone areas: evaluation of possible methods for Austria
14:40 ÷ 15:00	A29	Geraldine IELSCH Mapping of indoor radon and terrestrial gamma radiation levels in France: geostatistical modeling
15:00 ÷ 15:20	A30	Giorgia CINELLI Estimation of the geogenic radon potential using uranium concentration in bedrock and soil permeability data, integrated with geological information
15:20 ÷ 15:40	A32	Tadeusz PRZYLIBSKI Radon research in Poland: a review
15:40 ÷ 16:00		COFFEE BREAK
16:00 ÷ 16:10		Antonio PARRAVICINI <i>Silver Sponsor's presentation – mi.am Radon Detectors, Italy</i>
16:10 ÷ 16:30	A31	Sofija FORKAPIC QA/QC of radon measurements in accredited laboratories
16:30 ÷ 16:50	A33	Sofija FORKAPIC Results of the 2015 national indoor radon intercomparison measurements
16:50 ÷ 17:10	A34	Francesco CARDELLINI Metrological aspects of international intercomparison of passive radon detectors under field conditions at Marie Curie Tunnel in Lurisia (Italy)

WEDNESDAY, May 27, 2015 *Conference tour*

MEETING PLACE: Hotel GALAXY** at 09:00**

Option 1.

Wieliczka Salt Mine



Option 2.

Museum Collegium Maius of Jagiellonian University



**Muzeum Uniwersytetu Jagiellońskiego
Collegium Maius**

14:00 ÷ 15:00  **LUNCH at Hotel GALAXY******

SESSION 5 Chairpersons: Małgorzata WYSOCKA, Chingiz ALIYEV

15:20 ÷ 16:00		INVITED PRESENTATION: Bo CHEN The concentrations of environmental radon in China
16:00 ÷ 16:20	A37	Federica LEONARDI Critical aspects of the radon remediation in schools in south Italy
16:20 ÷ 16:40	A38	Lidia FIJAŁKOWSKA-LICHWA Extremely high radon activity concentration in two adits of abandoned uranium mine 'Podgórze' in Kowary
16:40 ÷ 17:00	A39	Georgy MALINOVSKY Reconstruction of national distribution of indoor radon concentration in Russia

THURSDAY, May 28, 2015

SESSION 6 Chairpersons: *Beata KOZŁOWSKA, Ilia YARMOSHENKO*

09:00 ÷ 09:40		INVITED PRESENTATION: Małgorzata WYSOCKA Radon problems in mining and post-mining areas in Upper Silesia region, Poland
09:40 ÷ 10:00	A56	Vladimir UDOVIČIĆ The use of multivariate analysis and modeling of the radon variation in laboratory and real environment
10:00 ÷ 10:20	A57	Wolfgang RINGER The Austrian radon risk communication concept
10:20 ÷ 10:40	A58	Eva PRAVDOVA Radon program of the Czech Republic
10:40 ÷ 11:00	A45	Matej NEZNAL International Intercomparison measurement of soil gas radon concentration, Serbia, Niska Banja, 2014
11:00 ÷ 11:20		COFFEE BREAK
11:20 ÷ 11:40	A46	Thomas STREIL THORON-SCOUT: The first diffusion-based active radon and thoron monitor for long-term measurements In buildings
11:40 ÷ 12:00	A47	Bernd HOFFMANN Thoron in modern clay constructions – a case study
12:00 ÷ 12:20	A48	Aleksey VASILYEV Variance of residential indoor radon concentrations: review and modeling study
12:20 ÷ 12:40	A49	Gennaro VENOSO, Francesco BOCHICCHIO In-field evaluation of the ageing and fading effects in nuclear track detectors used for radon measurements
12:40 ÷ 13:00	A35	Azeddine MORTASSIM Measurement of ²³⁸ U and ²³² Th in petrol, gas-oil and lubricant samples and radon and thoron in petrol and gas-oil exhaust fumes by using nuclear track detectors. Radiation doses to mechanic workers
13:00 ÷ 14:00		LUNCH

SESSION 7 Chairpersons: *Constantin COSMA, Vanja RADOLIČ*

14:00 ÷ 14:20	A55	Viktor GOLIÁŠ A new house built on the uranium vein outcrop? No problem in The Czech Republic !
14:20 ÷ 14:40	A52	Bety BURGHELE Remedial techniques for radon mitigation in a radon prone area from Romania
14:40 ÷ 15:00	A53	Alejandro MARTIN SANCHEZ Planning remedial actions in sites with high radon concentration
15:00 ÷ 15:20	A54	Zoltán SAS Radon dose problems and solutions for mitigation in case of show cave of Tapolca (Hungary) following the recommended reference level
15:20 ÷ 15:40	A42	Wu QIFAN A preliminary survey of outdoor radon concentration in China
15:40 ÷ 16:00		COFFEE BREAK
16:00 ÷ 17:00		POSTER SESSION

19:00  **CONFERENCE DINNER – RESTAURANT**

RESTAURACJA
Wierzynek
1364

FRIDAY, May 29, 2015

SESSION 8 III ERA WORKSHOP



**Provisional programme:
DESIGNING NATIONAL RADON ACTION PLANS**

08:30 ÷ 08:35	James McLAUGHLIN, ERA President Welcome
08:35 ÷ 09:10	A59 ERA Lecture: James McLAUGHLIN, Jose Luis GUTIERREZ-VILLANUEVA, Boris DEHANDSCHUTTER, Wolfgang RINGER EU- BSS and summary of the Paris HERCA-ASN-NRPA radon workshop

**SESSION:
QUESTIONS REGARDING THE IMPLEMENTATION OF THE RADON REQUIREMENTS OF THE EU BSS**

09:10 ÷ 09:30	A60 Francesco BOCHICCHIO, Katerina ROVENSKA, Jiri HULKA A Review of recent National Radon Plans considering international recommendations and regulations
09:30 ÷ 09:50	A61 Luis S. Quindos PONCELA, Carlos SAINZ, Jose Luis GUTIERREZ-VILLANUEVA, Ismael FUENTE Harmonization project to apply the new EU-BSS
09:50 ÷ 10:10	A62 Rebecca COATES and Martin FREEMAN Radon Action Plan Mitigation Guidance - diagnostic profiling to improve radon mitigation system design
10:10 ÷ 10:25	 COFFEE BREAK
10:25 ÷ 11:00	 INVITED PRESENTATION: Katerina ROVENSKA IAEA action plan flow chart

**SESSION:
IMPLEMENTATION OF ACTION PLANS**

11:00 ÷ 11:20	A63 Stephanie HURST Current state of preparation for a National Radon Regulation in Saxony, Germany
11:20 ÷ 11:40	A64 Krzysztof KOZAK, Jadwiga MAZUR Milestones in the preparation of a National Radon Action Plan in Poland
11:40 ÷ 12:00	A65 Vladimir UDOVIČIĆ et al. First steps towards a National Radon Action Plan in Serbia
12:00 ÷ 12:30	Discussion and announcements
12:30 ÷ 13:00	Martin Neznal Memorial Lecture (B.Dehandschutter)
13:00	CLOSURE OF THE CONFERENCE



to be continued...



RADOSYS –The Global Radon Test Instrumentation Supplier

Radosys, Ltd. is a company dedicated for development and manufacturing dosimeter systems based on PADC etched-track technology. Traditionally its products are dedicated to radon test applications by PADC etched- track metrology.

The radon test system was launched in 1999 and in the meantime more than **130 systems** have been installed worldwide in Europe, Japan, North-America and in Asia. Part of the users of the Radosys radon test system are private, radon test service provider companies, but the majority are university departments conducting radon research, also governmental organizations that involved in regional radiation protection. During the last 17 years Radosys systems were involved in **10 national or regional radon surveys** and more than **600,000 detectors** were supplied for surveys and commercial radon test services.

Besides the mainstream product line of indoor radon test products, product extensions for special applications and also customized solutions are available, including fast neutron dosimetry system. The market leader neutron dosimetry global service uses Radosys track readers in its dosimeter processing factory.

The company headquarter location is within a traditional industrial district of Budapest, close to the technology/science university campus. Radosys Americas and Radosys Atlantic subsidiaries are dedicated to provide technical and sales support in the Americas and in Europe regionally.

Radoys - Group of Companies





Company Profile

During 21 years, MI.AM has developed several instruments, from SPARK REPLICA COUNTER to POLITRACK, which represents the current state of the art for SSNTD reading.

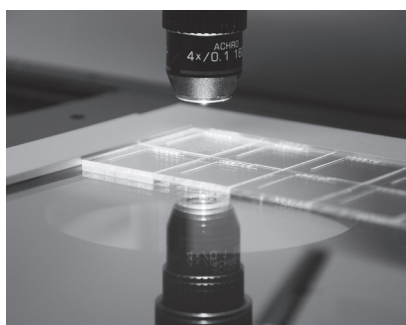
Our activity includes **research, design, production** and **marketing** of equipment for radon detection in air, water, soil, as well as a **laboratory** for radon dosimetry.

Products/Services

- Radon and Thoron monitors (MR1, Radon Mapper, CRM-510, E-Perm system)
- SSNTD reading system (Politrack®)
- Laboratory accredited by UFSP-CH
- Recognized by Rad Elec as Authorized calibration provider
- Technical advice in remedial action
- Represented firms: Rad Elec, Femto-Tech, Pylon Electronics



Politrack® Automatic track detector reader



- Research
- Dosimetry service
- CR-39 radon
- LR115 radon
- CR-39 fast and thermal neutrons



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- Double chamber, extended range
- CR-39 25x25 or 15x15 mm

MI.AM Srl via De Amicis 5 - 29029 Rivergaro (PC) Italy

tel. (+39) 0523.952385 fax 0523.956577 ● info@miam.it ● www.miam.it ● www.politrack.it