



PRELIMINARY PROGRAM

International Symposium on Natural Radiation Sources – Challenges, Approaches and Opportunities

National Library Building (Mircea Eliade room)

Bucharest, No. 22 Blvd.Unirii, district 3, zip code 030833

21-24 May 2019

SUMMARY

REGISTRATION

OPENING CEREMONY

POLICIES, STRATEGIES AND REGULATORY FRAMEWORK IN THE FIELD ON NATURAL RADIATION SOURCES

Chaired by Daniel DUPEAC

MANAGEMENT OF NATURAL RADIATION SOURCES CHALLENGES AND APPROACHES

Chaired by Alexandru TOMA, Liuba CORECHI

Round Table, Graded approach applied to NORM

Moderated by Constantin MILU, Rodin TRAIU

RADON CHALLENGES AND APPROACHES

Session 1 - Measurement Techniques and Methods

Chaired by Margareta CHERESTES, Cristian Nicolae DULAMA

Session 2 - Radon indoor

Chaired by Nicoleta BRISAN, Marian Romeo CALIN

Session 3 - Radon in workplaces

Chaired by Alexandra CUCOS, Laurentiu DONE

Session 4 - Radon remediation and prevention

Chaired by Tiberiu CATALINA, Kinga SZACSVAI

SCIENTIFIC COMMITTEE

Daniel DUPEAC, Politehnica University of Bucharest

Tiberiu CATALINA, Technical University of Civil Engineering of Bucharest

Constantin MILU, Romanian Radiation Protection Society

Liuba CORECHI, National Agency for Public Health, Chisinau, Republic of Moldova

Nicoleta BRISAN, Babes Bolyai University Cluj Napoca

Alexandru TOMA, Nuclear Research Institute Pitesti

Margareta CHERESTES, radiation protection expert, Dositracker SRL

Aurelian LUCA, Horia Hulubei National Institute for Research&Development for Physics and Nuclear Engineering

Marian Romeo CALIN, Horia Hulubei National Institute for Research&Development for Physics and Nuclear Engineering

Alexandra CUCOS, Babes Bolyai University Cluj Napoca

Laurentiu DONE, Horia Hulubei National Institute for Research&Development for Physics and Nuclear Engineering

Kinga SZACSVAI, Babes Bolyai University Cluj Napoca

Cristian Nicolae DULAMA, Nuclear Research Institute Pitesti

PROGRAMM

21 May Tuesday			
Registration 9.00-10.00			
OPENING CEREMONY			
10.00 – 11.15	Rodin TRAIUCU	President of the National Commission for Nuclear Activities Control (CNCAN)	
	Constantin MILU	President of the Romanian Radiation Protection Society (SRRP)	
	Stefan MUNDIGL	European Commission	
	Florin Radu CIOCANELEA	State Councilor of the Romanian Prime Minister	
11.15 – 11.30	Coffee break		
	Nicoleta BRISAN	Vice-Dean, Babes Bolyai University Cluj Napoca (UBB)	
	Daniel DUPLEAC	Professor, Politehnica University of Bucharest (UPB)	
12.30 – 13.30	Lunch break		
POLICIES, STRATEGIES AND REGULATORY FRAMEWORK IN THE FIELD ON NATURAL RADIATION SOURCES			
Chaired by Daniel DUPLEAC			
13.30-15.00	Maria SAHAGIA	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Education and training tradition at IFIN-HH in NORMs measurement and evaluation of radiological impact
	Daniel DUPLEAC	Politehnica University of Bucharest (UPB)	Education on radiation protection field at Power Engineering Faculty
15.00-15.15	Coffee break		
15.15 - 17.00	Daniela DOGARU	National Commission for Nuclear Activities Control (CNCAN)	Status of Implementation of Radon National Action Plan in Romania
	Alina DUMITRESCU	Ministry of Health	Romania's Radon Communication Strategy and research support
	Reka INCZE	Romanian Government - Department of Sustainable Development	The radon issue from the perspective of sustainable development

Hospitality event offered by CNCAN, location TBD**22 May Wednesday****MANAGEMENT OF NATURAL RADIATION SOURCES CHALLENGES AND APPROACHES****Chaired by Alexandru TOMA, Liuba CORECHI**

9.00-10.30	Vasile BALANEL	National Agency for Public Health Chisinau, Republic of Moldova	Evaluation of natural radioactivity characteristics for construction materials used in the Republic of Moldova
	Diana Maria BANU	Research and Development National Institute for Metals and Radioactive Resources (INCDMRR) Bucharest	The impact of the radioelements generated from the burning of the coals in the power plants from Craiova
	Diana CHIPER	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Study for chemical and radiological compositions of different types of clays that may be used in the nuclear field
	Ileana RADULESCU	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Characterization and radiation exposure from the natural radioactivity in Romanian building materials
	Cristian Nicolae DULAMA	Nuclear Research Institute Pitesti	Nuclear techniques applied to radiological characterization of NORM
	Ana PANTELICA	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Naturally Occurring Radionuclides in some phosphogypsum based building materials determined by gamma-ray spectrometry
10.30-11.00	Coffee break		
11.00 -12-30	Florin Iuian CUCU	National Uranium Company Feldioara (CNU)	Treatment of liquid waste resulted from processing of uranium ore, concentration of product and production of sinterable powder of UO ₂ at CNU- Feldioara branch
	Petre MIN	National Commission for Nuclear Activities Control (CNCAN)	Naturally Occurring Radioactive Materials - Risks and Risk Perception
	Marinela ANDREI	National Uranium Company	Environmental monitoring on and around CNU - Feldioara branch

		Feldioara Branch (CNU)	
	Gheorghe BULUBASA	National Institute for Research and Development for Cryogenic and Isotopic Technologies (ICSI) Rm Valcea	Assessment of Radon, Tritium, Gross Alpha and Beta Activity Concentration in Water Intended for Human Consumption in Babeni - Valea Mare Area
	Ioan ENCIAN	National Commission for Nuclear Activities Control (CNCAN)	Methodological approaches to radon in water measurements: comparative experiences between Romania and Spain
12.30-14.00	Lunch break		
14.00-15.00	Round Table, Graded approach applied to NORM, Moderated by Constantin Milu, Rodin Traicu		
RADON CHALLENGES AND APPROACHES			
Session 1			
Measurement Techniques and Methods			
Chaired by Margareta CHERESTES, Cristian Nicolae DULAMA			
15.00-15.40	Victorin Emilian TOADER	National Institute for Earth Physics	Monitoring of Radon in a Seismic Area
	Arthur TUNYAGI Alexandru LUPULESCU	Babes-Bolyai University Cluj-Napoca (UBB)	The innovative monitoring prototype system for radon and indoor air quality developed by Babes-Bolyai university
	Marius Lucian BOTOS	Technical University Cluj Napoca, and Babes-Bolyai University Cluj-Napoca (UBB)	Advanced Computational Models for Radon Transport at Soil-Building Interface
15.40-16.00	Coffee break		
16.00 -18.00	Andrei ANTOHE	Horia-Hulubei National Institute for Research& Development for Physics and Nuclear Engineering (IFIN-HH)	Recent development of the radon calibration facility from IFIN-HH, Romania
	Margareta CHERESTES	DOSITRACKER S.R.L.	Indoor air quality through radon real time monitoring – the results of 2 pilot studies
	Csaba LASZLO	Radosys, Hungary	Passive Measurements - Turnkey Systems for small, medium and large laboratories
	Laurențiu DONE	Horia-Hulubei National Institute for Research&	The radon concentration influence on the radionuclide characterization of the environmental samples

		Development for Physics and Nuclear Engineering (IFIN-HH)	
	Cornel-Liviu TUGULAN	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Radon concentration measurements inside and outside the Radon Chamber developed within CARSTEAM Project
	All participants	Discussions	
23 May Thursday			
Radon indoor Session 2			
Chaired by Nicoleta BRISAN, Marian Romeo CALIN			
9.00-10.30	Francesco BOCHICCHIO	Italian National Institute of Health, Italy	Protection from radon in Italy: past, present and perspectives
	Dobromir PRESSYANOV	Faculty of Physics, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria	The problem of the temperature dependence of radon diffusion chambers with anti-thoron barrier
	Carlos SAINZ FERNANDEZ	University of Cantabria Spain, and Babeş-Bolyai University Cluj-Napoca (UBB)	Notes regarding the development of the Spanish Radon Action Plan
10.30-11.00	Coffee break		
11.00 -12.30	Alexandra CUCOS	Babes-Bolyai University Cluj-Napoca (UBB)	Current status of indoor radon survey in Romania linked with National Radon Action Plan
	Sándor CSEGZI	Scientific Cultural University Targu Mures	A statistical model for radon monitoring in homes and the development of radon map for localities
	Vasile PATRASCU	National Institute for Marine Research and Development (INCDM) "Grigore Antipa"	Preliminary annually results of Radon measurements in INCDM Constanța
	Florica STEFAN, Ancuța ȚENTER	Babes-Bolyai University Cluj-Napoca (UBB)	The path from geogenic radon to indoor radon
	Antoaneta ENE	Dunarea de Jos University of Galati, Faculty of Sciences	Assessment of radon, thoron and their descendants in selected indoor environments in Romania

		and Environment	
	All participants	Discussions	
12.30-14.00	Lunch break		
Radon in workplaces			
Session 3			
Chaired by Alexandra CUCOS, Laurentiu DONE			
14.00-15.30	Liuba CORECHI	National Agency for Public Health, Chisinau, Republic of Moldova	Methodology of radon monitoring in kindergarten and institutions of primary, secondary and high education institutions in the Republic of Moldova
	Kinga SZACSVAI	Babes-Bolyai University Cluj-Napoca (UBB)	Indoor radon distribution in residential and public building from some major urban agglomerations of Romania
	Marian Romeo CALIN	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Radiometric measurements and evaluation of radon concentration in salt mines and caves from Romania
	Bety BURGHELE	Babes-Bolyai University Cluj-Napoca (UBB)	Radon measurements in the most popular Romanian show caves to assess the radiation safety for underground workers
	Gheorghe DOGARU	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Radon concentration estimation for the workplaces of radioactive waste storage and treatment plant – IFIN-HH
	Bogdan Tudor OBREJA	Horia-Hulubei National Institute for Research & Development for Physics and Nuclear Engineering (IFIN-HH)	Emissions fluctuations of natural radon in Baita Bihor repository area
	Ion POPESCU	Cernavoda Nuclear Power Plant	Radon exposure at CNE Cernavoda. Preliminary results and future actions
	All participants	Discussions	
15.30-16.00	Coffee break		
Radon prevention and remediation			
Session 4			
Chaired by Tiberiu CATALINA, Kinga SZACSVAI			

16.00- 18.00	Tiberiu CATALINA	Technical University of Civil Engineering of Bucharest	Experimental and numerical study of indoor air quality and energy consumption of a single-family detached home
	Andrei ISTRATE, Istvan PAP	Babes-Bolyai University Cluj-Napoca (UBB)	Experimental assessment of radon remediation between two decentralized ventilation unit, mounted in a single family detached home
	Andrei DAMIAN	Technical University of Civil Engineering of Bucharest	Indoor air quality assessment in a historic educational building using a heat recovery ventilation unit
	Linda SFERLE, Mircea MOLDOVAN	Babes-Bolyai University Cluj-Napoca (UBB)	Radon mitigation or prevention for real estate developers
	Tiberiu CATALINA	Technical University of Civil Engineering of Bucharest, and Babes-Bolyai University Cluj-Napoca (UBB)	Low Energy Consumption Ventilation Systems for Improving Indoor Air Quality in Residential Buildings
	Botond PAPP, Bety BURGHELE	Babes-Bolyai University Cluj-Napoca (UBB)	Scientific experience in radon mitigation in Romania
	All participants	Discussions	
24 May Friday			
Social event - Visit to Cotroceni Palace			