

MONDAY

9:00	Registration	09:30-13:00 Social programme for early birds: Visiting the Hospital in the Rock Nuclear Bunker Museum and the Buda Castle district					Associate Societies Forum
9:00-12:00							
13:00-14:00	Lunch						
Room	Pátria		Brahms	Kodály	Mozart	Strauss	Bartók I
14:00-15:00	Opening ceremony						
	János Petrányi Chair of the Congress						
	Bernard LeGuen President of IRPA						
	Csilla Pesznyák Co-Chair of the Congress Tamás Pázmándi Co-Chair of the Congress						
	Austrian Radiation Protection Society						
	Young Generation Network						
	International Atomic Energy Agency						
	Werner Rühm Chair of International Commission on Radiological Protection						
	Csilla Pesznyák European Nuclear Education Network						
	European Federation of Organisations For Medical Physics						
	Filip Vanhavere European Radiation Dosimetry Group						
	Kádár Andrea Beatrix President of HAEA						
	Other						
	Plenary talks						
15:00-15:30	Jenia Vassileva and Burcin Okyar (IAEA): Meeting the radiation protection challenges – “ Novel approaches for medical and occupational exposure control”						
15:30-16:00	Werner Rühm: Progress on the review and revision of the ICRP system of radiological protection						
16:00-16:30	Coffee break					Coffee break	
	Highlighted presentations I.	Combined Session NIR					
16:30-16:45	Oliver Hupe: The novel European Metrology Network (EMN) for radiation protection	Emilie van Deventer: A Framework for non-ionizing radiation protection					
16:45-17:00	Nathalie Vanhoudt: Influence of earthworms on the bioavailability of radium and metals in soil	Eric van Rongen: The ICNIRP 2020-2024 work plan					
17:00-17:15	Gonzalo Garcia-Fernandez: Impact of new delivery methods on the operational radiation protection of Compact Proton Therapy Centers (CPTC)	Julien Modolo & Alexandre Legros: Communication with the public of EMF health effects: creation of a non-ionizing radiation task group at IRPA					
17:15-17:30	Mandy Birschwilks: RadoNorm - Towards effective radiation protection based on improved scientific evidence and social considerations - focus on radon and norm	Nigel A. Cridland: Limits of scientific insight when updating ICNIRP guidelines					
17:30-17:45	Filip Vanhavere: Personal on-line dosimetry using computational methods: the PODIUM project	Plenary Discussion					
17:45-18:00	Joanne Stewart: Working together on E&T in radiation protection	Plenary Discussion					
18:00-20:00	Welcome reception					Welcome reception	

TUESDAY

Room	Bartók II	Liszt	Lehár	Brahms	Kodály	Mozart	Strauss	Bartók I
	Refresher course I.	Refresher course II.	Refresher course III.	Refresher course IV.				
08:00-08:50	Enora Clero: Radiation detriment calculation methodology	Eduard Gershkevitch: Learning from incidents in radiotherapy: retrospective and prospective risk analysis	Péter Zagvyai: New challenges in radiation protection	Tom Clarijs: How to apply the systematic approach to radiation protection training?				
	Industry&NPP	Medical applications I	Radioactivity monitoring and emergency monitoring I	Measurement and standardisation				
Session Chair								
09:00-09:15	Young Scientist Competition YSC1 Kathryn L. Ambrose: Conservatism versus sustainability	Clémence Baudin: Dysfunction of the salivary and lacrimal glands after radioiodine treatment: preliminary results of a self-controlled study in France	Bharath Bharath: Carbon-14 specific activity in atmospheric air in the vicinity of a PHWR nuclear power plant in India	Petr Kuča: Citizen Monitoring of ambient dose-rate: the SAFECAST project				
09:15-09:30	YSC2 Georgian V. Tobosaru: Implementation of the novel source term monitoring factors at CANDU plant for outage radiation field reduction	Gonzalo Garcia-Fernandez: Study of activation of air, water and soil in Compact Proton Therapy Centers (CPTC)	Benjamin Zorko: Modeling and measurement of airborne tritium	André Gomes Lamas Otero: A deep learning model for gamma spectroscopy analysis				
09:30-09:45	Helena Janžeković: European nuclear arena after the Fukushima accident	Leticia Irazola: Nuclei activation in protontherapy treatments	Héloïse Gervot: Adaptation of an analytical method for radium 226 in water to urine matrix	Federico A. Geser: Energy calibration of pulse-height spectra in plastic scintillators for clearance monitors using Mont Carlo simulations	IRPA Workshop		MELODI Workshop	Scientific Committee meeting 08:30-09:00
09:45-10:00	Máté Solymosi: Monitoring system of the fuel-cassette-free state of the control rod sleeves at the Paks Npp	Domonkos Szegedi: Neutron dose around high energy linacs in Hungarian radiotherapy centers	Claudia Olaru: Monte Carlo simulations of the radioluminescence photons induced by alpha particles in air	Raquel Idoeta: Selection tool of in situ measurement techniques for radiological characterization in D&D processes				
10:00-10:15	Allan Wilson: Updating a radiation protection programme for a change in business use and fingerprint	Catarina Souto: Risk management in srs treatments	David Breitenmoser: Non-proportional scintillation response model for airborne gamma-ray spectrometry applications	Young Scientist Competition				
				YSC3 Dávid Hajdú: Reproduction of shielding concrete activation measurements by simulations				
10:15-10:30	Omar Al-Somali: Radiation protection for well logging operations in Saudi Arabia							
10:30-11:15	Coffee break & Posters				Coffee break			
	Personal dosimetry I	Medical applications II	Radioactivity monitoring and emergency monitoring II	Hot Topics Optical Radiation				
Session Chair								
11:15-11:30	David Endesfelder: RENEb inter-laboratory comparison (2021): biological dosimetry based on dicentric chromosomes	Josep M. Martí-Climent: Optimization of patient dose in brain [18F]-DOPA PET/CT	Young Scientist Competition	Volkher Onuseit: Laser safety for high power and high intensity emerging laser applications. <i>This lecture is 20+5 minutes long.</i>				
			YSC4 Reinhard Wagner: Differences in the assessment of the number of victims of the Chernobyl nuclear disaster					
11:30-11:45	Bernard Landry: CADORmed a tool for internal dose assessment	Szilvia Gazdag-Hegyesi: The dose index of kilovoltage cone beam computed therapy for various imaging protocols	Mauro Magnoni: Optimisation of gamma spectrometry measurements in atmosphere during nuclear emergencies					
11:45-12:00	Maia Avtandilashvili: Modified human respiratory tract model to describe the retention of plutonium in scar tissues	Adam Galdi: kV-CBCT dose length product and effective dose estimation on Halcyon linear accelerator	Alexandru O. Pavelescu: Comparative re-analysis evaluation of the Fukushima accident atmospheric radioactive emissions	Rudolf Weber: Generation of soft X-rays during laser materials processing with ultrashort laser pulses. <i>This lecture is 20+5 minutes long.</i>	IRPA Workshop		MELODI Workshop	
12:00-12:15	Young Scientist Competition	Maria Gracia-Ochoa: Design and development of a national patient dose registry	Norbert Kavasi: Comparison of radiometric and mass spectrometric 90Sr analysis in the context of the Fukushima nuclear accident					
	YSC5 Victor Merza: Is the ISO slab phantom appropriate for calibrations of the new ICRU 95 operational quantity personal dose?							
12:15-12:30	YSC6 Martin Sefl: Estimation of plutonium concentration in skeleton from occupationally exposed individuals	Bela Kari: Unique in-vivo non-invasive multimodality imaging based translational research laboratory established at medical imaging center of Semmelweis University	Fabien Michel Panza: Drone mapping radioactivity in emergency situation	Ewan Eadie: The efficacy and safety of disinfection with 222 nm ultraviolet-C. This lecture is 20+5 minutes long.				
12:30-12:45	Evgenia Tolstykh: Personal dose estimation based on cytogenetic FISH data after internal exposure, model approach	Siarhei A. Kharuzhyk: PET/CT radiation doses in patients with lymphoma	János Petrányi: Assessing the radiation contamination of large areas using advanced technologies	Sven Connemann: Occupational exposure to optical radiation. This lecture is 10+5 minutes long.				
12:45-13:00				Aspasia Petri: Public exposure to artificial optical radiation in the aesthetics and the entertainment sector in Greece. Risk management actions. <i>This lecture is 10+5 minutes long.</i>				
12:45-14:15	Lunch & Posters				Lunch			
	Personal dosimetry II	Medical applications III	Regulation I	IEEE and ICNIRP and Hot Topics EMF, I				
Session Chair								
14:15-14:30	Maia Avtandilashvili: Biokinetics of highly enriched uranium in a female nuclear worker	Young Scientist Competition	Tünde Katona: The Hungarian radiation protection regulatory system	Eric van Rongen: The ICNIRP 2020 RF Guidelines - what is new?				
		YSC7 Claudia R. Codosero Navarro: Three-dimensional dose calculation in CT/SPECT treatments with internal emitter LU-177 using Monte Carlo techniques						
14:30-14:45	Jozef Sabol: The protection against radiation vs. the protection against Covid-19: some useful parallels	YSC8 Whitney N. Coulor: Developing a radiation safety program in countries without legislation in radiation safety – a report on Caribbean countries	Eszter Retfalvi: Regulatory radiational protectional oversight program for hungarian research reactors					
14:45-15:00	Young Scientist Competition	Lukas Jägerhofer: MEDAUSTRON – Radiation protection for an ion therapy center in Austria	Helena Janžeković: Twenty years of inspection interventions in Slovenia	Akimasa Hirata: Comparison of limits in ICNIRP guidelines and IEEE C95.1 standard				
	YSC9 Guillaume Garnier: Experimental reconstruction of an accidental external exposure: how the dosimetric methods complement each other?							
15:00-15:15	Lily Bossin: Transitioning to radiophotoluminescence (RPL) dosimetry for environmental and area monitoring: the Paul Scherrer Institute's experience	Highlighted posters	Highlighted posters		IRPA Workshop		MELODI Workshop	
		Marina V. Filimonova: Medical application of radioprotectors: a promising concept for the prevention of radiation pathologies	Silke C. Wouters: Dose rate calculations for a new radioactive waste interim storage facility at PSI					
		Nina Tuncel: Dosimetric comparison of tomotherapy and three dimensional conformal radiotherapy plans for graves ophthalmopathy	Jos van den Eijnde: Avoiding multiple conservative assumptions: a case on a laboratory rule					
15:15-15:30	Pavel A. Sharagin: Approach to dosimetric modeling of fetus exposed to Sr isotopes	Abdelmoneim Suleiman: Assessment of the effective radiation dose and cancer induction probability in urographic imaging procedures	Zhanat Baigazinov: Assessment of possibility of farm animal breeding on the STS	Jolanta Karpowicz: Numerical modeling of occupational hazards related to electromagnetic emission from surgical diathermy				
		Aída López Romero: Uncertainties in the fractionation and optimization of radioembolization with SIR-Spheres	Viktoria Grill: Determination of Cs-137 and Sr-90 in wood and wood ash purchased in Austria					
15:30-15:45	Highlighted posters	Juan D. Palma Copete: Establishment of radiation qualities for use in medical diagnostic according to the IEC 61267:2005 standard in the secondary standard dosimetry laboratory of the Centro Nacional de Dosimetría	Mirjana M. Đurašević: Importance of the exposed workers education in the system of radiation protection: the experience of the Center for Permanent Education, "Vinca" Institute of nuclear sciences Serbia	Ante Lojić Kapetanović: Machine learning-assisted antenna modelling for realistic assessment of human exposure reference levels at frequencies above 6 GHz				
	Alberto Stabili: Performance assessment and improvement of fluorescent nuclear track detectors as neutron dosimeters							
	Victor Garcia Balcaza: PyMCGPU-IR Monte Carlo code for occupational dosimetry in interventional radiology	Clement Devic: Evaluation of the IVIsScan detector for regulatory dosimetric quality control including wide radiation beam for computed tomography	Andrzej Wojcik: Education and training program of the project RadoNorm: towards effective radiation protection based on improved scientific evidence and social considerations – focus on radon and NORM					
15:45-16:15	Coffee break & Posters				Coffee break			
	Personal dosimetry III (medical)		Highlighted posters	Hot Topics EMF, II				
Session Chair								
16:15-16:30	Meng-En Lian: Occupational radiation dose and radiation protection to the eye lens of interventional professionals from departments of interventional radiology and interventional cardiology		Victor Merza: Measurements of backscatter factors of phantomS for the correct evaluation of uncertainty contributions in occupational dosimetry	Fabriziomaria Gobba: Occupational exposure to EMF and health surveillance of exposed workers				
			Gal Amit: Automatic classification of TLD glow curve anomalies using machine learning tools					
16:30-16:45	Guang Yee Wong: Medical radiation exposure during Cone-Beam Computed Tomography (CBCT) guided pulmonary intervention		Klara Poiškruh: Gross alpha beta method and dose estimation	Anna Šušnjara: Assessment of absorbed power density in multilayer planar model of human tissue				
16:45-17:00	Richard Milecz-Mityko: Preliminary study on individual radiation dose received by medical staff for dose constraint determination		Irina Avram: Radiological protection assessment using Monte Carlo simulation code	Julien Modolo & Alexandre Legros: Potential contribution of the transcranial stimulation literature to EMF exposure standards				
17:00-17:15	Young Scientist Competition			Jens Hauelsen: Transcranial electric and magnetic stimulation				
	YSC10 Victor Garcia Balcaza: PyMCGPU-IR Monte Carlo code for occupational dosimetry in interventional radiology							
17:15-17:30				Peter Jeschke: EMF-Risk assessment - supporting german SME with technical rules				
17:30-18:30		Posters		Miklós Kuczmann: Evaluation of physiological effects of the electromagnetic field caused by fully electric and hybrid drives in the passenger compartment				
18:00-19:00	YG Career Guidance - Workshop		EUTERP meeting					

W E D N E S D A Y

	Lehár	Kodály	Mozart	Strauss	Bartók I
All day	Excursions	IAEA Workshop	IRPA Workshop	MELODI Workshop	
09:30-13:00	Visiting the Hospital in the Rock Nuclear Bunker Museum and the Buda Castle district				
19:00-23:00	Gala Dinner Cruise				

The IRPA Workshop
Date: June 1, 2022, 9:00-16:30
Room: Lehár

Title: Satellite IAEA-IRPA workshop on Radiation safety culture training for healthcare professionals

Purpose: The purpose of the event is to contribute to the knowledge sharing on broader aspects of improving radiation protection and safety culture in healthcare.

The focus of discussion will be around the effective training approaches for enhancing the radiation safety culture traits as suggested in the [IAEA Radiation Safety: Trait Talks handbook](#).

Audience: The workshop will be attended by participants nominated by the IAEA Member States through the Technical cooperation project for Europe on radiation protection in medical exposure.

Other congress participants who are interested in the topic can also attend the workshop. Pre-registration is needed at no additional costs.

Technical Site Visits (TSV)

The Technical Site Visits are paralell events, you will be able to attend only one of them. All the TSVs are scheduled on Wednesday, 1 June and departure from the congress venue. Participants will travel by bus to the selected TSV, and lunch box will be handed out on the bus. The lunch box will be made by the congress catering service.

TSV1 - Extreme Light Infrastructure - Attosecond Light Pulse Source (ELI-ALPS) Szeged

Type: Education

The primary mission of the ELI-ALPS Szeged research facility is to make a wide range of ultrashort light sources accessible to the international scientific community user groups. Laser driven secondary sources emitting coherent extreme-ultraviolet (XUV) and x-ray radiation confined in attosecond pulses is a major research initiative of the infrastructure. The secondary purpose of the facility is to contribute to the necessary scientific and technological developments required for high peak intensity and high power lasers.

TSV2 - MVM Paks Nuclear Power Plant

Type: Industry

Existing:

4 reactors type: VVER V-213 (4x500 MW), a pressurized water reactor

First power: 1982-12

Capacity: 1902 MWe - its four reactors produced more than 50% of Hungary's electricity production in 2019.

New:

2 reactors type: VVER-1200/V-527

First power: 2026

Capacity: 2400 Mwe

TSV3 - Public Limited Company for Radioactive Waste Management (PURAM), Bâtaapáti, HU

Type: Waste management

The site started to operate more than 40 years ago in 1977, the company has been operating since 1998. The company has become responsible for the operation of the facility only non-nuclear power plant origin so-called institutional (health care, industry, agriculture, education and research) low and intermediate level wastes which are received from the whole territory of the country. Every working cloth, protecting equipment etc. that were in contact with irradiated material are put into concrete vaults that are sunk in the surface. The overall capacity of the vaults is 5040 m3.

TSV4 - Department of Nuclear Medicine, Semmelweis University, Budapest

Type: Medical

The Center carries out a full range of isotope diagnostic and isotope therapy activities. She is involved in outpatient and inpatient care. It is one of the widest nuclear medicine profile jobs in the country. A center designated to perform several special diagnostic procedures as part of progressive care. It is involved in the introduction of several new diagnostic procedures in Hungary. The Center also has SPECT-CT equipment.

TSV5 - Budapest Research Reactor (Centre for Energy Research)

Type: Research

The Budapest Research Reactor (BRR) is a VVR-type (water-cooled, water-moderated) Soviet design reactor. It went critical in 1959. The initial thermal power was 2 MW. The first upgrade took place in 1967 when the power was increased to 5 MW using a new type of fuel and a beryllium reflector. A full-scale reactor reconstruction and upgrade project started in 1986, and finished in December 1992. The upgraded 10 MW reactor received the operation license in November 1993. The reactor switched to low enrichment fuel (LEU) in 2013 and, with fewer and fewer research reactors in Europe, its role in neutron physics and neutron analysis researches is expected to increase in the coming years.

TSV6 - Training Reactor Budapest University of Technology and Economics

Type: Education

The Training Reactor of the Budapest University of Technology and Economics is a light water moderated and cooled reactor of 100 kW nominal thermal power. The core consists of EK-10 type fuel assemblies, containing 10% enriched UO₂ in metal magnesium matrix. The fuel region is surrounded by graphite reflector assemblies. The maximum thermal neutron flux in the reactor core is 2.7·10¹² n/cm²s.

TSV7 - Nuclear measuring instrument production Gamma Technical Co., Budapest, HU

Type: Industry

Get to know the representatives of the Hungarian radiation protection industry

Gamma Technical Co.

The Institute of Isotopes Co.

RADCHEM - Solution for Isotope Applications

IsotopTech Zrt.

TSV8 - MedAustron, Carbon Beam Radiotherapy Centre, Wiener Neustadt, AU

Type: Medical

The particle accelerator generates the particle beam used for medical treatment and research. At MedAustron either protons or carbon ions are used, generated by three ion sources. The charged particles are pre-accelerated in the so-called "Linac" ("Linear Accelerator") on a straight path by electrical alternating fields and are then injected into the synchrotron. In the synchrotron, a circular accelerator with a circumference of 80 meters, the particles are further accelerated until they reach their final velocity of approximately two thirds of the speed of light, or 200.000 km/s. Finally, the ion beam is led into the irradiation rooms on a so-called extraction line. The particles are held in place within a vacuum tube by strong magnetic fields, generated by 300 magnets in total. The synchrotron has been developed in close cooperation with CERN.

TSV9 - Seibersdorf laboratories, Seibersdorf, AU

Type: Industry

Seibersdorf Laboratories combines the knowledge gained from 30 years of research and development with unparalleled service. Their experts are renowned worldwide and represent Austria in various international committees.

THURSDAY

Room	Bartók	Liszt	Lehár	Brahms	Kodály	Mozart	Strauss	Bartók I
	Refresher course V.	Refresher course VI.	Refresher course VII.	Refresher course VIII.				
08:00-08:50	Noémi Nagy: Radiation in analysis and structural studies	Katalin Lumniczky: Challenges in radiation protection research and their radiobiological bases	Jenia Vasilleva (IAEA): Patient dose assessment in diagnostic radiology: from modality specific to patient specific metrics	Dragan Poljak: Human exposure to electromagnetic fields				
	NORM & Radon I	Other radiation protection	Education and training I	Radioecology				
Session Chair								
09:00-09:15	Jelena Mrdakovic Popic: Developing methodology for information collection for a systematic overview of NORM exposure sites	Giuseppe Taino: The fitness to work at risk of ionizing radiation: criteria and assessment process in employees with an oncological disease	Clemens Walther: Augmented cooperation in education and training in nuclear and radiochemistry	Carina Elin Sophie Ohlin: Deposit and root uptake of ²³⁸ U/ ²³² Th, ²²⁶ Ra and ²²⁸ Ra in berries and their foliage from areas with elevated levels of naturally occurring radioactivity				
09:15-09:30	Wolfgang Ringer: Radon mapping of a different kind: mapping activities and collaborations on radon of international organizations and associations	Filip Vanhavere: The importance of MEENAS in the European radiation protection research and innovation scene	Salome Kiparoidze: Effectiveness of online trainings on radiation protection in the context of the covid-19 pandemic	Runhild Gjelsvik: Long-term studies of radicaesium turnover in a mountain lake ecosystem in Norway				
09:30-09:45	Sylvain Andresz: The application of the ALARA principle for radon at work: feedbacks from the European ALARA network	Linda K. Janssen-Pinkse: Supporting the radiation protection professional in promoting radiation protection culture in the Netherlands	Jan-Willem Vahlbruch: Online radiation protection courses - lessons learned during the Corona crises	Franz Josef Maringer: A review on 60 years radioecological research of the Danube River				
09:45-10:00	Ruxandra Cristina Săpoi: Raising awareness through continuous radon measurements in indoor workplaces	Marianna Koutrouli: Comparison of the secondary cancer risk induced by prostate external beam radiotherapy for partially in-beam organs between two different regimes in different patient age groups	Jim Thurston: A remote radiation protection training initiative in the UK	Sophie Beauquier: Interest of ecosystem services concept for environmental radiation protection	RHSP meeting	MELODI Workshop		Startup Competition
10:00-10:15		Julie J. Burt: Outputs of a horizon style exercise to advance the use of the adverse outcome pathway in radiation protection	Young Scientist Competition	Benoit Charrasse&: Does the use of reference organism in impact assessments provide an adequate protection of site-specific species in routine release? Clarification and reassurance				
10:15-10:30		Highlighted posters	YSC11 Charlotte Schütte: A teaching concept for school experiments on radioactivity using augmented reality methods					
		Seung Hun Shin: Respiratory protection strategies for the public in emergency response	Tom Clarijs: Radiation protection education and training: initiatives from the SCK CEN Academy	Eduardo Gallego: Methodologies to assess radiological impact of a nuclear fusion test facility				
		Hassan Salah Ibrahim: Assessment of pediatric radiation dose and cancer risk from pediatric enhanced ct abdomen examination						
10:30-11:15					Coffee break & Posters			
	NORM & Radon II	Radiobiology I	Education and training II	5G Communication Systems, I				Coffee break
Session Chair								
11:15-11:30	Zsolt Homoki: Indoor gamma radiation and radon risk assessment in Hungarian dwellings	Vadim Chumak: Dose reconstruction for epidemiological studies among Chernobyl cleanup workers: review of accomplishments and outlook	Carmel J. Caruana: Increasing the number of students in radiation protection and medical physics - finding a formula that works	Akimasa Hirata: EMF dosimetry and assessment above 6 GHz				
11:30-11:45	Annette Röttger: Exploitation of results: Radon metrology for the use in climate change observation and radiation protection	Dominique Laurier: Effects of radiation exposure on offspring and next generations: current issues and potential impact for radiological protection	Hielke-Freerk Boersma: Developing (education and training in) radiation protection in suriname and beyond – the role of the Dutch Society for Radiation Protection					
11:45-12:00	Rocco Marchese: Simple one-parameter function to retrieve the correct exposition value from cr-39 radon detectors, also valid in high saturation regime. Validation of the method with two different radon measuring systems and in BFS intercomparison	Richard Wakeford: Effects of radiation exposure on offspring and next generations: effects consequent to intrauterine exposure to ionising radiation	Claire-Louise Chapple: UK Experience of Professional Registration in Radiation Protection	Dragan Poljak: Assessment methods for radiation of 5G systems				Startup Competition
12:00-12:15	Eric Petermann: On the effectiveness of radon priority areas - a critical evaluation	Sisko I. Salomaa: Effects of radiation exposure on offspring and next generations: genetic and epigenetic effects	Wei-Hsung Wang: Roadmap to become a certified health physicist in the US				MELODI Workshop	
12:15-12:30	Hallvard Haanes: Outdoor measurements of thoron progeny in a ²³² Th-rich area with deposition-based alpha track detectors and corrections for wind bias	Christelle Adam-Guillermin: Effects of radiation exposure on offspring and next generations: heritable effects in non-human species	Stéphane Pepin: Information on cosmic radiation received by Belgian aircrew: a survey	Wout Joseph: Challenges of 5G NR exposure assessment				
12:30-12:45	Ladislav Tomasek: Additive and multiplicative risk models of lung cancer risk from radon and smoking	Stéphane Grison: Multigenerational effects of co-exposure to chronic low-dose in utero exposure to internalized Cs-137 and post-natal high-fat diet in mice: study plan and collaboration opportunities	Highlighted posters					
			Isabel Paiva: MPSR: A unique Master's Course on "Radiation Protection and Safety" in Portugal. Lessons learnt and recommendations for the future					
12:45-14:15					Lunch & Posters			
	NORM & Radon III	Radiobiology II	Perspectives from ethics, social sciences and humanities	5G Communication Systems, II				Lunch
Session Chair								
14:15-14:30	Thomas Makumbi: Assessment of uncertainties affecting dosimetric calculations for intake of radon and NORM	Dmitry Klokov: Low dose research projects database: a new tool to facilitate global collaboration and effective funding decisions	Anja J. Dijkman: Learning from daily work processes promotes safe working	Mats-Olof Mattsson: 5G NR and human health: current knowledge and important knowledge gaps				
14:30-14:45	Hélène Caplin: Occupational exposure in industries involving NORM: special case of the inadvertant ingestion	Vinita Chauhan: The adverse outcome pathway approach in radiation protection and efforts towards global co-ordination	Peter Bryant: Communicating radiation risk: the role of public engagement in reaching ALARA					
14:45-15:00	Rainer Gellermann: Classification of NORM as a basis for dose estimation	Felix Mathew: Examining radiation-induced mutations in human cells using single-cell DNA sequencing - an exploratory study	Tanja Perko: Measuring radiological risk perception through public opinion surveys: critical reflecton on methods	Szilvia Nagy: Investigation of exposure to electromagnetic waves by using unmanned aerial vehicles				
15:00-15:15	Rainer Gellermann: Experience with NORM-waste disposal in different European countries	Tetsuhiro Kinugawa: Analysis of radiation effects on cancer using a mathematical model	Marie Claire Cantone: Ethics in radiological protection in medicine - ICRP TG 109	Krzysztof Gryz: Comparison of exposure to radiofrequency electromagnetic field emitted by RTV and mobile communication transmitters in urban environment			MELODI Workshop	
15:15-15:30	Iuliia Gushchina: Radiation monitoring in the areas of uranium legacy sites and facilities of the Central Asian countries during the environmental remediation	Young Scientist Competition	Catrinel Turcanu: Transdisciplinarity in radiation protection research and practice? Way forward and practical considerations	Péter Pál Necz: Measurement of radiofrequency (RF) exposure around a 5G base station				
15:30-15:45	Highlighted posters	YSC13 Maria Alexandrovna Ianishvaskaia: Association of single nucleotide polymorphisms of apoptosis and cell cycle control genes with the risk of malignant neoplasm development in chronically exposed persons		Mattia Vaccarone: A methodology to assess the EMF exposure Of 5G signals				
	Rainer Gellermann: The European NORM association (ENA) - promoting radiation protection in the field of NORM in Europe							
	Coretchi Liuba: Radon survey and exposure assessment in Republic of Moldova							
15:45-16:15					Coffee break & Posters			
	Radioactive waste management and geological disposal	Radiobiology III	Perspectives from ethics, social sciences and humanities	Health Effects of Lighting				
Session Chair								
16:15-16:30	Young Scientist Competition	Takahiro Wada: Radiation and lifespan: revisiting the concept of radiation-induced aging		John O'Hagan: Health effects of lighting				
	YSC14 Davide Bozzato: Operational Radiation Protection Challenges For The LHC Experiments							
16:30-16:45	YSC15 Vanda Papp: Investigation of the structure of binders related to the final disposal of radioactive waste	Masanori Tomita: Significance of stem cell competition in the dose rate effects	Ethics Round Table: ethics and social sciences and humanities for radiological protection: an approach that concerns us all					
16:45-17:00	Carlo Bergamaschi: Remediation of a concrete underground artifact containing radiferous preparations of Ra-226 and disposal of the radioactive or contaminated material until complete restoration of the area	Sandrine Pereira: Predicting toxicity after head and neck cancer radiotherapy: synergistic role of biological markers and dosimetry?		Mariëlle P.J. Aarts: Importance of indoor lighting for well-being, physical and mental health				
17:00-17:15	Eszter M. Kovács: Preparation of a sorbent suitable for sorption of anionic and cationic radioactive contaminants	Géraldine Landon: Liposomal formulations of new decorporation molecules for the treatment of internal strontium/cobalt contaminations						
17:15-17:30	Isabel Paiva: Introduction to the application of COMSOL Multiphysics to radionuclide transport calculations of migrating species from a repository for low-level radioactive waste	Highlighted posters						
		Stanislav S. Silkin: Cancer risk in the cohort of exposed population of the East Urals radioactive trace						
		Elena Shishkina: Extensive measurements of Sr-90 body-burden as a basis of retrospective internal dosimetry for population of the Urals region						Plenary Discussion
17:30-17:45	Malgorzata U. Sliz: Newly built clearance facility at the Paul Scherrer Institute, Switzerland	Nadia Boroumand: Cancer-related changes in cells exposed to alpha radiation in combination with nicotine						
		Teena Haritwal: Radiotherapy induced alteration in cytokine levels are mitigated by TSA in C57Bl/6 mice						
17:45-18:00	Angelo Infantino: Radiation protection challenges in the upgrade, autopsy and disposal of the LHC beam dump	Zuzanna Pawłowska: Progress of TraceRadon – Empir 19ENV01 project						
18:00-18:10	Highlighted posters							
	Jean-Michel Horodyski: SimB-AD project, methodology to assess beta-only radionuclides activation into cyclotron materials							
18:00-19:00					Posters			

FRIDAY

Room	Pátria	Brahms	Kodaly	Mozart	Strauss	Bartók I
	Refresher course IX.					
08:00-08:50	Carmel J. Caruana: Strategic planning for attracting young people to radiation protection and medical physics university programmes	PEROSH workshop "Electronic Article Surveillance"				
	Plenary					
09:00-09:30	Bernard LeGuen: Enhancing radiation safety culture in health care : a joint IRPA WHO IOMP IAEA initiative	8.15-8.45: Technical issues				
	Highlighted presentations II	8.45-9.15: Challenges in application				
09:30-09:45	Dóra Buzetzky: Application of cation-exchanged bentonites in nuclear waste treatment	9.15-9.30: Reasonably foreseeable use of EAS and product safety				
09:45-10:00	Harald Breitzkreutz: Identification and quantification of anomalies in gamma dose rates of environmental radiation monitors using artificial intelligence	9.30-9.45: Continuous effort to support safe and healthy EAS-workplaces in Europe				
10:00-10:15	Stéphane Pepin: The issue of Cs-137 in firewood and biomass combustion: a review	Discussion				
10:15-10:30		Discussion				
10:30-11:00	Coffee break & Posters					
	Sponsored presentation					
11:00-11:15						
	Highlighted presentations III					
11:15-11:30	Ulf Stolzenberg: Radiation protection at ultrashort-pulsed lasers in materials processing					
11:30-11:45	Thierry Schneider: Reasonableness and tolerability in the system of radiological protection: ICRP on-going reflection					
11:45-12:00	Angelo Infantino: Radiation protection challenges in the Large Hadron Collider upgrade					
12:00-12:15	Competitions awards ceremony					
12:15-12:45	Closing ceremony					EURADOS meeting
12:45-14:15	Lunch					