

M O N D A Y

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					
9:00-12:00	Associate Societies Forum (Bartók II)						
13:00-14:00	Lunch						
Room	Pátria			Brahms	Mozart	Strauss	Bartók I
14:00-15:00	Opening ceremony						
Session chair	Hannes Stadtmann & Tibor Bujtás						
	János Petrányi - Chair of the Congress						
	Bernard LeGuen, President of IRPA						
	Csilla Pesznyák Co-Chair & Tamás Pázmándi Co-Chair						
	Franz Josef Maringer, 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						
	Paddy Gilligan, European Federation of Organisations For Medical Physics						
	Filip Vanhavere, European Radiation Dosimetry Group						
	Kádár Andrea Beatrix, President of HAEA						
	Other						
	Plenary talks						
	Katona Tünde & Csilla Pesznyák						
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						
	Highlighted presentations I.						
Session chair	Franz Josef Maringer & Pázmándi Tamás						
16:30-16:45	Harald Breittkreutz: Identification and quantification of anomalies in gamma dose rates of environmental radiation monitors using artificial intelligence						
16:45-17:00	Nathalie Vanhoudt (Virtual participant): Influence of earthworms on the bioavailability of radium and metals in soil						
17:00-17:15	Gonzalo Garcia-Fernandez: Impact of new delivery methods on the operational radiation protection of Compact Proton Therapy Centers (CPTC)						
17:15-17:30	Mandy Birschwilks (Virtual participant): RadoNorm - Towards effective radiation protection based on improved scientific evidence and social considerations - focus on radon and norm						
17:30-17:45	Filip Vanhavere: Personal on-line dosimetry using computational methods: the PODIUM project						
17:45-18:00	Joanne Stewart: Working together on E&T in radiation protection						
18:00-20:00	Welcome reception						

TUESDAY

Room	Bartók II	Liszt	Lehár	Brahms	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?	MELODI Workshop		Scientific Committee meeting 08:30-09:00			
Session Chair	Industry&NPP	Medical applications I	Radioactivity monitoring and emergency monitoring I	Measurement and standardisation						
	Máté Solymosi & Tibor Bujtás	Lukas Jägerhofer & Richárd Elek	Mauro Magnoni & János Petrányi	Franz Jozef Maringer & László Szűcs						
09:00-09:15	Young Scientist Competition	Clémence Baudin (Virtual participant): 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	YSC1 Kathryn L. Ambrose: Conservatism versus sustainability	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	Federico A. Geser: Energy calibration of pulse-height spectra in plastic scintillators for clearance monitors using Monte Carlo simulations						
09:30-09:45	Helena Janžekovič: European nuclear arena after the Fukushima accident	Leticia Irazola (Virtual participant): Nuclei activation in protontherapy treatments	Héloïse Gervot: Adaptation of an analytical method for radium 226 in water to urine matrix	Raquel Idoeta (Virtual participant): Selection tool of in situ measurement techniques for radiological characterization in D&D processes						
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 Oлару: Monte Carlo simulations of the radioluminescence photons induced by alpha particles in air	Young Scientist Competition						
10:00-10:15	Allan Wilson: Updating a radiation protection programme for a change in business use and fingerprint	Ana Beatriz S. Morais: Risk management in srs treatments	David Breitenmoser: Non-proportional scintillation response model for airborne gamma-ray spectrometry applications	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									
Session Chair	Personal dosimetry I	Medical applications II	Radioactivity monitoring and emergency monitoring II	Hot Topics Optical Radiation						
	Josef Sabol & Tamás Pázmándi	Jenia Vassileva & Carmel J. Caruana	Benjamin Zorko & Péter Zagvyai	Ljiljana Udovicic & Peter Jeschke						
11:15-11:30	David Endesfelder (Virtual participant): RENEB inter-laboratory comparison (2021): biological dosimetry based on dicentric chromosomes	Josep M. Martí-Climent (Virtual participant): Optimization of patient dose in brain [18F]-DOPA PET/CT	Young Scientist Competition	Volkher Onuselt (Virtual participant): Laser safety for high power and high intensity emerging laser applications. <i>This lecture is 20+5 minutes long.</i>	MELODI Workshop					
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	YSC4 Reinhard Wagner: Differences in the assessment of the number of victims of the Chernobyl nuclear disaster							
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	Mauro Magnoni: Optimisation of gamma spectrometry measurements in atmosphere during nuclear emergencies	Alexandru O. Pavelescu: Comparative re-analysis evaluation of the Fukushima accident atmospheric radioactive emissions						
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	Rudolf Weber (Virtual participant): Generation of soft X-rays during laser materials processing with ultrashort laser pulses. <i>This lecture is 20+5 minutes long.</i>						
12:15-12:30	YSC5 Victor Merza: Is the ISO slab phantom appropriate for calibrations of the new ICRU 95 operational quantity personal dose?	Bela Kari: Unique in-vivo non-invasive multimodality imaging based translational research laboratory established at medical imaging center of Semmelweis University	Caroline Simonucci: Drone mapping radioactivity in emergency situation	Ewan Eadie (Virtual participant): The efficacy and safety of disinfection with 222 nm ultraviolet-C. This lecture is 20+5 minutes long.						
12:30-12:45			János Petrányi: Assessing the radiation contamination of large areas using advanced technologies	Sven Connemann (Virtual participant): 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									
Session Chair	Personal dosimetry II	Medical applications III	Regulation	IEEE and ICNIRP and Hot Topics EMF, I						
	Hannes Stadtmann	Borislava Petrovic & Eduard Gershkevitch	Zsolt Stefánka	Dragan Poljak & Peter Jeschke						
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 (Virtual participant): The ICNIRP 2020 RF Guidelines - what is new?	MELODI Workshop		Startup Competition 14:30-15:30			
14:30-14:45	Jozef Sabol: The protection against radiation vs. the protection against Covid-19: some useful parallels	YSC7 Claudia R. Codosero Navarro (Virtual participant): Three-dimensional dose calculation in CT/SPECT treatments with internal emitter LU-177 using Monte Carlo techniques	Eszter Retfalvi: Regulatory radiational protection oversight program for Hungarian research reactors							
14:45-15:00	Lily Bossin: Transitioning to radiophotoluminescence (RPL) dosimetry for environmental and area monitoring: the Paul Scherrer Institute's experience	Lukas Jägerhofer: MEDAUSTRON – Radiation protection for an ion therapy center in Austria	Helena Janžekovič: Twenty years of inspection interventions in Slovenia	Akimasa Hirata (Virtual participant): Comparison of limits in ICNIRP guidelines and IEEE C95.1 standard						
15:00-15:15	Young Scientist Competition	Highlighted posters	Highlighted posters							
	YSC9 Guillaume Garnier: Experimental reconstruction of an accidental external exposure: how the dosimetric methods complement each other?	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 (7 min.)	Slike C. Wouters: Dose rate calculations for a new radioactive waste interim storage facility at PSI							
15:15-15:30	Highlighted posters		Jos van den Eijnde: Avoiding multiple conservative assumptions: a case on a laboratory rule	Jolanta Karpowicz (Virtual participant): Numerical modeling of occupational hazards related to electromagnetic emission from surgical diathermy						
	Alberto Stabilini: Performance assessment and improvement of fluorescent nuclear track detectors as neutron dosimeters (7 min.)		Viktoria Grill: Determination of Cs-137 and Sr-90 in wood and wood ash purchased in Austria							
			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									
Session Chair	Personal dosimetry III (medical)		Highlighted posters	Hot Topics EMF, II						
	Filip Vanhavere & Richárd Elek		Csurgai József & Viktoria Grill	György Thuroczy & Peter Jeschke						
16:15-16:30	Meng-En Lian (Virtual participant): 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 (Virtual participant): Occupational exposure to EMF and health surveillance of exposed workers	MELODI Workshop					
16:30-16:45	Guang Yee Wong (Virtual participant): Medical radiation exposure during Cone-Beam Computed Tomography (CBCT) guided pulmonary intervention		Klara Poiškruh: Gross alpha beta method and dose estimation							
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 (7. min)	Anna Šušnjara (Virtual participant): Assessment of absorbed power density in multilayer planar model of human tissue						
17:00-17:15	Young Scientist Competition			Julien Modolo & Alexandre Legros (Virtual participant): Potential contribution of the transcranial stimulation literature to EMF exposure standards						
17:15-17:30	YSC10 Victor Garcia Balcaza: PyMCGPU-IR Monte Carlo code for occupational dosimetry in interventional radiology			Jens Hauelsen (Virtual participant): Transcranial electric and magnetic stimulation						
17:30-18:30				Peter Jeschke: EMF-Risk assessment - supporting German SME with technical rules						
				György Wersényi (Virtual participant): 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		Mozart	Strauss	Bartók I
All day	Excursions		IAEA Workshop		MELODI Workshop		IRPA Executive Council Meeting
19:00-23:00	Gala Dinner Cruise						

THURSDAY

Room	Bartók II	Liszt	Lehár	Brahms	Mozart	Strauss	Bartók I
		Refresher course VI.	Refresher course VII.	Refresher course VIII.			
08:00-08:50		Katalin Lumniczky: Challenges in radiation protection research and their radiobiological bases	Jenia Vasileva (IAEA): Patient dose assessment in diagnostic radiology: from modality specific to patient specific metrics	Dragan Poljak: Human exposure to electromagnetic fields			
Session Chair	Constantin Milu & Zsolt Homoki	Other radiation protection	Education and training I	Radioecology			
09:00-09:15	Wolfgang Ringer: Radon mapping of a different kind: mapping activities and collaborations on radon of international organizations and associations	Giulia Castellani: 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	Franz Josef Maringer: A review on 60 years radioecological research of the Danube River			
09:15-09:30	Sylvain Andresz: The application of the ALARA principle for radon at work: feedbacks from the European ALARA network	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	Sophie Beauquier: Interest of ecosystem services concept for environmental radiation protection			
09:30-09:45	Ruxandra Cristina Săpoi: Raising awareness through continuous radon measurements in indoor workplaces	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	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			
09:45-10:00		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	Eduardo Gallego (Virtual participant): Methodologies to assess radiological impact of a nuclear fusion test facility			
10:00-10:15		Julie J. Burt (Virtual participant): Outputs of a horizon style exercise to advance the use of the adverse outcome pathway in radiation protection	Young Scientist Competition				
			YSC11 Charlotte Schütte: A teaching concept for school experiments on radioactivity using augmented reality methods				
10:15-10:30		Highlighted posters	Tom Clarijs: Radiation protection education and training: initiatives from the SCK CEN Academy				
		Seung Hun Shin: Respiratory protection strategies for the public in emergency response					
		Hassan Salah Ibrahim: Assessment of pediatric radiation dose and cancer risk from pediatric enhanced ct abdomen examination					
10:30-11:15	Coffee break & Posters						
Session Chair	Rainer Gellermann & Tímea Hülber	Radiobiology I	Education and training II	5G Communication Systems, I			
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 (Virtual participant): 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 (Virtual participant): 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	Sisko I. Salomaa: Effects of radiation exposure on offspring and next generations: genetic and epigenetic effects	Claire-Louise Chapple: UK Experience of Professional Registration in Radiation Protection	Dragan Poljak: Assessment methods for radiation of 5G systems			
12:00-12:15	Eric Petermann: On the effectiveness of radon priority areas - a critical evaluation	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				
12:15-12:30	Highlighted posters	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	Wout Joseph: Challenges of 5G NR exposure assessment			
	Konstantin Kovler: A difficult way towards a rational and harmonized international regulation of indoor radon (7 min.)		Isabel Paiva: MPSR: A unique Master's Course on "Radiation Protection and Safety" in Portugal. Lessons learnt and recommendations for the future (7 min.)				
12:30-12:45							
12:45-14:15	Lunch & Posters						
Session Chair	Wolfgang Ringer	Radiobiology II	Perspectives from ethics, social sciences and humanities	5G Communication Systems, II			
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 (Virtual participant): 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 inadvertent ingestion	Vinita Chauhan (Virtual participant): 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	Tetsuhiro Kinugawa: Analysis of radiation effects on cancer using a mathematical model	Marie Claire Cantone: Ethics in radiological protection in medicine - ICRP TG 109	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	Dominique Laurier: Effects of IR on diseases of the circulatory system and their consideration in the system of radiological protection	Catrinel Turcanu: Transdisciplinarity in radiation protection research and practice? Way forward and practical considerations	Krzysztof Gryz: Comparison of exposure to radiofrequency electromagnetic field emitted by RTV and mobile communication transmitters in urban environment			
15:15-15:30	Highlighted posters			Mattia Vaccarone (Virtual participant): 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						
15:30-15:45							
15:45-16:15	Coffee break & Posters						
Session Chair	Isabel Pavia & Behrooz Bazargar-Sabet	Radiobiology III	Perspectives from ethics, social sciences and humanities	Health Effects of Lighting			
16:15-16:30	Young Scientist Competition	Takahiro Wada: Radiation and lifespan: revisiting the concept of radiation-induced aging		John O'Hagan (Virtual participant): Health effects of lighting			
	YSC12 Davide Bozzato: Operational radiation protection challenges for the LHC experiments						
16:30-16:45	YSC13 Vanda Papp: Investigation of the structure of binders related to the final disposal of radioactive waste	Masanori Tomita (Virtual participant): 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 (Virtual participant): 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					
		Nadia Boroumand: Cancer-related changes in cells exposed to alpha radiation in combination with nicotine					
		Zuzanna Pawlowska: Progress of TraceRadon – Empir 19ENV01 project					
17:30-17:45	Malgorzata U. Sliz: Newly built clearance facility at the Paul Scherrer Institute, Switzerland						
17:45-18:00	Angelo Infantino: Radiation protection challenges in the upgrade, autopsy and disposal of the LHC beam dump						
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		Mozart	Strauss	Bartók I
	Refresher course IX.			PEROSH workshop "Electronic Article Surveillance"				
Session Chair				Klaus Schiessl & Peter Jeschke				
08:00-08:50	Carmel J. Caruana: Strategic planning for attracting young people to radiation protection and medical physics university programmes			8:15-8:45: EAS: overview, exposure and electromagnetic hazards				
	Plenary			8:45-9:15: Challenges in application				
Session Chair	Franz Josef Maringer							
09:00-09:30	Bernard LeGuen: Enhancing radiation safety culture in health care : a joint IRPA WHO IOMP IAEA initiative			9:15-9:30: Reasonably foreseeable use of EAS and product safety				
	Highlighted presentations II			9:30-10:00: Short reports on national (or personal) experiences with EAS				
Session Chair	Pázmándi Tamás & Csilla Pesznyák			10:00-10:20: Discussion				
09:30-09:45	Dóra Buzetzky: Application of cation-exchanged bentonites in nuclear waste treatment			10:20-10:30: Wrap up				
09:45-10:00	Oliver Hupe (Virtual participant): The novel European Metrology Network (EMN) for radiation protection							
10:00-10:15	Stéphane Pepin: The issue of Cs-137 in firewood and biomass combustion: a review							
	Sponsored presentation							
10:15-10:30	Imdetek: Recent progress of CdZnTe based room temperature detectors in industrial applications							
10:30-11:00	Coffee break & Posters							
Session Chair	Renate Czarwinski & Hannes Stadtmann							
	Sponsored presentation							
11:00-11:15	József Krausz: Development of an automatic calculation system of public exposure to RF in Hungary							
	Highlighted presentations III							
11:15-11:30	Ulf Stolzenberg (Virtual participant): 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							
12:45-14:45	Lunch							