



Sunday, June 17

10:00-20:00 Registration

Monday, June 18

08:00-19:00 Registration

09:00 Official Opening Biljana Hall

Plenary Session

Invited Lectures Biljana Hall

Chairperson: Peter Bossew

09:30 Francesco Cardellini, Experimental activity in the field of radon and thoron measurement at Italian Metrological Institute for measurement of ionizing radiation

10:00 Nataša Avramović, Structure, function and application of rhamnolipid and exopolysaccharide biosurfactants of *Pseudomonas aeruginosa*

10:30-11:00 Refreshments

11:00-12:30 Poster Sessions Car Samoil Hall

Poster placement on marked panels from 10:00

Poster removal from the panels until 14:00

Radiation Measurements

Chairpersons: Aleksandar Jaksic, Gordana Pantelić

RS1 A. Stepanov et al., Using of the remote methods for radiation survey during reactor MR dismantling

- RS2 A. Jevremović et al., Determination of coincidence summing correction factors for ^{22}Na point source
- RS3 I. Stonecka, Z. Baranowska, K. Łukasik, K. Fornalski, Bayesian statistics as a modern tool in retrospective dosimetry of mixed ionizing radiation
- RS4 M. Filipek, A. Bantsar, M. Pietrzak, S. Pszona, Z. Szepliński, Review of recent Jet Counter experiments
- RS5 K. Malik, B. Obryk, K. Ambrožič, L. Snoj, Characterisation of the TRIGA Mark II reactor radiation field with thermoluminescence detectors
- RS6 P. Tulik, A. B. Knyziak, M. Derlaciński, Development and characterization of graphite ionization chamber at Ionizing Radiation Laboratory at GUM
- RS7 M. Petrichenkov, V. Chudaev, A. Repkov, V. Eksta, N. Shamakina, S. Melnik, Dosimetry in neutron fields of BINP accelerators with intense low energy part of spectrum using TLDs with LiF
- RS8 E. Iliescu et al., Studies on the characteristics of alanine dosimeters in stereotactic radiosurgery
- RS9 Ł. Murawski, M. Kuć, Preparation of the recombination chamber use in environmental measurements
- RS10 J. I. Byun, D. S. Ham, T. W. Gang, Determination of Cs-137 inventory in a disturbed area using *in-situ* and laboratory gamma-ray spectrometers
- RS11 Z. Matej, A. Jancar, Z. Kopecky, H. Ondrej, Comparison of algorithm for neutron and gamma separation
- RS12 A. Krleski, M. Ginovska, H. Spasevska, S. Petkovska, Characterization of thermoluminescent response of LiF: Mg, Ti dosimeter at different doses of beta rays with Risø TL/OSL DA-20 reader at low and upper dose limit
- RS13 Z. Baranowska, I. Stonecka, K. Wołoszczuk, Methodology of personal dose estimation in mixed beta and gamma radiation field using thermoluminescent dosimeters
- RS14 K. Ivanova, B. Kunovska, K. Potiriadis, Background measurement and modeling
- RS15 K. Maternicki, R. Majgier, M. Biernacka, A. Mandowski, New methods of optical stimulation for the prototype of OSL Helios reader
- RS16 J.-S. Chae, E. Kwon, Y.-J. Kim, An improved method for the measurement of ^{210}Pb in environmental samples by liquid scintillation counter
- RS17 M. Grbić, A. Pavlović, Quantification of operator proximity effect on measuring results of electric field strength in the vicinity of overhead power lines

Radiation Detectors

Chairpersons: Dušan Mrđa, Evgeny Taskaev

- RD1 T. Onodera, K. Hitomi, K. Kimura, T. Shoji, Growth of TlBr semiconductor crystals in ceramic substrates for gamma-ray detector fabrication
- RD2 V. Ivanovs et al., Temperature stabilization of SiPM-based gamma-radiation scintillation detectors
- RD3 T. Kowalski, Ö. Şahin, Measurements and calculations of gas gain in Xe - 5% TMA mixture - pressure scaling
- RD4 W. Westmeier, S. Klaus, CeBr_3 - A well-characterized new scintillator for gamma-ray spectrometry

- RD5 D. Zoul, M. Cabalka, M. Kopolová, A study of using polycarbonate as a reusable radiochromic integrating dosimeter for measurements of high doses of ionizing radiation
- RD6 P. Escobedo et al., Radiation effects on light-dependent resistances
- RD7 S. Vereschagin, Readout electronics for TPC detector in the MPD/NICA project
- RD8 R. Smyka, A. Mandowski, M. Biernacka, R. Majgier. OSL and IRSL properties of microcline from Strzegom granites
- RD9 M. Maciak, M. A. Gryziński, A high-dose ionization chamber for real-time monitoring at spent fuel irradiation stand
- RD10 S. Stanković, A. Jakšić, M. Radenković, D. Nikolić, N. Kržanović, Radiation characteristics for HfO₂ and SiO₂ incorporated in electronic component with MOS structure in fields of gamma and X-radiation
- RD11 E. Mandowska, R. Majgier, A. Mandowski, Spectral properties of irradiated potassium chloride crystals
- RD12 R. Majgier, M. Biernacka, A. Mandowski, Properties of the model for radiation-induced optically stimulated luminescence (OSL) in sodium chloride and other ionic crystals
- RD13 M. Biernacka, R. Majgier, A. Mandowski, Time dependence of the OSL regeneration effect in various types of natural sodium chloride samples

Radiation Effects

Chairpersons: Dušan Mrda, Evgeny Taskaev

- RF1 M. Yigitoglu, M. Bilge Demirköz, P. Uslu, S. Nigdelioglu, C. Yazgan, I. Efthymiopoulos, Performing the first single event effect tests using the METU defocusing beam line in Turkey
- RF2 R. Lok, S. Kaya, Al. Aktağ, E. Yılmaz, Interface and oxide trapped charges and gamma-ray irradiation effects on Al/HfSiO₄/p-Si/Al MOS capacitors
- RF3 R. Lok, E. Budak, S. Abubakar, E. Yılmaz, The radiation response and electrical characterization of neodymium oxide MOS capacitors by sol-gel dip coating technique
- RF4 J. Budinski-Simendić et al., Determination of glass transition temperature and irradiation resistance of elastomeric materials based on chlorinated natural rubber
- RF5 S. Jovanović et al., The influence of carbon black on thermal degradation and gamma irradiation resistance of elastomeric composites based on three network precursors

Oral Session

Radiation Measurements Biljana Hall

Chairperson: Maria Sahagia

- 14:00 **Keynote talk:** K. Bikit-Šreder, I. Bikit, D. Mrdja, Is the radioactive decay constant really constant?
- 14:30 Ş. Kaya Keleş, G. Polymeris, N. Meriç, Thermal stability of the Merck Quartz CW-OSL and EPR signals
- 14:45 A. Bantsar, M. Pietrzak, S. Pszona, Jet Counter nanodosimeter as a tool for investigating particle track structure

15:00 G. Lorusso, A. Boso, R. Canavan, S. Collins, F. Juget, R. Shearman, Measurement of the internal pair-production branching ratio in the $0^+ \rightarrow 0^+$ transition of ^{90}Zr : Application in medical imaging

15:15 F. Di Capua, L. Campajola, P. Casolaro, EBT3 Radiochromic film response to different radiation fields

15:30 G. Lastovicka-Medin, The role and design of swarm robots and human-swarm interaction for radiation source localization

Oral Session

Radiotherapy

Ohrid Hall

Chairperson: Tomasz Wysokinski

14:00 M. C. Montesi et al., The FOOT experiment: Fragmentation measurements in particle therapy

14:15 S. Karaca, H. Başaran, Megavoltage Computed Tomography (MVCT) dose assessment at different depths

14:30 T. Yao, L. Luthjens, J. Warman, 3D radiation dosimetry using a radio-fluorogenic (RFG) gel

14:45 J. Stevanovic, N. Gavrilovic, Positioning and immobilization as a base of accurate radiotherapy

15:00 M. Sawicki, J. Łyczek, Ł. Kowalik, D. Kazalski, Treatment planning in brachytherapy HDR based on three-dimensional images

15:15 T. Şahmaran, A. Kaşkaş, Preliminary results: The effects of some trace element concentrations on radiation dose in cancerous tissues at radiotherapy

15:30 S. Akulinichev, S. Chaushansky, I. Yakovlev, V. Derzhiev, Application of ytterbium sources for intracavitary brachytherapy with directed emission

Oral Session

Environmental Chemistry, Radiation Chemistry

Radiochemistry

Kaneo Hall

Chairperson: Alicia Negron-Mendoza

14:00 J. F. Facetti-Masulli, P. Kump, V. Romero de González, Incompatible elements in bottom sediments from Acaray dam reservoir- eastern Paraguay

14:15 I. Pozdnyakov, P. Sherin, T. Romanova, F. Wu, O. Shuvaeva, V. Plyusnin, Mechanisms of micropollutants photooxidation by natural photosensitizers

14:30 J. Jovanovic, B. Adnadjevic, The effects of microwave heating on the kinetics of CLRP for poly(acrylic co-methacrylic acid) and poly(acrylic-co-maleic) hydrogels

14:45 A. Kowalska, Correlation between increased ^{226}Ra and ^{228}Ra activity concentration and chemical composition and chemical type of groundwaters

15:00 S. Matveeva, E. Glebov, I. Pozdnyakov, A. Melnikov, Photochemistry of hexachloroplatinate (IV) in organic solvents

15:15 D. Blevins, D. Osborne, G. Kabalka, M. Akula, $\text{Cu}(\text{OTf})_2$ and $\text{Cu}(\text{OTf})_2(\text{Py})_4$ promoted radiofluorination of benzoyl and phthaloyl glycines

15:30 K. Bartholomew, C. Landstetter, V. Damberger, B. Hiegesberger, M. Korner, Assessment of radionuclide ratios in soil samples

15:30-16:00 **Refreshments**

Oral Session

Radiation Measurements Biljana Hall

Chairperson: Marko Zavrtnik

16:00 A. Tartas, M. Gałeccki, B. Brzozowska, P. Pellicoli, M. Donzelli, E. Bräuer-Krisch, Dose verification and modelling of a radiochromic film in the Monte Carlo code

16:15 K. Bikit-Šreder, D. Mrdja, S. Forkapic, I. Bikit, Study of cosmic-ray muon-induced processes in various materials

16:30 G. Pantelic, M. Jankovic, N. Sarap, J. Krneta Nikolic, quality control of liquid scintillation counter Quantulus 1220

16:45 W. Bulski, P. Ulkowski, A. Kowalczyk, E. Gruszczyńska, K. Chelmiński, Calibration of ionization well chambers at the Polish SSDL

17:00 M. Sahagia, A. Luca, A. Antohe, M.-R. Ioan, The Romanian system of activity standards for the radiopharmaceuticals used in Positron Emission Tomography; influence of the decay scheme on the standardization method

17:15 I. Mateu, M. Glaser, G. Gorine, M. Moll, G. Pezzullo, F. Ravotti, ReadMON: a portable radiation monitoring system based on the CERN PH-RADMON dosimeters

17:30 F. Di Capua, M. Campajola, E. Sarnelli, C. Nappi, D. Fiore, Proton irradiation effects on Single-Photon avalanche diodes

17:45 G. Lastovicka-Medin, A lab of one's own & Modern Suffrage: Mothers who set up a radiation lab and those used as guinea pigs

Oral Session

Radiotherapy, Medical Imaging, Medical Physics Ohrid Hall

Chairperson: Ercan Yilmaz

16:00 T. W. Wysokinski, E. Brauer-Krisch, M. Donzelli, Monochromatic microbeam radiation therapy (m-MRT) modality - implementation using the synchrotron light

16:15 L. Kostadinova, Intensity-modulated radiation therapy in head and neck carcinomas

16:30 A. Yalçın, T. Olğar, Characterizing the digital radiography system in terms of effective detective quantum efficiency and CDRAD measurement

16:45 D. Šegota, A. Diklić, P. Valković Zujić, G. Banušić, S. Jurković, Introducing Computed Tomography low dose protocol for sinuses at University Hospital Rijeka

17:00 A. Diklić, D. Šegota, I. Belac-Lovasić, S. Jurković, Establishment of local diagnostic reference levels for CT localisation procedures in radiation therapy at University Hospital Rijeka

17:15 A. Topi et al., In-beam PET monitoring technique for proton therapy: Experimental data and Monte Carlo prediction

17:30 E. Shishkina, V. Zalyapin, Yu. Timofeev, M. Degteva, B. Napier, Parametric stochastic model of bone structures to be used in computational dosimetric phantoms of human skeleton

17:45 P. Sharagin, E. Shishkina, E. Tolstykh, A. Volchkova, M. Smith, M. Degteva, Segmentation of hematopoietic sites of human skeleton for calculations of dose to active marrow exposed to bone-seeking radionuclides

Oral Session

Radiation in Medicine Kaneo Hall

Chairperson: Remon Pop-Iliev

16:00 V. Panteleev et al., A new method development for medical radionuclide $^{223,224}\text{Ra}$ and ^{225}Ac production

16:15 E. Lapshina, S. Ermolaev, B. Zhuikov, V. Ostapenko, A. Vasiliev, ^{230}Pa isolation from irradiated Th-target and development of a $^{230}\text{U}/^{226}\text{Th}$ generator

16:30 M. Zhukovsky, H. M. H. Zakaly, Dose coefficients for monoclonal antibodies and antibody fragments labeled by zirconium-89

16:45 A. Pejovic-Milic, G. Mankovskii, Use of total reflection energy dispersive X-ray fluorescence spectrometry in nanomedicine

18:00-19:30 **Poster Sessions** **Car Samoil Hall**

Poster placement on marked panels from 17:00

Poster removal from the panels until 20:00

Radioecology

Chairpersons: Maria de Lurdes Dinis, Michael Zhukovsky

RE1 B. Mitrović, D. Ćirović, J. Ajtić, V. Andrić, B. Vranješ, Activity concentration of ^{40}K and ^{137}Cs in the muscle tissue and liver of the golden jackal (*Canis aureus*)

RE2 J. Ajtić, E. Brattich, M. A. Hernández-Ceballos, D. Sarvan, V. Djurdjević, Extremely high beryllium-7 surface concentrations in Europe: a case study

RE3 V. Radumilo, I. Knezevic, D. Arbutina, Correlation of radiation and meteorological parameters during the environmental radiation monitoring in the public company "Nuclear facilities of Serbia"

RE4 L. Dobrev, B. Slavchev, D. Dimitrova, B. Veleva, Methodology for analyses of uranium isotopes in drinking waters in Bulgaria

RE5 N. Pomortseva, D. Gudkov, The effect of additional acute radiation on haematological parameters of the crucian carp *Carassius gibelio* from the Chernobyl Exclusion Zone

RE6 N. Todorović, J. Nikolov, I. Stojković, M. Lekić, N. Lazarević, Determination of tritium activity concentration in water in vicinity of nuclear facilities in Serbia

RE7 D. Pavičić-Hamer, D. Barišić, Using mussels *Mytilus galloprovincialis* as an indicator species in radioecology monitoring of the Northern Adriatic Sea

RE8 D. Sarvan et al., Behaviour of beryllium-7 and lead-210 time series measured in Serbia and Slovenia over 1991-2015

RE9 C.-J. Kim, J.-M. Lim, W. Lee, Long-term variation ^{7}Be in particulate matter of surface air from Seoul and Daejeon, South Korea

RE10 J. Barešić, M. Štrok, B. Svetek, P. Vreča, I. Krajcar Bronić, Activity concentration of tritium (^3H) in precipitation - Long-term investigations performed in Croatia and Slovenia

RE11 M. Długosz-Lisiecka, Long term assessment of the behaviour and origin of ^{210}Pb and ^{210}Po radionuclides in the atmosphere

RE12 S. Kalinichenko, A. Nikitin, V. Goloveshkin, Lateral distribution of ^{137}Cs , ^{90}Sr , and ^{241}Am in the top layer of soil in various types of ecosystems of the Belarusian sector of the exclusion zone of the Chernobyl NPP

RE13 S. Kalinichenko, R. Nenashev, Yu. Marchenko, Accumulation of radionuclides in bottom sediments of water bodies of various types in the exclusion zone of the Chernobyl NPP

RE14 V. Pintilie, A. Ene, L. P. Georgescu, A. Pintilie, D. I. Moraru, Determination of ^{226}Ra , ^{210}Po and ^{210}Pb in natural mineral water

RE15 A. Ene, A. Pantelica, F. Sloata, Natural and artificial radioactivity of soils around iron and steel industry measured by low-background high resolution gamma-ray spectrometry

RE16 B. Zorko et al., Comparison of concentration activities of ruthenium isotopes measured over Slovenia and Serbia

RE17 P. Szajerski, A. Zimny, Fast protocol for Rn-222 diffusion measurements in building materials

Other topics

Chairpersons: Maria de Lurdes Dinis, Michael Zhukovsky

OT1 S. Samardžić, R. Lakatoš, M. Cvijanović, A. Mihailović, U. Kozmidis Luburić, T. Nemeš, Investigation of noise pollution and its effects on cognitive performance of workers in open-plan bank offices in Serbia

OT2 S. Samardžić, U. Kozmidis Luburić, M. Cvijanović, A. Mihailović, R. Lakatoš, Investigation of occupational noise exposure in Electro Industries

OT3 O. Çelen, Y. Yahşi Çelen, K. F. Oğuz, Case study: Ergonomic project

20:30-00:00 **Conference Cocktail**

Tuesday, June 19

08:00-19:00 **Registration**

08:00-09:30 **Poster Sessions**

Car Samoil Hall

Poster placement on marked panels from 07:15

Poster removal from the panels until 14:00

Biomedicine

Chairperson: Dragica Obad Kovačević

BD1 T. Novakovic, Z. Dolicanin, N. Djordjevic, The maternal hematological changes and fetal cell micronuclei in pregnant women with thrombophilia

BD2 A. Ramović, M. Hukić, Z. Dolićanin, N. Đorđević, S. Buljubašić, Biofilm forming capability of complex vaginal microbiota and the analysis of its heterogeneous ecosystem

BD3 M. Čolović, M. Luce, A. Cricenti, V. Vasić, D. Krstić, The influence of 12-tungstosilicic acid on rat synaptic plasma membrane

BD4 D. Krstić, M. Čolović, M. Luce, A. Cricenti, V. Vasić, The effect of decavanadate on plasma membrane structure

BD5 E. Kuzmina, D. Zemskova, A. Potapov, O. Vatin, T. Mushkarina, Reduction of early suppressive immune response and systemic inflammation due to application of the enhanced recovery after patients' surgery of colorectal cancer

BD6 S. Thomaj, Some basic elements of the differential diagnosis between hepatitis and sickle cell anaemia in pregnant women (Case study)

BD7 E. Bilić- Komarica, Correlation between the application of antihypertension drugs and the incidence of prostate cancer

BD8 E. Bilić - Komarica, S. Gicić, Z. Dedović, Preoperative risk factors and corrective medication for the success of operations and the reduction of postoperative complications in middle-aged and senior patients

BD9 U. Suljic, M. Dilić, M. Malenica, M. Sabanovic, Influence BMI and smoking on the incidence of ischemic heart disease

Biopharmaceuticals

Chairperson: Olha Storchylo

BL1 B. Veljković, N. Đorđević, V. Jakovljević, Z. Dajić-Stevanović, Cytotoxic activity of leaf and fruits methanolic extract of wild raspberry (*Rubus idaeus* L.) from Serbia

BL2 O. Molchan, E. Zaprudskaya, Influence of LED-light on the pharmacologically significant terpenoid indole alkaloids biosynthesis in *Catharanthus roseus* plants

BL3 M. Stanković, V. Tadić, I. Arsić, Skin photoprotection by natural polyphenols: Extracts of wild rowanberry

BL4 M. Stanković, V. Tadić, I. Arsić, Extracts of blackthorn fruits as potential active substances in skin photoprotection preparations

BL5 D. Stojiljković, I. Arsić, V. Tadić, A. Bogdanović, UV protection cream with standardized wild apple fruit extract - investigation of polyphenols and fruit acids content and *in vivo* efficiency

Pharmaceutical Science

Chairperson: Olha Storchylo

PH1 B. Djurdjic, B. Markovic, Z. Zoricic Mitrovic, V. Vuksanovic, B. Mugosa, FT-IR investigation of organically modified silica nanoparticles - carriers for anticancer drug

Radiopharmacology

Chairperson: Olha Storchylo

RL1 M. Orlova, T. Trofimova, I. Ivanov, A. Orlov, ^{69m}Zn complexes with thiazine and 2-aminopyrimidine derivatives as potential antileukemic agents

Radiology

Chairperson: Ljiljana Jauković

RG1 F. Niculescu, C. M. Pera, D. Mossang, E. Dadulescu, E. Antonescu, Evaluation of skin absorbed doses in radiography for three procedures - skull, thorax and lumbar spine

RG2 Ž. N. Savić et al., Application of contrast drugs in ultrasound diagnostics

RG3 M. Jeremic Knezevic, A. Knezevic, D. Markovic, T. Puskar, D. Djurovic Koprivica, J. Boban, Magnetic resonance imaging versus CBCT in diagnostics of temporomandibular joint internal derangement

Nuclear Medicine

Chairperson: Ljiljana Jauković

NM1 M. Mačkić-Đurović, D. Rukavina, I. Aganović-Mušinović, Micronuclei frequency in patients treated with J-131 for therapeutic causes

NM2 M. Radulovic, S. Beatovic, M. Jankovic, Z. Krstic, B. Ajdinovic, Diuresis renography and ultrasonography in children with antenatally detected hydronephrosis can support diagnosis and suggest related surgery treatment

NM3 M. Tulik, P. Tulik, D. Banasiewicz, D. Kabat, T. Kowalska, Impact of the attenuation correction on the SPECT/CT image quality and patient exposure in bone scintigraphy

NM4 N. Čolović, D. Leković, M. Tirnanić, V. Jurišić, Diagnostic contribution of positron emission tomography with [¹⁸F] fluorodeoxyglucose in hepatosplenic candidiasis

NM5 F. Ciupagea, G. Rosca Fartat, M. Anghene, A. Zamfirescu, C. Petroiu, C. Ghioca, Ensuring protection and safety in the handling of a deceased person that is known to contain an unsealed source as a result of a medical treatment - Health authority case study

Radiation Oncology

Chairperson: Ljiljana Jauković

RO1 M. Bilski et al., Great effect of radiation therapy connected with neoadjuvant immunochemotherapy in a patient with extramedullary plasmacytoma of the maxillary sinus - A case report

RO2 M. Janiszewski et al., Influence of PET-CT on irradiation volume target determination based on patient case analysis with locally advanced esophageal cancer

RO3 T. Mushkarina, E. Kuzmina, T. Konstantinova, V. Kurasova, N. Sirotkina, Delayed radiation damage to lungs and pelvic organs developing in the presence of T-cell deficiency and humoral immunity activation

Cancer Research

Chairperson: Chang Hyun Jin

CR1 G. Morozevich, N. Kozlova, A. Berman, Implication of $\alpha_2\beta_1$ integrin in anoikis of human breast carcinoma and melanoma cells

CR2 N. Kozlova, G. Morozevich, N. Ushakova, N. Gevorkian, A. Berman, Role of protein kinase Erk in integrin $\alpha_5\beta_1$ -dependent drug resistance of human breast carcinoma cells

CR3 V. Markovic, K. Jakovljevic, I. Matic, T. Stanojkovic, M. Joksovic, Novel 1,3,4-thiadiazole-chalcone hybrids containing antioxidant phenolic moiety: Synthesis and biological evaluation

CR4 E. Kuzmina et al., Low count of lymphocytes and CD4 cells in patients with previously untreated Hodgkin's lymphoma correlates with unfavorable disease prognosis

CR5 T. Mushkarina, E. Kuzmina, T. Konstantinova, G. Neprina, Immunoregulatory T-cells in the onset of lymphoproliferative disorders and their response to chemoradiation therapy

Biomaterials

Chairperson: Chang Hyun Jin

BM1 G. Ciobanu, Radio-opaque dental restorative biocomposite based on hydroxyapatite

BM2 A. Rajkovic, M. Radenkovic, S. Stankovic, R. Dojcilovic, Graphene oxide amino acid based nanostructures: synthesis, characterization and sensitivity to Co-60 irradiation

BM3 I. Nikolic, I. Savic-Gajic, I. Savic, Photostability studies of biochanin A in the methanol solution

Biotechnology

Chairperson: Chang Hyun Jin

BT1 T. Sultimova, L. Stoyanova, Investigation of the strain *Lactococcus lactis* K-205 as a biologically active preservative of dried meat

BT2 S. Lim, J.-H. Jung, H. S. Seo, M.-K. Kim, Engineering robustness of industrial microorganism *Escherichia coli* by introducing the stress-response genes from *Deinococcus radiodurans*

Plenary Session

Biljana Hall

Invited Lectures

Chairperson: Alberto J. Palma López

09:30 A. Reznik, O. Semeniuk, G. Juska, S. Baranovskii, Lead oxide photoconductor for application in direct conversion X-ray detectors

10:00 K. Krezhov, Tz. Nonova, A. Mladenov, D. Dimitrov, Environmental radiation monitoring and radiological assessments at the IRT Sofia nuclear site

10:30 Sponsor presentation: ORTEC

10:45-11:15 **Refreshments**

Oral Session

Radiation Measurements Biljana Hall

Chairperson: James Liu

11:15 E. Taskaev, Reference Materials (RM) and Performance Testing (PT) samples in radioactivity analysis: Practice, capabilities, alternatives

11:30 M. Pyshkina, M. Zhukovsky, A. Ekin, The uncertainties of personal neutron dosimeters at various operational neutron fields

11:45 T. Hu, The study on a low radioactive background HPGe spectrometer at a surface laboratory

12:00 T. Nemes, D. Mrdja, Calculation of effective angular correlation corrections in the sum-peak method

12:15 J.-H. Lee, J.-I. Byun, D.-M. Lee, In-situ CeBr₃ gamma-ray spectrometry for the analysis of radioisotopes in the soil

12:30 I. Tucaković et al., LabSOCS vs angle for HPGe efficiency calculations

Oral Session

Radiobiology

Ohrid Hall

Chairperson: Marek Janiak

11:15 N. Kudryasheva et al., Effects of low-level radiation of alpha, beta and gamma type on simplest biological systems - Description in terms of hormesis and threshold models

11:30 N. Koltovaya, K. Lyubimova, N. Zhuchkina, Genetic effects after irradiation of heavy ions in haploid and diploid yeast cells

11:45 E. Persa, K. Lumniczky, G. Safrany, In vivo irradiation has effect on activation of spleen dendritic cells in mice

12:00 S. Vasilyev, R. Savchenko, A. Murashkina, V. Fishman, O. Serov, I. Lebedev, The impact of the extracellular matrix proteins on the radiation-induced DNA damage response

12:15 B. Brzozowska et al., DNA damage and repair in U2OS cells exposed to mixed beams of X-rays and alpha particles

12:30 M. Gatecki et al., The mobility of 53BP1 DNA damage foci induced by X-rays, alpha and mixed beam radiation

Oral Session:

Biomedicine, Radiopharmacology

Kaneo Hall

Chairperson: Boris Ajdinović

11:15 L. Traikov et al., Vasculature tone low-frequency rhythm disorders and micro-vascular shear stress changes in brain vessels as indicators of pathological changes in nerve tissue

11:30 O. Pechanova, M. Cebova, A. Barta, Protective effect of nanoparticle-loaded aliskiren on cardiovascular system in spontaneously hypertensive rats

11:45 O. Pechanova, S. Vrankova, M. Cebova, Ambivalent effect of chronic L-NAME treatment in peripheral tissue and brain

12:00 N. Stavreva, B. Kapusevska, E. Zabokova Bilbilova, O. Kokocheva Ivanova, A. Mijoska, Managing of common complications with implants in prosthodontic dentistry

12:15 O. Storchylo, Phytopreparations in the correction of radiation effects

Oral Session

Radiation Measurements

Biljana Hall

Chairperson: Beata Brzozowska

14:00 **Keynote talk:** J. Liu et al., US DOE technical standard "Clearance and release of personal properties from accelerator facilities"

14:30 I. Sandeva, H. Spasevska, M. Ginovska, L. Stojanovska-Georgievska, Effects of storage on the luminescence response of certain spices

14:45 A. Sokić, L. Perazić, I. Knežević, Measurement of ambient dose equivalent $H^*(10)$ in the surrounding of nuclear facilities in Serbia

15:00 J. Semkova et al., Recent results for space radiation quantities aboard the ExoMars Trace Gas Orbiter to Mars

15:15 A. Sinanaj, B. Papajani, Calculation of the concentrations of elements in environmental samples using XRF portable systems and the fundamental parameters method

Oral Session

Radiation Detectors **Ohrid Hall**

Chairperson: Dmitry Hits

14:00 V. Cindro, G. Kramberger, I. Mandić, M. Zavrtanik, M. Mikuž, 4D particle detectors

14:15 L. Diehl, R. Mori, U. Parzefal, M. Hauser, K. Jakobs, L. Wiik-Fuchs, Annealing studies of irradiated p-type sensors designed for the upgrade of the ATLAS Phase-II Strip Tracker

14:30 G. Gorine et al., Metal thin-film dosimetry technology for the ultra-high particle fluence environment of the future circular collider at CERN

14:45 S. Ilie, C. A. Ur, O. Sima, G. Suliman, Characterisation of the segmented clover detectors from the ELIADE array at ELI-NP

15:00 M. A. Carvajal Rodríguez, M. Jiménez Melguizo, P. Escobedo Araque, D. Guirado Llorente, A. Martínez Olmos, A. J. Palma López, MOSFET probe for intra operative radiotherapy

15:15 S. Kaya, E. Yilmaz, Use of erbium oxide layer as new gate dielectric in NürFET radiation dosimeters

15:30 K. F. Oguz, Investigation of luminescence properties of Tm-doped CaCO_3 dosimeter

Oral Session

Radiobiology, Radiation effects **Kaneo Hall**

Chairperson: Nadezhda Kudryasheva

14:00 A. Osipov, D. Klovov, Dose-Rate Effect in Radiation Biology: DNA Double-Strand Breaks Repair Efficiency

14:15 K. Walczak, J. Olszewski, P. Politański, M. Zmysłony, M. Stępnik, Determination of mutagenic effects after the exposure to radon in dwellings on the example of Kowary (Poland)

14:30 I. Schmitz-Feuerhake, S. Pflugbeil, Heritable radiation effects in man: neglected aspects in cases of chronic exposure

14:45 R. Wolff, R. Frentzel-Beyme, I. Schmitz-Feuerhake, High prevalence of chronic lymphocytic leukemia and B cell lymphomas in nuclear workers after incorporation of alpha emitters: Case report and review of the literature

15:00 K. Gopcevic, D. Stanisavljev, A. Hozic, M. Cindric, Influence of microwave irradiation on proteomic profile of an adder

15:15 K. Gopcevic, D. Stanisavljev, L. Izrael-Zivkovic, A. Medic, A. Isakovic, Effects of microwave irradiation on proteolytic and cytotoxic activity of an adder

15:30 S. Hurem, T. Fraser, J. Ortman, I. Mayer, T. Christensen, Sub-lethal UVA and UVB radiation during early life stages alter behaviour and heart rate in the zebrafish (*Danio rerio*)

15:30-16:00 **Refreshments**

Oral Session

Radioecology

Biljana Hall

Chairperson: Antoaneta Ene

16:00 F. Gering, P. Bossew, T. Hamburger, C. Katzlberger, M. DeCort, An episode of Ru-106 in air over Europe, September-October 2017

16:15 K. Gorzkiewicz, R. Kierepko, J. Mietelski, E. Tomankiewicz, T. Mróz, K. Brudecki, Ruthenium in the ground level atmosphere over Krakow (Poland): Determination of its activity concentration, deposition and absorbed dose assessment

16:30 P. Zoriy, M. Schläger, K. Murtazaev, J. Pillath, M. Zoriy, B. Heuel-Fabianek, Monitoring of uranium concentrations in water samples collected near potentially hazardous objects in North-West Tajikistan

16:45 A. Walencik-Lata, B. Kozłowska, Preliminary results of uranium studies in rainwater samples in Poland

17:00 B. Kozłowska, A. Walencik-Lata, S. O. de Souza, F. Dantas Freire, Natural radionuclides in water near U-mine in Brazil

17:15 H. Bem, M. Dlugosz-Lisiecka, A. Gasiorowski, P. Szajerski, Measuring of soil radon by liquid scintillation counting

17:30 O. Günay, K. Günoğlu, İ. Akkurt, Natural radiation measurement in some beach sand samples, Istanbul-Turkey

17:45 M. Erdogan, K. Manisa, H. Bircan, İ. Çevik, N. Bingöldağ, R. Bıyık, Risk analysis and annual effective dose due to terrestrial and cosmic radiation in the region of Niğde Province (Turkey)

Oral Session

Radiation Detectors, Radiation Effects

Ohrid Hall

Chairperson: Miguel Ángel Carvajal Rodríguez

16:00 A. Jaksic, A. M. McGarrigle, N. Vasovic, A. Barry, R. Duane, Effects of critical processing steps parameters on RADFET performance

16:15 M. Cherepnev et al., Photon radiation spectrometer based on pin-photodiode

16:30 D. Richter, I. Stonecka, S. Schischke, K. Dornich, myOSL - A new series of portable and stationary equipment for OSL-dosimetry based on BeO

16:45 D. Meskauskaite et al., Comparative analysis of GaN and CdTe materials for radiation detectors

17:00 G. Tamulaitis, E. Auffray, M. Korjik, S. Nargelas, A. Vaitkevicius, Exploitation of free carrier absorption in quest for ten picosecond target for time resolution of radiation detectors

17:15 S. Abubakar, S. Kaya, R. Lok, A. Aktag, H. Karacali, E. Yilmaz, Effect of irradiation on interface state and series resistance characteristics of Y_2O_3 MOS capacitors

17:30 D. Hits, H. Kagan, W. Trischuk, Diamond detector technology: Status and perspectives

17:45 A. Gasiorowski, P. Szajerski, Phosphate glasses as passive detectors of ionizing radiation dose measurements

18:00 S. Kaya, S. Abubakar, R. Lok, H. Karacali, A. Aktag, E. Yilmaz, The evolution of the physical, chemical and electrical characteristics of SnO_2/Si interface under gamma irradiation

European LED Academy session:

Photonic signalling and clinical photobiomodulation

Kaneo Hall

Chairperson: Michele Pelletier

16:00 L. Fouque, Photonic signalling in acne vicious circle

16:15 S. Hausdorfer, Management of swelling due to aesthetic procedures by led device

16:30 K. Abdi, Healing cases: Clinical dynamics sequences of PBM effect

16:45 M. Pelletier, The "Photo Bio-flexible" Field

17:00 V. Zaporozhan, M. Pelletier, A. Ponomarenko, Immunological effects of light therapy

18:00-19:30 **Poster Sessions**

Car Samoil Hall

Poster placement on marked panels from 17:00

Poster removal from the panels until 20:00

Biochemistry

Chairpersons: Jelena Jovanović, Ivan Pozdnyakov

BC1 Š. Mandal, A. Čaušević, S. Semiz, Analysis of the plasma free fatty acid profile and composition in prediabetic subjects

BC2 J. Stanojević, D. Cvetković, J. Zvezdanović, Lj. Stanojević, S. Petrović, D. Marković, Indirect proof of bilirubin Type II photosensitizing properties under continuous UV irradiation regime

BC3 J. Stanojević, D. Cvetković, J. Zvezdanović, Lj. Stanojević, D. Marković, UV induced changes of bilirubin-benzophenone-riboflavin-querctin-phospholipids mixture in methanolic solution

Environmental Chemistry

Chairpersons: Jelena Jovanović, Ivan Pozdnyakov

EC1 J.-P. Jeun, Y.-J. Lee, P.-H. Kang, A study on the cation exchange fibers prepared by the radiation-induced grafting

EC2 I. Aliji, J. Velevska, M. Najdoski, A. Tanuševski, Chemically deposited electrochromic films and solar light modulation

EC3 J. F. Facetti Masulli, P. Kump, M. Delgado, Trace and minor elements in suspended sediments of selected river and brooks from Eastern Paraguay by X-Ray Fluorescence

EC4 T. M. Filho, E. Barros Ferreira, M. da Conceição Costa Pereira, J. R. Berretta, The use of the neutron activation analysis technique to determine heavy metals in *Nicotiana tabacum solanaceae*

EC5 R. Pivić, Z. Dinić, J. Maksimović, A. Stanojković-Sebić, Heavy metal pollution - the limiting factor in the use of irrigation water originating from the river Kolubara (Serbia)

EC6 A. Ene, F. Sloata, M. V. Frontasyeva, D. I. Moraru, S. S. Pavlov, Quantification of heavy metals and trace elements in soils around metallurgical industry by combined atomic and nuclear techniques

EC7 M. Krivokapić, I. Djuretić, G. Nikolić, D. Radonjić, Preliminary analysis of the amount of water from Montenegro industry

Radiation Chemistry

Chairpersons: Jelena Jovanović, Ivan Pozdnyakov

RC1 A. Paredes-Arriaga, A. Melendez-Lopez, S. Ramos-Bernal, A. Heredia, A. Negron-Mendoza, Irradiation of cytosine adsorbed in a clay mineral

RC2 A. Lopez-Islas, C. Fuentes-Carreón, J. Cruz-Castañeda, A. Heredia, S. Ramos-Bernal, A. Negron-Mendoza, The gamma radiolysis of aldehydes of biological importance in aqueous solutions

Radiochemistry

Chairpersons: Jelena Jovanović, Ivan Pozdnyakov

RY1 S. Kulyukhin, I. Melikhov, V. Lavrikov, V. Kulemin, V. Krapukhin, Effect of ionizing radiation field on CsI aerosols formed by condensation of supersaturated vapor

RY2 S. Kulyukhin, V. Kulemin, V. Krapukhin, E. Krasavina, M. Gorbacheva, I. Rumer, Application of microwave radiation for the decomposition of uranyl nitrate in the silica gel matrix

RY3 Iu. Simirskii, A. Stepanov, I. Semin, A. Volkovich, Determination of carbon-14 and tritium in irradiated reactor graphite

RY4 S. Corradetti et al., ISOLPHARM: new ISOL-production method of high specific activity beta-emitting radionuclides as radiopharmaceutical precursors

RY5 A. Gasiorowski, P. Szajerski, Adsorption of Cs-137 on alkali-activated slag and fly ash based sorbents

RY6 S. Dulanská, M. Štofaničková, Ľ. Mátel, M. Nodilo, I. Cocha, Ž. Grahek, Sequential determination of ^{90}Sr and ^{210}Pb in bone samples using molecular recognition technology product AnaLig® Sr-01

RY7 O. Kochnov, N. Zorina, Production of medical radionuclide ^{131}I on pressure-tube power reactor

Radiation Protection

Chairpersons: Jelena Ajtić, Sofija Forkapić

RP1 S. Nikolova, N. Mitreska, Implementing optimisation of medical exposure in clinical practice at the Institute of Radiology

RP2 V. Stepanov, A. Stepanov, S. Smirnov, Iu. Simirskii, A. Safronov, I. Semin, A. Volkovich, Radiation and video survey of the water cleanup and ventilation system of RFT reactor

RP3 F. Savino, T. Capussela, M. A. Di Pasquale, M. Quarto, G. Roberti, Occupational eye lens dose to clinical staff in interventional radiology: preliminary results

RP4 M. Grbić, A. Pavlović, Determining the zone of influence of transmission overhead power lines from the aspect of non-ionizing radiation

RP5 M. Mladenović, I. Maksimović, D. Arbutina, M. Milenović, Enhancing the nuclear security on nuclear research reactors RA and RB

RP6 A. Milatovic, B. Berisaj, N. Svrkota, Monitoring of occupationally exposed workers in Montenegro: An overview

RP7 A. C. Iglesias Rodrigues, T. Madi Filho, D. Gomes da Silva, Analysis and project of the high density storage racks for spent fuel of the research reactor IEA-R1

RP8 M. Długosz-Lisiecka, T. Jakubowska, Neutron and gamma radiation levels analysis around the cyclotron facility

RP9 O. Stoyanov, Data from security staff personnel monitoring in Bulgaria

RP10 S. Akozcan, M. Beste Ozturk, Measurements of gamma radiations at the Erciyes Mountain (Central Anatolian)

RP11 S. Akozcan, Seasonal variations of ^{210}Po activity concentrations in mussel and related dose assessment to the population

20:30-00:00 Conference Cocktail

Wednesday, June 20

09:00-18:30 Conference Excursion

20:30-00:00 Conference Cocktail

Thursday, June 21

08:00-19:00 Registration

08:00-09:30 Poster Sessions **Car Samoil Hall**

Poster placement on marked panels from 07:15

Poster removal from the panels until 14:00

Radiobiology

Chairpersons: Nataša Anastasov, Sangyong Lim

RB1 N. Chushova, G. Goroch, I. Cheshik, Influence of electromagnetic radiation from a mobile phone (1745 MHz) on the state of the reproductive system of male rats of two generations

RB2 E. V. Koryakina et al., RBE of accelerated carbon ions and of neutron-produced heavy-charged particles in Chinese hamster cells

RB3 A. Panek, J. Miszczyk, DNA repair processes in human lymphocytes irradiated with 60 MeV proton radiotherapeutic beam at IFJ PAN

RB4 H. Li, Q. Li, Circular RNA CBL11 mediates the proliferation of colon cancer cells via sponging up miR-6778-5p and regulating the YWHAE expression

RB5 T. Szatmári, E. Kis, E. Persa, G. Sáfrány, K. Lumniczky, Radiation-induced bystander signals in the blood can be mediated by extracellular vesicles

RB6 V. I. Potetnya, E. V. Koryakina, M. V. Troshina, N. G. Boldueva, S. N. Koryakin, S. E. Ulyanenko, Dosimetric and radiobiological aspects of cell monolayer irradiation with 14 MeV neutrons in the presence and absence of proton equilibrium

RB7 K. Wakimura, M. Kato, Effect of irradiation with gamma rays on chemotactic response and motility of *Escherichia coli*

RB8 M. Kuranova, A. Nozdracheva, R. Ushakov, N. Pleskach, I. Spivak, V. Mikhelson, Mosaicism in cell of ataxia-telangiectasia patients

RB9 A. Ylli, L. Binxhija (Qeska), E. Ylli, The chlorophyll pigment measurement in different generations at *Phaseolus Vulgaris* mutant lines

RB10 K. Voskanyan, A. Rzyanina, G. Mitsyn, V. Gaevskiy, Radioprotective effect of laser radiation with a wavelength of 532 nm on fibroblast cells

Radiation Effects

Chairpersons: Nataša Anastasov, Sangyong Lim

RF6 N. Shevtsova, D. Gudkov, A. Yavnuk, Radiation-induced biological effects in higher aquatic plants from the Chernobyl Exclusion Zone

RF7 C. H. Jin, H. Y. Kim, J.-B. Kim, The mixed extract of radiation mutated plant alleviates development of arthritis in animal and human body

RF8 G. Goroch, A. Kazlou, M. Bakshayeva, R. Novikov, N. Chueshova, A. Shubianok, Consequences of the combined action of immobilization stress and the electromagnetic field of the industrial frequency on the blood and reproductive system of male rats

RF9 M. Lekovic, E. Mahmutovic, N. Drekovic, N. Djordjevic, Effects of extremely low-frequency electromagnetic field on human lung fibroblast cell line MRC-5

RF10 S. Paras, Lj. Amidzic, N. Vojinovic, M. Matavulj, Impact of high-frequency electromagnetic fields produced by antennas for mobile communication on thymus structure in rats

Medical Imaging

Chairperson: Benjamin Zorko

MI1 M. Cvijovic, L. Ranin, Multislice Computed Tomography in the evaluation of hard and spotty calcificated plaque

MI2 D. Zoul, P. Zháňal, 3D reconstruction of inner structure of radioactive sample utilizing gamma tomography

MI3 S. Vučković, K. Paunović, M. Vujisić, A tissue-specific method for CT slice dose estimation

MI4 K. Paunović, S. Vučković, M. Vujisić, Estimation of CT patient-dose savings from the utilization of different image reconstruction algorithms

Radiotherapy

Chairperson: Benjamin Zorko

- RR1 Y.-N. Kim , H.-M. Joo, Reduction of dose estimation error of an artificial neural network algorithm for radiation treatment
- RR2 S. Song, H. Chun, T. Yu, H.-M. Joo, S. K. Kim, Y. N. Kim, A study on the optimization strategy of intensity-modulated radiotherapy for prostate cancer
- RR3 D. Jaroš, G. Kolarević, B. Pavičar, Dosimetric study on comparison of gamma index in pre-vmat treatment verification procedure using Delta4 and portal dosimetry
- RR4 P. Tulik, M. Tulik, M. Maciak, D. Kabat, J. Lesiak, Consideration regarding the secondary mixed radiation field around the medical linear accelerator - Measurements with and without an anthropomorphic phantom placed in the radiation field
- RR5 I. Yakovlev, S. Akulinichev, Proton therapy: Passive scattering technique improvement
- RR6 S. Petkovska, Y. Acarbas, M. Ginovska, H. Spasevska, Small field output factors and their impact in calculation model configuration

Medical Physics

Chairperson: Benjamin Zorko

- MP1 D. Ćirić, D. Otašević, B. Radojičić, D. Jovanović, G. Nišević, In vivo verification of entrance dose for head and neck treatments
- MP2 D. Krstic, D. Nikezic, M. Jeremic, M. Matovic, Monte Carlo MCNP code in Boron Neutron Capture therapy for several organs of the ORNL voxel phantom
- MP3 D. Parshkova et al., Geometric model of hematopoietic sites of human skeleton to be used in bone dosimetry: parameter estimation

Plenary Session

Invited Lectures

Biljana Hall

Chairperson: Gregor Kramberger

- 09:30 Arkadiusz Mandowski, Novel methods and development of radiation-induced optically stimulated luminescence (OSL) measurements
- 10:00 Peter Bossew et al., The European atlas of natural radiation
- 10:30 A. Pejovic-Milic, Use of radiation in non-conventional medical diagnostic procedures

11:00-11:30 **Refreshments**

Oral Session

Radioecology

Biljana Hall

Chairperson: Dharmendra Gupta

11:30 Q. Wu, C. Wang, Z. Cao, Y. Yu, Overview of NORM industries in China

11:45 D. Vasilache, R.-Cs. Begy, C. Baci, Reconstruction of historical land use changes in Fântânele Lake`s area (Romania), based on ^{137}Cs and $^{210}\text{Pb}_{\text{ex}}$ measurements

12:00 M. Nadri, C. Khiari, A. Ioannidou, Vertical profile of ^{210}Pb , ^{40}K and ^{137}Cs in Reggane and Ghardaia regions, Algeria

12:15 O. Günay, S. Aközcan, Determination of natural radioactivity levels in soil samples in Anatolian district of Istanbul

12:30 K. Manisa, M. Erdogan, A. Usluer, H. Çetinkaya, U. Işık, L. Sahin Yalcin, Determination of natural radioactivity in soils from Çorlu Regions in Tekirdağ Province, Turkey

12:45 M. Zheltonozhskaya, V. Zheltonozhsky, A. Tugay, T. Tugay, A. Chernyaev, Research of interaction of microbiological component of nuclear fuel contaminated soils with fuel-containing materials

11:30 **Oral Session**

Radiology

Ohrid Hall

Chairperson: Nese Ilgin Karabacak

11:30 B. Ajdinovic, Imaging in children with urinary tract infection

11:45 A. Bonfanti et al., Thoraco-abdominal triphasic CT in oncologic follow-up: assessment and advantages of "LOW DOSE" protocol

12:00 E. Petrova, Pulmonary dust diseases in Bulgaria

12:15 D. Obad Kovačević, J. Popić, V. Vidjak, Ultrasound guided percutaneous sclerotherapy of simple renal cysts: primary success and procedure safety

12:30 J. Popić, D. Obad Kovačević, Đ. Milković, V. Garay Vrhovac, V. Vidjak, The possibilities and limitations of direct digital radiography, ultrasound and computed tomography in diagnosing pleural mesothelioma

Oral Session

Radiation Physics

Kaneo Hall

Chairperson: Boris Lončar

11:30 D. Mrdja, K. Bikit-Šreder, I. Bikit, J. Slivka, S. Forkapic, Monte-Carlo simulation of background components for shielded HPGe detector

11:45 M. Cherepnev, V. Yakovleva, A. Zelinskiy, The estimation of the cosmic ray component and the total γ -background of atmosphere, comparison with the experiment

12:00 M. Ferrari et al., The SPES facility at Legnaro National Laboratories

12:15 Z. M. Cinan, A. H. Yilmaz, The large angle quasi-elastic scattering cross sections and the effective weight function based on the barrier distribution for $^{32}\text{S} + ^{92,94,96,98,100}\text{Mo}$ reactions

12:30 B. Erol, A. H. Yilmaz, Heavy-Ion Fusion Cross Sections for $^{20}\text{Ne} + ^{90,92,94,96}\text{Zr}$

12:45 S. Cakmak, Study of Gamow-Teller transitions for germanium isotopes

Oral Session

Radioecology, Radiation Protection

Biljana Hall

Chairperson: Beata Kozłowska

14:00 Ş. Karatepe, S. Şahin Bal, M. Kürşat, M. Fatih Kuluöztürk, E. Yılmaz, Gross alpha and beta radioactivity concentrations of aromatic plant, soil and water in Bitlis

14:15 D. K. Gupta, W. Schulz, G. Steinhauser, C. Walther, Accumulation and retention of radionuclides (Sr/Cs) by saprophytic fungi: Possible effect on uptake of these radionuclides by plants

14:30 B. Vranješ, V. Andrić, M. Vranješ, J. Ajtić, B. Mitrović, Caesium-137 and potassium-40 in blueberry-based products on the market in Serbia

14:45 C. Ganzha, D. Gudkov, Physicochemical forms of radionuclides and dose rates on *Bivalve Molluscs (Dreissenidae)* in the Chernobyl NPP cooling pond

15:00 S. Pflugbeil, I. Schmitz-Feuerhake, Relevance of the Chernobyl research for the evaluation of radiation effects in cases of low dose rate exposure

15:15 P. Kuča, J. Helebrant, I. Češpírová, J. Hůlka, Citizen monitoring network in the Czech Republic

Oral Session

Nuclear Medicine, Biomedicine

Ohrid Hall

Chairperson: Jelena Popić

14:00 **Keynote talk:** N. İ. Karabacak, Personalized therapy in cancer and theranostic approaches in nuclear and molecular medicine

14:30 S. Dugonjić, B. Ajdinović, D. Pucar, M. Šišić, Comparison of positive ^{99m}Tc -MIBI/ ^{99m}Tc subtraction scintigraphy and parathyroid hormone levels and histological type of parathyroid hyperplasia in patients operated from secondary hyperparathyroidism

14:45 Lj. Jaukovic, M. Rajovic, M. Radulovic, L. Kandolf-Sekulovic, Prediction of sentinel lymph node status by patient and primary tumor characteristics in cutaneous melanoma - A single center study

15:00 A. Vasiliev, S. Ermolaev, E. Lapshina, N. Betenekov, E. Denisov, B. Zhuikov, $^{225}\text{Ac}/^{213}\text{Bi}$ generator based on inorganic sorbents

15:15 S. Shubeska Stratrova, S. Mishevskva Jovanovska, G. Petrovski, M. Zivkovic, Legs/trunk and arms and legs sum to trunk fat mass indexes determined with dual-energy x-ray absorptiometry in Cushing's and non-Cushing's obese women

Oral Session

Radiation Physics, Radiation Effects

Kaneo Hall

Chairperson: Roberto Bedogni

14:15 M. Zheltonozhskaya, V. Zheltonozhsky, E. Lykova, A. Chernyaev, Photoactivation method of ^{10}Be activity measurement in nuclear power point constructions

14:30 T. Chuvilskaya, Investigations of isomeric cross section ratios for the reactions on ^{187}Re and ^{194}Pt targets

14:45 T. Bayram, S. Akkoyun, Determinations of transition energies and half-lives for photo-nuclear reaction products of some rare earth nuclei

15:00 M.-V. Ilie, T. B. Sava, Radiocarbon dating applications of accelerator mass spectrometry

15:15 B. Papajani, E. Vataj, A. V. Hasimi, A. Sinanaj, The study of the influence of additives in the crystallinity of recycled LDPE by IR and XRD analysis

15:30-16:00 **Refreshments**

Oral Session:

Radiation Protection **Biljana Hall**

Chairperson: Jordanka Semkova

16:00 I. Iorga, Simulated dose rate calculation for radioactive effluent transport pipes at VVR-S Nuclear Research Reactor from Bucharest - Magurele, Romania

16:15 C. Tuca, A. Stochioiu, R. Deju, Aspects of the radiological monitoring of the gaseous effluents released in the decommissioning of the biological concrete shielding of VVR-S nuclear reactor

16:30 L. Petrenko, Geological disposal of radioactive waste in Ukraine: approaches and concepts

16:45 M. Pietrzak, S. Pszona, A. Bantsar, Nanodosimetry for radiation exposure assessment

17:00 T. Bayram, A. H. Yilmaz, S. S. Yilmaz, Y. Misirlioğlu, A. Kucuk, E. Tutuncu, On the gamma attenuation of various polymer compounds

17:15 E. Vataj, U. Gjoka, F. Ylli, B. Papajani, Evaluation of doze rate field of industrial X-ray equipment for NDT

17:30 G. Žauhar, B. Dresto Alač, Comparison of professional radiation exposures of medical staff covered by personal dose monitoring considering the type of occupation and workplace

17:45 D. Vasovic, S. Musicki, S. Hristov, CBRN decontamination observed from multiple perspectives

Oral Session

Radiation Oncology, Cancer Research **Ohrid Hall**

Chairperson: Vladimir Jurišić

16:00 Keynote talk: M. Janiak, Cancer immunotherapy with low-level whole-body exposures to ionizing radiation

16:30 M. Bilski et al., Abscopal effect of radiotherapy - The pursuit of the unknown

16:45 P. Cisek, D. Kieszko, M. Bilski, I. Kordzińska-Cisek, P. Kozakiewicz, L. Grzybowska-Szatkowska, 3D-HDR intraluminal brachytherapy in oesophageal cancer

17:00 V. Solodky, A. Tsibulskii, A. Pavlov, A. Ivashin, S. Garmash, Salvage high-dose-rate brachytherapy of local prostate cancer recurrence

17:15 Y. Yahşi Çelen, Assessment of changes in tumor volume in head and neck cancers in terms of critical organs

17:30 N. Anastasov et al., Molecular characterization of combined MEK1 and HDAC inhibitor treatment upon irradiation in breast cancer cells

17:45 E. Glebov, A. Shushakov, I. Pozdnyakov, D. Vasilchenko, A. Melnikov, Photochemistry of Pt(IV) complexes prospective in photodynamic therapy of tumors

16:00 **Oral Session: Neutron and Heavy Ion Radiation**

Environmental Physics Kaneo Hall

Chairperson: Sergei Baranovskii

16:00 M. Costa et al., The e_LiBANS project: intense thermal and epithermal neutron fields based on a medical LINAC

16:15 R. Bedogni, A. Pietropaolo, J.-M. Gomez-Ros, A new concept of thermal neutron irradiator

16:30 V. Monti et al., Characterization measurements of E_LiBANS thermal neutron source

16:45 M. Karetnikov, Application of tagged neutron technology for measuring response of gamma-detectors to 14 MeV neutrons

17:00 H. K. Namburi, J. Soltes, J. Krejci, Application of neutron radiography for detection of hydrogen distribution in nuclear fuel claddings in LVR15 research reactor

17:15 S. Mitrofanov, Beam instrumentation of FLNR JINR accelerator complex for applied physics researches

17:30 S. Brkić, B. Tuka, Estimation of global solar radiation from sunshine duration for Mostar and Split area

17:45 Z. Kovač, J. Parlov, J. Barešić, Environmental isotope research for a more efficient protection of the future Kosnica well field (Zagreb, Croatia)

18:00-19:30 **Poster Sessions**

Car Samoil Hall

Poster placement on marked panels from 17:00

Poster removal from the panels until 20:00

Radon and Thoron

Chairperson: Igor Celikovic

RT1 P. Vukotic, R. Zekic, N. Antovic, Radon concentrations in multi-storey buildings in Montenegro

RT2 G. Nafezi, N. Mahmudi, A. Sinani, G. Hodolli, B. Uka, Comparison of radon activity concentrations between four different countries

RT3 L. Fijałkowska-Lichwa, T. A. Przylibski, First ²²²Rn activity concentration measurements in newly discovered parts of deeper-lying passages of Bear Cave in Kletno (South-West Poland)

RT4 B. Küçükömeroğlu, S. U. Duran, A. Şen, A. Çiriş, H. Taşkın, U. Çevik, Radon concentrations in drinking waters of Trabzon province, Turkey

RT5 T. Petrova, P. Miklyaev, High radon exhalation rate in Moscow

RT6 B. Kunovska, Z. Stojanovska, K. Ivanova, A. Angelova, A study of building factors affecting indoor radon concentration

Biophysics

Chairperson: Tomislav Stankovski

BP1 D. Krezhova, K. Velichkova, N. Petrov, Remote sensing-based empirical approaches for estimation of biophysical variables of plants under stress

BP2 K. Velichkova, D. Krezhova, Comparative analysis of hyperspectral vegetation indices for stress detection and estimation of biophysical variables in crops

Biomedical Engineering

Chairperson: Tomislav Stankovski

BE1 D. Djurovic Koprivica, T. Puskar, M. Jeremic Knezevic, B. Milekic, M. Paut Kusturica, Computer analysis of occlusion in fixed dental implant replacement

BE2 A. Bogdanovic, V. Tadic, I. Arsic, M. Stankovic, S. Petrovic, Supercritical carbon dioxide extraction in function of steroidal saponin isolation from *Trigonella foenum-graecum* L. seeds: Process optimization using response surface methodology

Radiation Physics

Chairperson: Aleksandar Kandić

RH1 N. Hasanli, M. Isik, Defect center parameters in B-irradiated MgO nanoparticles

RH2 S. Akkoyun, T. Bayram, Estimations of attenuation coefficients for gamma ray angular distribution

Microwave, Laser, RF and UV radiations

Chairperson: Selçuk Çömlekçi

NI1 A. Tačić, S. Petrović, V. Nikolić, S. Savić, Lj. Nikolić, I. Nikolić, Identification of sulfanilamide degradation products after UV irradiation

NI2 A. Tačić, S. Petrović, S. Savić, S. Savić, V. Nikolić, Lj. Nikolić, UV-stability studies of sulfanilamide in liposome vesicles

NI3 I. Topalova, Ts. Shalamanova, V. Zaryabova, M. Israel, Electromagnetic field exposure from telecommunication sources in areas with “sensitive” buildings and places

NI4 M. Israel, M. Ivanova, V. Zaryabova, Ts. Shalamanova, P. Ivanova, Occupational exposure to electromagnetic field - transposition of the European policy

NI5 M. Ivanova, Ts. Shalamanova, I. Topalova, M. Israel, Evaluation of the electromagnetic field exposure of the general public around telecommunication sources

NI6 B. Adnadjevic, J. Jovanovic, Kinetic study of water evaporation and PMA hydrogel dehydration under the microwave field

Neutron and Heavy Ion Radiation

Chairperson: Aleksandar Kandić

NH1 Ş. Şentürk, T. Bayram, On the ground-state nuclear properties of superheavy Hs, Ds and Cn nuclei

Environmental Physics

Chairperson: Aleksandar Kandić

EP1 J. Barešić et al., Study of the bank-filtered Zagreb aquifer system using isotope analyses near well field Kosnica

EP2 G. Žauhar, M. Čargonja, D. Mekterović, Analysis of aerosols in air after fireworks in the city of Rijeka by X-ray fluorescence technique (XRF)

EP3 N. Yagova, E. Fedorov, Space weather effects on ionosphere contamination by heavy ions originated from space debris

EP4 A. Ylli, L. Binxhija (Qeska), Heavy metals in *Primula veris* L., *Primulaceae* - their spread in Kosovo

20:30-01:00 Conference Gala Diner

Friday, June 22

09:00-13:00 **Registration**

Plenary Session

Biljana Hall

Invited Lecture

Chairperson: Kiril Krezhov

Special Talk

09:00 Byung Yeoup Chung, Current status and future perspectives of Advanced Radiation Technology Institute (ARTI)

Oral Session

Radiation Protection

Biljana Hall

Chairperson: Ištvan Bikit

09:30 I. Iorga, Methods of evaluation using MicroShield code for the biological concrete shield at the VVR-S Nuclear Research Reactor from Bucharest - Magurele, Romania

09:45 Z. Mirkov, N. Todorović, K. Bikit, J. Nikolov, Comparative measurement of dental X-ray devices in order to improve the quality control in the country

10:00 M. Fadil, Modeling of the nuclear facility S3 of SPIRAL2: Neutron environment and radiological study

10:15 M. Voytchev, R. Radev, The role of international standards for radiation protection instrumentation

10:30 M. Geçin, S. Çömlekçi, E. Eroğlu, Electromagnetic environmental problem in dental clinics

Oral Session

Radon and Thoron

Ohrid Hall

Chairperson: Francesco Cardellini

- 09:30 S. Forkapić, R. Lakatoš, K. Bikit-Šreder, I. Čeliković, P. Repić, D. Mrđa, The comprehensive radon survey in single-family houses in Vojvodina region
- 09:45 D. Avramović et al., Radon exhalation rate of some building materials common in Serbia
- 10:00 K. Jilek, A. Fronka, M. Fejgl, J. Lenk, I. Hupka, The NRPI integral system for measurement of an average air exchange rate in buildings
- 10:15 N. Ibrayev, Influence of high radon concentrations in the basement on the level of radon in the living space
- 10:30 N. Yagova, A. Sinha, A. Schekotov, E. Fedorov, G. Vichare, A possible relation between pre-seismic variations of natural ULF-ELF electromagnetic noise and regional thunderstorm activity
- 10:45 P. Miklyayev, T. Petrova, A. Marennyy, Cases of very high seasonal variations of radon levels in fault zones
- 11:00 A. S. Silva, M. de Lurdes Dinis, Measurements of radon concentration in natural mineral water

11.00-11:30 Refreshments

Oral Session

Radiation Protection Biljana Hall

Chairperson: Arkadiusz Mandowski

- 11:30 Z. Mirkov, D. Šegota, A. Milatović, Joint research for the purpose of determining local diagnostic reference levels in a part of the Republic of Serbia, the Republic of Croatia and the Republic of Montenegro
- 11:45 Z. Mirkov, J. Pajić, Handheld X-ray unit in diagnostic radiology procedures - risks and recommendations
- 12:00 A. Volchkova, E. Shishkina, M. Degteva, B. Napier, Dose coefficients to convert air kerma into organ dose rate values for people of different ages externally exposed to ^{137}Cs in soil
- 12:15 A. Stochioiu, C. Tuca, Analysis of radiological risks for critical group members as a result of nuclear activities in IFIN-HH, Romania

Oral Session:

Medical Devices, Biomedical Engineering,

Biomechanics, Biophysics

Ohrid Hall

Chairperson: Dora Krezhova

- 11:30 Yu. Kovalenko, S. Miroshnichenko, A. Nevgasymyy, Increase of diagnostic roentgenology efficiency by adding dynamic digital receivers to the operated conventional x-ray equipment
- 11:45 D. Yurkov et al., Novel generators for nuclear medicine: technical and antitumor characteristics
- 12:00 R. Pop-Iliev, W. Yi Pao, P. Karimipour-Fard, G. Rizvi, Visualization and morphological characterization of integral skin cellular polymeric composites using X-ray microtomography

12:15 A. Hedrih, K. (Stevanovic) Hedrih, Kinetic energy of homologue chromosome pairs in biomechanical oscillatory model of mitotic spindle

12:30 T. Stankovski, Coupling functions: Universal insights into dynamical interactions

12:45 Yu. P. Chukova, Radiation hormesis in the light of laws of quantum thermodynamics

Virtual Session

Radiobiology

N. Metlyaeva, A. Bushmanov, V. Krasnuk, O. Shcherbatykh, Ly. Yunanov, Assessment of the adaptation of patients with ARS, the victims of ChNPP and different radiation accidents, past psychophysiological examination

J. Pajić, D. Jovičić, A. P. S. Milovanović, Inter-individual variability in biological response to ionizing radiation measured by dicentrics and micronuclei

J. Pajić, D. Jovičić, A. P. S. Milovanović, Micronuclei frequency in peripheral blood lymphocytes of the serbian adult population: database for dose assessment by biodosimetry tools

A. P. S. Milovanović, J. Pajić, D. Jovičić, Biodosimetry and physical dosimetry tools in radiation exposure assessment

A. P. S. Milovanović, J. Pajić, D. Jovičić, Cytogenetic changes in persons occupationally exposed to radionuclides

S. Litvinov, N. Rashydov, M. Krivohizhaya, Radiation-induced long-term changes in the non-pigmented compounds in leaves of *Arabidopsis thaliana* (L.) Heynh.

U. Bliznyuk, P. Borschegovskaya, F. Studenikin, A. Chernyaev, The influence of accelerated 1 MeV electron beam on microbiological parameters of chilled trout

A. A. Oleshkevich, Cell sensitivity to doxorubicin after application of ultrasound

E. Gulik, N. Kostesha, Radioprotective activity of chitabis

N. Shimalina, V. Pozolotina, N. Orekhova, E. Antonova, Biochemical aspect of adaptation of *Plantago major* L. seed progeny from radioactive contaminated area

A. Gapeyev, N. Lukyanova, Radiation protective action of pulse-modulated electromagnetic radiation of extremely high frequencies: participation of SAPK/JNK-dependent intracellular signaling systems

A. Gapeyev, M. Yashanova, V. Nikolaev, O. Zanozina, T. Shcherbatyuk, Correction of the glycemic profile under the action of low-intensity electromagnetic radiation of extremely high frequencies in the combined therapy of diabetes mellitus in rats

Radiochemistry

A. Lazarević, S. Petrović, J. Stanojević, D. Cvetković, Lj. Stanojević, J. Zvezdanović, Apigenin and apigenin stability to UV-irradiation treatment in methanol solutions

H. Vasylyeva, I. Myroniuk, Sorption removal of Sr²⁺ and Y³⁺ ions from aqueous solutions by a TiO₂ - based sorbents

Radiation in Medicine

S. Vargas Castrillon, F. Cutanda Henriquez, Absolute dose determination in flattening filter-free beams: AAPM TG 51 and IPEM recommendations

Radiation Measurements

J. Czub et al., Absorbed dose readings using Gafchromic films EBT2 and XR-RV3 in an experimental system with low radiation X-rays

J. Czub et al., Measurements of half value layer using different detectors and calculations of effective energies for low energy X-ray experimental setup

M. Shyti, M. Trdin, Determination of ^{226}Ra and ^{228}Ra in water using LabSOCS efficiency calibration software for gamma spectrometric analysis

S. Plastun, N. Ryzhakova, M. Cherepnev, A. Udalov, S. Kozlov, S. Bryunetkin, Development of radon indicator method for determination of residual oil-water saturation in core samples

Radiation Protection

A. Talbi, M. A. Misdaq, A. Chaouqi, Study of alpha and beta radioactivity of clay originating from the nuclei of the ^{238}U and ^{232}Th radioactive series and resulting radiation doses to the skin of potters

O. Girjoaba, A. Cucu, Medical exposure in 2016 in Romanian radiological departments

L. Aslamova, O. Nasvit, I. Kulich, N. Melenevska, Safety culture as a key issue of radiation safety in medical activities with ionizing radiation sources

S. Musicki, D. Vasovic, S. Markovic, CBRN defence: organization, resources and tasks of armed forces

M. Benelfakir, M.A. Misdaq, Evaluation of committed effective doses to skin from the application of various plant oils inside saunas by bathers

P. A. Amoah, R. Agalga, D. N. Adjei, D. F. Charles, Theoretical evaluation of the nuclear security risk at a hypothetical nuclear facility using an adversary pathway methodology for an insider - outsider collusion scenario

Radioecology

M. Shyti, I. Bërdufi, F. Cfarku, G. Xhixha, Analysis of terrestrial natural radionuclides and the assessment of annual effective dose in the soils of the Institute of Applied Nuclear Physics in Albania

Ly. N. Mikhailovskaya, V. N. Pozolotina, E. V. Antonova, M. V. Modorov, Accumulation of radionuclides by plants of different taxonomic groups within the East-Ural radioactive trace

M. Asztemborska, M. Bembenek, M. Jakubiak, R. Stęborowski, The effect of TiO_2 and ZnO nanoparticles on the bioaccumulation of strontium ions by aquatic plants *Salvinia natans* and *Elodea Canadensis*

M. Varbeva, P. Kovacheva, Effects of sharp temperature change on the binding of Americium with humic and fulvic acids in soils

- M. Varbeva, P. Kovacheva, Effects of soil properties on the binding of Europium to humic and fulvic acids after rapid warming
- H. Vasylyeva, Yu. Kylyvnyk, O. Sych, Purification of water solutions from some radionuclides with natural and synthetic inorganic sorbents
- M. Kropacheva, M. Melgunov, I. Makarova, Artificial isotope speciation in plants' biomass, rhizosphere and alluvial soil of Yenisei flood plain
- Yu. Vosel, S. Vosel, M. Melgunov, I. Makarova, V. Strakhovenko, Three authigenic U(IV)- phases in lake sediments (Olkhon region)
- Yu. Vosel, E. Lazareva, S. Vosel, M. Melgunov, M. Kropacheva, V. Strakhovenko, Artificial isotopes (^{241}Am and ^{137}Cs) in diagenetic conditions of bottom sediments on the example of the Lake Krugloe (Tomsk Region, Russia)
- H. M. H. Zakaly et al., Natural radionuclides and heavy metal concentrations in marine sediments in view of tourism activities in Hurghada city, northern Red Sea, Egypt
- I. Yordanova, D. Staneva, R. Lazarova, Uranium in foodstuff samples from two regions in Bulgaria with relatively higher local levels of radioactive background
- T. Paramonova, M. Godyaeva, N. Kuzmenkova, O. Komissarova, Soil-to-wheat transfer of ^{137}Cs in conditions of post-Chernobyl landscape and in model pot experiment
- T. Paramonova, O. Komissarova, L. Turykin, Assessment of ^{137}Cs inventories in agricultural landscapes: soil sampling of actual ploughed horizon or standardized layers?
- Ž. Mihaljev, M. Živkov Baloš, S. Jakšić, B. Kartalović, Activity concentration of uranium, thorium and potassium in the urine of the roe deer (*C. capreolus*) from the area of Vojvodina (Northern Province of Serbia)

Radon and Thoron

- O. Symkanych et al., Measurement of radon content using Cr-39 solid state track detector
- A. Talbi, M. A. Misdaq, Radon, thoron and their progenies measured in the air of different marble factories and resulting alpha-dose to the respiratory tract of workers
- D. Guimarães, C. Monteiro, L. Peralta, S. Barbosa, Fiber optic sensor for radon monitoring: proof of concept
- M. Hanfi, Radiological assessment of gamma and radon dose rates at former uranium mining tunnels in Egypt
- K. Tushe, H. Reci, B. Daci, E. Bylyku, I. Berdufi, E. Kiri, Indoor radon concentration related to geological soils at different workplaces of Albania
- M. Mostafa, M. Zhukovsky, Alpha particle penetration in radiometric filter materials using Monte Carlo computer program (SRIM)
- S. Sakr, A. Ahmed, A. Mohamed, M. Moustafa, M. Mostafa, Deposition fractions of inhaled indoor radon decay products in human respiratory system with various levels of physical exertion
- H. Khalaf, M. Zhukovsky, M. Mostafa, M. Vasyanovich, Number, specific surface area and mass distribution comparison of radioactive aerosols
- M.A. Misdaq, M. Benelfakir, J. Ouguidi, Radiation doses to spa workers due to radon and its daughters from the inhalation of air

M. Poje Sovilj, J. Nikolov, I. Stojković, G. Šmit, N. Todorović, V. Radolić, Comparison of several methods for measuring ^{222}Rn in drinking water between two laboratories

Radiation Detectors

A. Tanushevski, M. Lazarova, I. Boev, Determination of structural and photoelectric characteristics of ZnO polycrystalline thin films and ZnO nanorod arrays obtained by spray pyrolysis

Radiation Effects

P. Kovacheva, N. Boshnakova, D. Zhekov, Effects of gamma-irradiation disinfestation with different dose rates on leather materials

P. Kovacheva, N. Boshnakova, Long-term side-effects of gamma-irradiation disinfestation on some properties of archives

U. Bliznyuk, V. Avduhina, P. Borschegovskaya, E. Kondratieva, F. Studenikin, A. Chernyaev, The impact of x-ray irradiation on the sprouting of potato tubers

N. Kizilova, L. Batyuk, Dielectrophoretic study of radiation protection ability of nanodiamonds

I. Kovalchuk, M. Gzhegotskyi, Influence of radiation on heart rate variability (HRV) of rats at different terms of post-radiation period

V. Nugis, I. Galstian, M. Kozlova, V. Nikitina, C. Dobrovolskaya, Development of acute leukemia in patient through 30 years after irradiation in accident at Chernobyl NPP

T. Shcherbatyuk, E. Plekhanova, I. Chernigina, V. Chernov, A. Gapeyev, Free radical activity of low-level led light with 400 nm and 460 nm wavelengths at the cholangiocellular RS-1 carcinoma of early and late growth stages in rats

E. Calabrò, S. Magazù, Increasing of ion flux in cellular membrane channels can be induced by exposure to electromagnetic fields

E. Calabrò, S. Magazù, Diamagnetic effects in a methylene group induced by low intensity exposure to a static magnetic field

T. Andriichuk, N. Raksha, S. Vakal, L. Ostapchenko, Aspects of ionizing radiation effects on purine metabolism in spleen lymphocytes upon injection of inosine

Medical Physics

Li. Aslamova, I. Kulich, N. Melenevska, Experience of Ukraine in education and refresher training of medical physicists as quality assurance of medical irradiation services

S. Vargas Castrillon, F. Cutanda Henriquez, Impact of extended CT density range on Eclipse Acuros XB

Radiology

I. V. Di Molfetta, S. del Monte, A. Forbidussi, A. Guerrisi, A. Giordani, B. Lippi, Low dose CT with kV reduction in thoracic study

V. Shchedrenok, M. Kotov, T. Zakhmatova, O. Moguchaya, Radiation predictors of outcomes of ischemic stroke

Radiation Oncology

P. Chakalaroski, V. Klisarovska, I. Stojkovski, Dose differences between two-dimensional and three-dimensional approach to high dose brachytherapy dose reporting of organs at risk in inoperable cervical cancer treatment

V. Klisarovska, P. Chakalaroski, I. Stojkovski, G. Petkovska, The effect from Paclitaxel/Carboplatin regimen to advanced ovarian carcinoma

I. Stojkovski, G. Petkovska, B. Petreska, P. Chakalaroski, V. Bojovska, V. Klisarovska, Relationship between O(6)-methylguanine-DNA methyltransferase (MGMT) promoter methylation status and tumor size on preoperative contrast enhanced MRI in patients with glioblastoma multiforme - Single institution experience

B. Petreska, S. Veljanoska-Petreska, I. Stojkovski, P. Chakalarovski, V. Klisarovska, G. Petkovska, Adjuvant chemotherapy and radiotherapy for Stage III endometrial cancer: Impact on survival

Environmental Chemistry

A. Miletic, E. Pecev Marinkovic, A. Pavlovic, S. Tosic, I. Rasic Misic, Application of novel analytical methods for pesticide dicamba determination in baby food

Environmental Physics

M. Cukavac, E. Hasanagic, S. Mihajlovic, L. Pekevski, J. Jankovic, M. Rasic, Geoeffective impacts of solar and geomagnetic disturbances

I. Shpachenko, N. Brandt, A. Chikishev, Variations in ATR FTIR spectra of several liquids

Microwave, Laser, RF and UV radiations

Z. Podrascanin, M. Atlagic, Z. Mijatovic, A. Firanj Sremac, UV index forecast in Vojvodina region

Biomedicine

S. Heta, I. Robo, H. Heta, Some data on surgical treatment of gastroesophageal reflux

S. Heta, I. Robo, E. Gina, N. Heta, Fibrinogen as an inflammatory marker of the connection of periodontitis with arteriosclerosis

Z. Ajanović, A. Sarač-Hadžihalilović, R. Gojak, L. Dervišević, Morphoscopic predictors for sexual dimorphism of skulls

L. Dervisevic, Z. Ajanovic, A. Dervisevic, E. Kapur, I. Hasanbegovic, Anatomical study of nutrient foramina on the diaphysis of the human fibula

A. Dervišević et al., Assessment of anti-inflammatory effect of alpha-tocopherol on induced rheumatoid arthritis in rats

Biochemistry

J. Jovanović Mirković, G. Kocić, R. Nikolić, D. Dejković, Biochemical and pathophysiological changes in pancreatic tissue caused by lipid peroxidation

J. Jovanović Mirković, G. Kocić, R. Nikolić, D. Dejković, Oxidative stress developed by toxic lead in the pancreatic tissue of Wistar rats

Biophysics

A. A. Oleshkevich, Physiological state of horse blood cells in continuous and pulsed ultrasonic field

A. V. Novikova, A. A. Oleshkevich, V. E. Novikov, Change in acid erithrogram of laboratory animals in constant electric and magnetic field

A. A. Novikova, A. A. Oleshkevich, V. E. Novikov, Effect of constant electric field on the change of erithrocyte membrane permeability for glucose

S. A. Komarova, A. A. Oleshkevich, Determination of the features of the coat by biophysical methods

I. Shpachenko, N. Brandt, A. Chikishev, Raman spectroscopy in the study of enzyme kinetics

Other Topics

M. S. Jankulovska, V. Dimova, M. Jankulovska, The application of the semiempirical methods to determine the proton transfer of some benzoyl hydrazones

V. Dimova, M. S. Jankulovska, M. Jankulovska, A quantum chemical investigation of N1-substituted 1,2,4-triazole