

PROGRAMME

May 27 - 30, 2014 | Faculty of Electronic Engineering | Niš | Serbia



Second International
Conference on
Radiation and Dosimetry in
Various Fields of Research

www.rad2014.elfak.rs



Second East European
Radon Symposium

www.rad2014.elfak.rs/seeras





FINAL PROGRAMME OF RAD 2014 & SEERAS

Monday, May 26

16:30-19:00	Early registration, part 1, The Regent Club hotel
19:30-20:30	Early registration, part 2, Faculty of Electronic Engineering
20:30-23:30	Cocktail, Faculty of Electronic Engineering

Tuesday, May 27

08:00	Registration	Lobby
09:30	Official Opening	Room A1

	Plenary Session	Room A1
	Chairperson: Olivera Ciraj-Bjelac	

10:00	RAD 2014 Ahmed Meghzi, IAEA-VIC, Austria, Dosimetry standards in medical radiation dosimetry: Needs and challenges
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10:30	SEERAS Tore Tollefsen, EC Joint Research Centre, Italy, From the European indoor radon map towards a map of natural radiation
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11:00	Refreshments
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	Oral Session RAD 2014 Radiation protection in medicine	Room A
	Chairperson: Barbara Caccia	

11:30	J. Sampaio, M. Conceição Abreu, P. Sousa, Scatter fraction with simulations. Revisiting radiation scatter in x-ray imaging
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11:45	F. Manafi, S. M. Hosseini Pooya, L. Hafezi, A. R. Talaeipour, Occupational exposure due to working with a portable dental x-ray system
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12:00	Đ. Milković, M. Ranogajec-Komor, L. Porcs-Makkay, Ž. Knežević, Influence of various factors on the dose of personnel during cardiology diagnostic
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12:15	A. Skopljak-Beganović <i>et al.</i> , A tool for estimation of effective doses in interventional cardiology
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12:30	J. Chabukovska-Radulovska, T. Slezekovska, A. Poposka, Reducing radiation exposure: Our experience review and further steps
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12:45	D. Arandjic, O. Ciraj-Bjelac, D. Hadnadjev, S. Stojanovic, P. Bozovic, Radiation doses in adults CT practice in Serbia: Initial results
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Oral Session SEERAS

General aspects and Rn policy

Room B

Chairperson: James Mc Laughlin

- 11:30 T. Boal, K. Rovenska, T. Colgan, **The IAEA programme for controlling public exposure to radon**
- 11:45 B. Dehandschutter, **The contribution of geological information to establish radon action plans**
- 12:00 Z. S. Žunić, P. Ujić, *et al.*, **High variability of indoor radon concentrations in uraniumiferous bedrock areas in the Balkan region**
- 12:15 M. Zhukovsky, I. Yarmoshenko, A. Onishchenko, **Problems of establishing national reference level**
- 12:30 D. Nikezic, D. Vucic, J. Vaupotic, Z. Stojanovska, D. Krstic, Z. S. Zunic, **Radon levels and resulting effective doses of residents in Gornja Stubla at Kosovo applying dosimetric lung model based on ICRP 65 and ICRP 66 methodology**
- 12:45 M. Neznal, M. Neznal, **History of soil-gas radon concentration measurements in the Czech Republic**
- 13:00 C. Cosma, B. Papp, A. Cucuș (Dinu), L. Suci, O. A. Dumitru, G. Banciu, C. Sainz, **First Results on Remedial Techniques against Radon in Area of Baita-Steii (Romania)**

Oral Session RAD 2014

Biophysics

Room D

Chairperson: Gordana Žauhar

- 11:30 D. Krezhova, S. Maneva, **Hyperspectral remote sensing applications for environmental protection**
- 11:45 N. Kudryasheva *et al.*, **The use of marine luminous bacteria for assessing radiation hormesis and toxicity**
- 12:00 R. Angelova, V. Groudeva, I. Nedkov, I. Sziklai-László, K. Krezhov, **INAA study of synthetic and natural iron bacteria products**
- 12:15 T. Wysokinski *et al.*, **QA dosimetry for the biomedical imaging and therapy facility at CLSI**
- 12:30 S. Shubeska Stratrova, **Dual energy x-ray absorptiometry gold standard for bone health and body composition assessment**
- 12:45 G. Tchernev, S. Philipov, K. Semkova, **Pigmented lesions in Dermatology- a diagnostic and therapeutic problem**

13:00-14:30

Lunch

Plenary Session

Room A1

Chairperson: Shinji Tokonami

RAD 2014

- 14:30 Gayle Woloschak, Northwestern University, USA, **Using archival animal databases to re-evaluate dose and dose-rate effectiveness factor (DDREF) estimates**

SEERAS

- 15:00 Constantin Cosma, Babes-Bolyai University, Romania, **Radon research status in Romania**

Oral Session RAD 2014

Radiation protection

Room A

Chairperson: Nataša Todorović

- 15:30 T. McKenna, P. V. Welter, J. Callen, E. Buglova, **Protection of the public during a severe emergency at a light water reactor or its spent fuel pool**
- 15:45 I. Vošahlíková, P. Otáhal, **Decontamination of protective clothing against radioactive contamination**
- 16:00 A. Mladenov, D. Stankov, T. Nonova, K. Krezhov, **Radiation protection, radiation waste management and site monitoring at the nuclear scientific and experimental centre IRT-Sofia at INRNE-BAS**

- 16:15 M. Spunei, M. Mihai, I. Malaescu, C. N. Marin, **Absorbing materials with applications in radiotherapy and radioprotection**
- 16:30 J. Ranouil *et al.*, **Results of the French national working group GEDOC for occupational eye-lens exposure in clinical and industry fields**
- 16:45 S. B. Chand, P.P. Chaurasia, **Status of radiation protection and safety at BPKM Cancer Hospital, Nepal**

Oral Session RAD 2014

Indoor Rn and Tn

Room B

Chairperson: Dragoslav Nikezić

- 15:30 F. Bochicchio, S. Antignani, C. Carpentieri, G. Venoso, **The Italian national radon action plan: some results and perspectives**
- 15:45 C. Sainz-Fernandez *et al.*, **The Spanish indoor radon mapping strategy**
- 16:00 P. Bossew *et al.*, **Relation between radon in schools and in dwellings: A case study in a rural region of Southern Serbia - the "Onion Study"**
- 16:15 Z. Stojanovska *et al.*, **Preliminary results from time integrated measurements concentrations of indoor radon, thoron and their progenies in schools of Republic of Macedonia**
- 16:30 K. Ivanova, M. Tsenova, B. Kunovska, Z. Stojanovska, V. Badulin, **Measurements of indoor radon concentration in kindergartens in Sofia, Bulgaria**
- 16:45 G. Wurm, W. Ringer, J. Gräser, H. Friedmann, A. Baumgartner, C. Seidel, F. Kabrt, **Comprehensive radon surveys in six municipalities in Austria**
- 17:00 Ch. S. Aliev, A. A. Feyzullaev, R. J. Bagirli, F. F. Mahmudova, **Radon field in Azerbaijan: nature, concentration levels and experience for its reduction**

Oral Session RAD 2014

Medical imaging and Medical physics

Room D

Chairperson: Jorge Miguel Sampaio

- 15:30 A. Y. Kilcar, F. Z. B. Muftuler, H. Enginar, E. I. Medine, V. Tekin, P. Unka, **A novel brain imaging agent including Alzheimer's disease diagnosis potential: ^{99m}Tc-BIOQUIN-HMPAO**
- 15:45 L. V. Messa, C. Paradiso, E. M. Messa, G. L. Messa, U. Arrigucci, **Is it possible that get closer to Golden Ratio means to be more healthy? A study of proportions of the human body through Magnetic Resonance Imaging**
- 16:00 E. Petrova, **Influence of some risk factors on chest X-ray finds in patients with initial pneumoconiosis**
- 16:15 A. Meghzifene, J. Le Heron, **The medical physics practice in the light of the new international basic safety standards**
- 16:30 A. Esposito, B. Caccia, C. Andenna, **GEANT4 simulation of a helical tomotherapy unit**
- 16:45 E. Sukhikh, E. Malikov, M. Rychkov, **Dosimetry of electron beam extracted from betatron by polymer films gafchromic EBT 3**

17:00-17:30

Refreshments

17:30-19:00

Poster Sessions

Lobby

RAD 2014

Radiation protection

Chairpersons: Phillip Vilar Welter

- RA1 B. Bašić, A. Beganović, A. Skopljak-Beganović, D. Samek, **Fifteen years of occupational exposure monitoring in Federation of Bosnia and Herzegovina**
- RA2 D. Krstic, Z. Jovanovic, D. Nikezic, D. Savic, D. Vucic, **Calculation of the dose conversion coefficients for the voxelized eye lens for neutrons irradiation**

- RA3 E. Iliescu, S. Bercea, D. Niculae, A. Celarel, S. Patrascu, **Area dosimetry for the new radiopharmaceutical center in IFIN-HH**
- RA4 G. Stankunas, A. Tonkunas, R. Pabarcus, **Assessment and benchmarking of the impact to gamma dose rate employing different photon-to-dose conversion factors using MCNP code at the decommissioning stage of Ignalina NPP**
- RA5 H. Malá, P. Rulík, T. Ježková, **Emergency response exercise of laboratories equipped with gamma spectrometry**
- RA6 J. Rachubik, **Monitoring of food radioactive contamination as a tool for consumer radiation protection**
- RA7 K. Wołoszczuk, D. Aksamit, K. Ciupek, **Assessment of occupational radiation exposure from RTG and CT in veterinary clinics**
- RA8 N. Navab Moghadam, S. M. Hosseini Pooya, H. Afarideh, M. R. Kardan, **A national intercomparison program for performance approval tests of individual dosimetry service providers in Iran**
- RA9 V. N. Gulbin, N. S. Kolpakov, V. V. Polivkin, N. P. Gulbina, **Investigation of radio- and radiation-protective nano-structured materials**
- RA10 Đ. Vukmirović, B. Đurović, **Aero engines maintenance - specific risks**
- RA11 Y. N. Kim, G. H. Kim, S. K. Kim, K. Jeong, S. H. Park, **Monte Carlo study on the photoneutron shielding in a medical accelerator room**
- RA12 Y. Lee, **Development of the application software and design of the hardware for the radiation safety management**
- RA13 R. Druteikienė, J. Šapolaitė, Ž. Ežerinskis, A. Puzas, V. Remeikis, V. Juzikienė, **Iodine behaviour in cemented radioactive waste storage barriers**
- RA14 V. Cibreva, E. Stikova, **Comparative analysis of two methodologies for risk evaluation and assessment at workplace where professional exposure of ionized radiation exists in conditions of controlled radiation zone**

RAD 2014

Radiation protection in medicine

Chairpersons: Seyed Mahdi Hosseini Pooya

- RB1 M. Gazdić-Šantić *et al.*, **Influence of computed tomography angular tube current modulation on patient skin dose**
- RB2 O. Girjoaba, A. Cucu, **Romanian pediatric exposure to ionizing radiation from diagnostic medical procedures**
- RB3 M. Zdraveska Kochovska, V. Spasic Jokic, O. Vaskova, A. Bogdanovska, D. Miladinova, V. Majstorov, **Calculated doses to family members of patient treated with radioiodine 131**
- RB4 J. Samac, **Assessment of absorbed and effective dose for patients after parathyroid gland scintigraphy using ^{99m}Tc-MIBI**
- RB5 M. Vujovic, O. Ciraj-Bjelac, P. Bozovic, D. Arandjic, M. Gavrilovic, **Uncertainty of dose assessment in conventional radiography**
- RB6 M. Bashir, I. I. Suliman, **Staff dosimetry in interventional cardiology using electronic personal dosimetry**
- RB7 D. Kishta, Aa. Deda, K. Preza, E. Islami, **Optimisation medical exposures in intervention radiology used in Mother Teresa Hospital, Tirana, Albania**
- RB8 M. Bashir, E. Mohamed-Ahmed, **Reduction of patient's dose of I-131 therapy by used local diuretic juice**
- RB9 K. Uhrhan, F. Sudbrock, A. Drzezga, **The patient as a radioactive source - an intercomparison of survey-meters for measurements in nuclear medicine**
- RB10 V. Acovska, V. Gershan, **Which is more dominant parameter in dap value fluoroscopic time or patient size?**

RAD 2014

Medical imaging

Chairpersons: **Elisaveta Petrova**

- RC1 A. Mladenovic, Z. Markovic, S. Radenkovic, B. Orbovic, V. Mircetic, G. Tomasek, **Low dose computerized tomography examinations of the heart, prevention and screening of the coronary occlusive disease**
- RC2 B. Çekiç, F. Z. Biber Muftuler, A. Y. Kilcar, Ç. İçhedef, P. Unak, **Interaction between broccoli extract and ^{99m}Tc-GH on *in vivo* distribution and labeling of blood components**
- RC3 B. Sabuncu, F. Z. Biber Muftuler, A. Y. Kilcar, B. Çekiç, E. Uçar, **Effects of green tea extract on the radiolabeled blood cells and on the biodistribution of radiopharmaceutical sodium pertechnetate**
- RC4 M. Ozkan, F. Z. Biber Muftuler, A. Y. Kilcar, E. I. Medine, P. Unak, **Extraction of hydroxytyrosol from olive leaves, radiolabeling with I-131 and evaluation bioaffinity of the radioiodinated hydroxytyrosol**
- RC5 M. Stevic, M. Vlajkovic, G. Koracevic, M. Rajic, S. Ilic, **Avoiding of false positive finding in spect perfusion myocardial scintigraphy with iterative images reconstruction**
- RC6 O. Büyükok, S. Teksöz, Ç. İçhedef, E. Uçar, B. Çekiç Bozkayalar, **Evaluation of radiolabeled aminoacid coated magnetic nanoparticles**
- RC7 V. Riversi, A. Giansanti, A. Belba, L.V. Messa, F. Vigni, G.L. Messa, R. Ponchietti, **Importance of ultrasound elastography prior to testicular surgery: Clinical evidence**
- RC8 S. Radenkovic *et al.*, **HER2 positive breast cancer patients: correlation between mammographic and pathological findings**
- RC9 Ş. A. Alan, S. Teksöz, Ç. İçhedef, E. Uçar, Ö. K. Güldü, **Radiolabeling of a nitrogen mustard derivative**
- RC10 A. N. Solovyev, V. I. Kharlov, U. A. Stepanova, V. V. Federov, **Medical images processing for Monte-Carlo based treatment planning simulation**
- RC11 V. Serban, G. Stanescu, S. Serban, D. Stanescu, E. L. Grigorescu, **Contrast versus patient dose in modern diagnostic radiology**
- RC12 V. D. Zivkovic, **Scintigraphy measurement of segmental colonic transit in children with bowel bladder dysfunction**

RAD 2014

Medical use of radiation

Chairpersons: **Vladimir Jurišić**

- RD1 D. Stanojevic *et al.*, **Radiology interventions in cardiovascular diseases during pregnancy- ignore taboos to save lives**
- RD2 D. Jablanovic, O. Ciraj-Bjelac, R. Maksimovic, S. Seric, **Comparison of radiation dose and image quality in screen-film and digital radiography**
- RD3 M. Laoues, **Validation of gate simulation code for dosimetry in gynecological brachytherapy by Césium-137: intercomparison system Manchester and ICRU-38**
- RD4 O. Ciraj-Bjelac, D. Arandjic, P. Bozovic, **Quality control in interventional cardiology and radiology**
- RD5 S. Shubeska Stratrova, **Central obesity index determined with DXA**
- RD6 V. Sekulic, M. Rajic, M. Vlajkovic, S. Ilic, M. Stevic, **Influence of lithium carbonate on efficacy of radioiodine therapy in patients with Graves' hyperthyroidism-our preliminary results**
- RD7 M. Vlajković, M. Rajić, M. Stević, S. Ilić, V. Petronijević, M. Matović, **The influence of proliferation index on somatostatin receptor scan in patients with carcinoid tumors**
- RD8 Y. N. Kim, S. K. Kim, K. Jeong, C. G. Lee, I. J. Lee, J. Seong, S. H. Park, **Evaluation of the scattered dose by blankets for helical tomotherapy**
- RD9 Y. N. Kim, S. K. Kim, K. Jeong, S. H. Park, **Application of respiration data to evaluate the radiation dose for 4-dimensional radiotherapy**

- RD10 L. Yettou, B. Mohamed, Calculation of the cross sections on ^{63}Cu and ^{176}Lu targets used for production of ^{64}Cu and ^{177}Lu therapeutic radionuclides by using the talys and empire codes
- RD11 G. Pavlovski, M. Nikolova, V. Poposka, A. Stankov, R. Jankova-Ajanovska, Lj. Cakar, The role of forensic radiology in the process of forensic expertise and investigation

RAD 2014

Medical physics

Chairpersons: Fazilet Zümrüt Biber Müftüleri

- RE1 B. Caccia *et al.*, GEANT4 Monte Carlo as a tool to evaluate the effect of different lung densities on radiotherapy dose distribution
- RE2 K. P. Chang, L. Y. Chen, Y. H. Chien, Monte Carlo simulation of LINAC irradiation with dynamic wedges
- RE3 P. Kazantsev, Clinical narrow photon beam profile reconstruction from measurement data with ionization chamber
- RE4 V. I. Kharlov, V. I. Potetnya, A. A. Lichagin, Effective and equivalent dose evaluation for breast cancer radiation treatment on NG-24 neutron generator
- RE5 V. Gracanin, A. Rosenfeld, M. Lerch, Neutron dosimetry for an 18MV medical linear accelerator using silicon pin diodes
- RE6 Z.G. Portakal, C. Tunali, A comparative treatment planning study of intensity modulated radiotherapy and 3-D conformal radiotherapy for head & neck cancer
- RE7 R. Tzoneva, I. Ugrinova, V. Uzunova, M. R. Berger, Combine action of electrical field and erufosine on breast cancer cells

RAD 2014

Pharmacological aspects of radiation

Chairpersons: Vladimir Jurišić

- RF1 D. Niculae, I. Ursu, L. Craciun, R. Leonte, A. Silisteanu, F. Puicea, A new facility for radiopharmaceuticals research at IFIN-HH
- RF2 S. Koryakin *et al.*, The study of new compounds based on hyaluronic acid for neutron and photon capture therapies

SEERAS

Rn news from the region and regional Rn policy

Chairpersons: Alexandra Onishchenko

- SA1 G. Gillmore, R. Crockett, F. Perrier, L. Fijalkowska-Lichwa, A Review of UNESCO IGCP Project 571, 'Radon, Health and Natural Hazards'
- SA2 P. Bossew, N. C. Da Silva, The planned Brazilian radon survey - concepts and particular challenges
- SA3 A. Kasumović, F. Adrović, A. Kasić, E. Hankić, Indoor radon activity concentration measurement and assessment of annual effective dose in houses of Tuzla City, Bosnia and Herzegovina
- SA4 Lj. Gulan, G. Milic, Z. S. Zunic, B. Vuckovic, Peter Bossew, First step mapping of indoor thoron concentration in the residential houses of Kosovo and Metohija
- SA5 J. Vaupotič *et al.*, Radon and thoron in homes within a regular grid in Slovenia
- SA6 S. Hurst, Saxon Radon Strategy - In Anticipation of the EU BSS
- SA7 V. Radolić, I. Miklavčič, D. Stanić, M. Poje, I. Krpan, M. Mužević, B. Petrinec, B. Vuković, Identification and mapping radon-prone areas in Croatia - preliminary results for Lika-Senj and southern part of Karlovac County
- SA8 D. Pressyanov, Z. Stojanovska, D. Dimitrov, S. Georgiev, Pilot survey of indoor radon in Republic of Macedonia using retrospective method
- SA9 O. A. Dumitru, B. P. Onac, J. J. Fornós, C. Cosma, Preliminary results of radon concentration measurements in Arta and Campanet touristic caves (Mallorca Island, Spain)

- SA10 B. Kunovska, K. Ivanova, Z. Stojanovska, V. Badulin, **Measurements of outdoor radon concentration in different settlements in Bulgaria**

SEERAS

Rn geology and water

Chairpersons: Vladimir Udovičić

- SB1 M. İçhedef, **Soil gas radon anomalies and seismic activities around Urla-Karaburun fault zone**
- SB2 A. Cozma, M. Moldovan, C. Baciú, B. Burgehele, **Radon and radium monitoring in several groundwaters from Roşia Montană Area, România**
- SB3 M. Murat Sac, **The radon and heavy metal contents of thermal waters in Denizli Region, Western Turkey**
- SB4 M. Moldovan, V. Benea, D. Nita, B. Papp, B. Burgehele, N. Bican-Brisan, C. Cosma, **Radon and radium concentration in water from north-west of Romania and the estimated doses**
- SB5 N. Kapanadze, G. Melikadze, M. Bezek, J. Vaupotič, **Radon levels in selected waters in Georgia**
- SB6 G. Melikadze, N. Kapanadze, J. Vaupotič, M. Bezek, S. Šebela, **Levels of radon, thoron, ions and gamma radiation in air of the Sataplia and Prometheus caves in Georgia**

SEERAS

Indoor Rn and Tn

Chairpersons: Jadwiga Mazur

- SC1 Z. Ćurguz *et al.*, **Assessment of nuclear track detectors exposure in schools of Banja Luka City, Republic of Srpska**
- SC2 Z. Ćurguz, *et al.*, **Variability of radon and thoron equilibrium factors close to the wall in indoor environments of Banja Luka city (Republika Srpska)**
- SC3 I. Mócsy, I. Csige, M. Ranogajec-Komor, K. Szacsvai, T. Nédá, Ž. Knežević, **Proposal for radon mapping**
- SC4 M. Hosoda, S. Tokonami, A. Sorimachi, Y. Omori, T. Ishikawa, **Investigation of indoor radon concentration at temporary houses in Fukushima prefecture after the Fukushima nuclear accident**
- SC5 F. Loffredo, G. La Verde, M. Quarto, M. Pugliese, C. Mattone, V. Roca, **Preliminary radon concentration measurements in museums of University Of Naples, Italy**
- SC6 D. M. Maletić *et al.*, **Correlative and multivariate analysis of increased radon concentration in underground laboratory**
- SC7 J. Vaupotič, M. Bezek, P. Kolarž, I. Kobal, Z. S. Žunić, **Impact of concentration and size distribution of nano particles (5-1100 nm) on the fraction of unattached radon progeny in dwelling environment**
- SC8 D. Grządziel, K. Kozak, J. Mazur, M. R. Dudzińska, B. Potednik, I. Bilska, M. Mroczek, **Dependence of radon and its attached and unattached progeny concentration on indoor air parameters**
- SC9 S. Porojanova, T. Dimitrova, L. Hineva, B. Manusheva, **Study of radon levels in residential buildings of Varna Region, Bulgaria**

20:00-23:00

Cocktail, University of Niš, Atrium

Wednesday, May 28

Oral Session RAD 2014

Radiation measurements and radioecology

Room A

Chairperson: Serpil Aközcan

- 09:00 I. Krajcar Bronić, J. Barešić, N. Horvatinčić, **Determination of biogenic fraction in solid and liquid fuel by the ^{14}C method**
- 09:15 I. Jakonić, N. Todorović, J. Nikolov, I. Krajcar Bronić, B. Tenjović, M. Vesković, **Rapid method for tritium measurements with liquid scintillation counting on Quantulus 1220**
- 09:30 G. Pantelić, D. Todorović, J. Nikolić, M. Rajačić, **Testing of homogeneity of material distributed in interlaboratory comparison**
- 09:45 M. Čujić, J. Petrović, M. Đorđević, R. Dragović, S. Dragović, **The radiological hazard due to naturally occurring radionuclides in soil around thermoelectric power plant**
- 10:00 Jevremović *et al.*, **High precision measurement of the half - life of ^{19}Ne**
- 10:15 N. Horvatinčić *et al.*, **Isotope analyses of the lake sediments in the Plitvice lakes area**
- 10:30 N. Eren, E. Altinkaya, **Researching of natural radiation dose level in the around of Beyşehir Lake of Turkey**

Oral Session SEERAS

Indoor Rn and Tn regarding different issues

Room B

Chairperson: Carlos Sainz -Fernandez

- 09:00 S. Tokonami, T. Ishikawa, S. K. Sahoo, A. Sorimachi, M. Hosoda, Y. Omori, **Thoron and its progeny in high background radiation areas**
- 09:15 M. Rogozina, M. Zhukovsky, A. Ekin, M. Vasyanovich, **Thoron decay products size distribution in monazite storage facility**
- 09:30 R. Trevisi, F. Cardellini, F. Leonardi, C. Vargas Trassiera, **A comparison of radon and thoron and their decay products behavior in indoor air**
- 09:45 J. Vaupotič, M. Bezek, A. Gregorič, **Experimental evidence of the dependence of the fraction of unattached radon decay products on the aerosol characteristics**
- 10:00 P. Kolarž, J. Vaupotič, I. Kobal, N. Kávási, T. Ishikawa, S. Tokonami, Z. S. Žunić, **Complex radon-thoron study in dwellings in Sokobanja (southern Serbia)**
- 10:15 D. Pressyanov, D. Dimitrov, **Using CDS/DVDS for radon and thoron monitoring in underground mines**
- 10:30 Z. Sas, J. Szántó, J. Somlai, T. Kovács, **Utilization possibilities and characterization of red mud as additive material in building material industry**

Oral Session RAD 2014

Radiation physics

Room D

Chairperson: Anatoly Rozenfeld

- 09:00 F. Becker, B. Kienzler, **Simulation of alpha dosimetry for predicting production of radiolytic species at the surface of spent nuclear fuel pellets**
- 09:15 S.V. Nikiforov, V.S. Kortov, **Dosimetric response for crystalline and nanostructured aluminum oxide to high current pulse electron beam**
- 09:30 D. Mrdja, K. Bikit, I. Bikit, J. Slivka, **Monte-Carlo simulation of bremsstrahlung induced dose depending on source matrix**
- 09:45 V. Maslyuk, I. Megela, T. Okunieva, J. Pekar, V. Pekar, **Specific features of the influence of high-current high-energy electron beams on the luminescent properties of undoped and NB, FE-doped AL₂O₃ crystals**
- 10:00 D. Krstic, Z. Jovanovic, V. Markovic, D. Nikezic, V. Urosevic, **MCNP simulation of the dose distribution in liver and pancreas cancer treatment for BNCT therapy**

Oral Session RAD 2014

Non-ionizing radiation

Room E

Chairperson: Kiril Krezhov

09:00

G. Žauhar, S. Jurković, Đ. Smilović Radojčić, D. Dobravac, **Testing of ultrasound transducers by use of thermochromic tile**

09:15

B. Djordjevic, D. Sokolovic, A. Veljkovic, M. Despotovic, J. Basic, G. Ristic, D. Krstic, **The activity of polyamine oxidase and diamine oxidase in the thymus tissue of rats exposed to microwave radiation**

09:30

Z. Banovački, I. Srećković, M. Matavulj, **Extremely low frequency electromagnetic field (ELF EMF) exposure influences morphometric characteristics of neurosecretory neurons and alters salinity stress response in earthworm Eisenia foetida (*Lumbricidae*)**

09:45

S. Paraš, M. Matavulj, D. Dmitrović, **Effects electromagnetic fields high frequency on beta cells endocrine pancreas in rats**

10:00

Osipov, N. Smetanina, M. Pustovalova, D. Klovov, **Mechanisms of DNA single-strand breaks and alkali-labile sites formation in human blood lymphocytes exposed to 365 NM UVA radiation**

10:30-11:00

Refreshments

Plenary Session

Chairperson: Gayle Woloschak

Room A1

11:00

RAD 2014Anatoly Rozenfeld, University of Wollongong, Australia, **Advanced semiconductor dosimetry in radiation therapy**

11:30

SEERASFrancesco Bochicchio, Italian National Institute of Health, Italy, **Protection from health risks due to radon exposure and recent /forthcoming regulations: Present knowledge and challenges**

12:00-13:30

Lunch

13:30-19:30

Excursion

20:30-23:30

Cocktail, Grand Hotel Niš

Thursday, May 29**Plenary Session**

Chairperson: Peter Bossew

Room A4

09:00

RAD 2014Iveta Waczulikova, Comenius University, Bratislava, Slovakia, **What is hypothesis testing? Statistical versus biological significance.**

09:30

SEERASStephanie Hurst, Saxon State Ministry for Environment and Agriculture, Germany, EU - BSS, **National radon action plan - an approach to get hold of geogenic risk**

10:00-10:30

Refreshments

Oral Session RAD 2014

Radiation measurements

Room A

Chairperson: Grazia Gambarini

10:30

M. Herbert, V. Masondo, M. Makhehula, **Comparison of neutron fluence energy distributions measured with NE213 proton recoil spectrometer and NE230 deuteron recoil spectrometer at the Ithemba labs time-of-flight facility**

10:45

J. P. de Carvalho Saraiva, M. Brugger, **Monte Carlo simulations and benchmark studies of radiation environments at CERN's injector chain and respective constraints for installed electronic systems**

- 11:00 K. Ueno, Tominaga, Okada, Tadokoro, Sasaki, Kuwabara, **Radiation measurements technology using optically stimulated luminescence and optical fiber and the application to radiation monitor for nuclear power plants**
- 11:15 E. Mandowska, B. Nitsze, A. Mandowski, **Spectral stability of stimulation sources for OSL readers**
- 11:30 W. Bulski, K. Chelmiński, **Radiochromic dosimetry films in radiotherapy**
- 11:45 J.-I. Kim, S.-K. Kang, B.-I. Lee, **Measurement of gamma spectrum at PWR reactor coolant system with CZT semiconductor detector**

Oral Session SEERAS

Rn/Tn radiology, outdoor radon

Room B

Chairperson: **Mikhail Zhukovsky**

- 10:30 J. Mc Laughlin, **The challenges of reducing the public health burden in Europe due to radon exposure**
- 10:45 S. K. Sahoo *et al.*, **Distribution of Uranium and Thorium in Human hair and nail among residents of Niska Banja spa a high natural background radiation area of Serbia (Balkan Region - continental Europe)**
- 11:00 V. Udovičić, *et al.*, **Comprehensive analysis of the long-term variations of low radon concentration in an underground laboratory**
- 11:15 W. Ringer, J. Gräser, V. Gruber, W. Aspek, J. Gschnaller, **Comprehensive investigation of radon exposure in Austrian tourist attraction mines and caves**
- 11:30 M. Taheri, S. M. Hosseini Pooya, M. Jafarizadeh, M.R. Kardan, **Measurement of sudden Increase of Radon Emission at the time of Earthquake Occurrence during Measurements of Natural Exposure of Tourist Caves in Iran: A Case Report of Katakheh Tourist Cave in Zanjan City**
- 11:45 S. Singh, H. P. Jaishi, R. P. Tiwari, R. C. Tiwari, **Variations of soil radon concentrations along Chite Fault in Aizawl district, Mizoram, India**
- 12:00 K. Manisa, M. Erdogan, E. Şükrü Topsakal, **Measurements of radon activity concentrations in ground waters and soil gas near the ILGIN active fault zone in Konya, Turkey**
- 12:15 M. Erdogan, K. Manisa, F. Tel, **The Measurement of radon activity concentrations in tap water in some dwellings of Konya province - Turkey**

Oral Session RAD 2014

Biomedicine

Room D

Chairperson: **Alexey Moskalev**

- 10:30 M. Hofer, M. Pospíšil, L. Dušek, Z. Hoferová, D. Komůrková, **Combined pharmacological therapy of the acute radiation disease using a cyclooxygenase-2 inhibitor and an adenosine A3 receptor agonist**
- 10:45 Y. Gluhcheva, V. Atanasov, J. Ivanova, E. Pavlova, **Chronic exposure to cobalt compounds - an in vivo study**
- 11:00 M. I. Baritz, D. L. Cotoros, C. Singer, **Ergometric analysis by correlative methods of the thermal radiation emission developed within hand following a controlled effort**
- 11:15 K. Kosno, I. Janik, D. Pogocki, **Estimation of antioxidative properties of nicotine using pulse radiolysis**
- 11:30 N. Vrinceanu, M. Iorgoiaea Guignard, M. Petruta Sucheana, D. Coman, **Research onto bamboo knitted fabric irradiated with air-plasma for the enhancement of surface attributes**
- 11:45 D. Niculae, I. Esanu, F. D. Puicea, **Synthesis and biological evaluation of NOTA/DOTA CYCLO-RGD dimers labelled with Ga-68 as radiotracer for cancer diagnosis and therapy follow-up**

12:00-13:30

Lunch

13:30-14:00	Special Talk RAD 2014	Room A
	Goran Đorđević, University of Niš, European Physical Society: Towards the integration of the physics community in CEI countries into the ERA	
13:30-14:00	Special Talk SEERAS	Room B
	Zora S. Žunić, Vinča Institute, Belgrade, Design, methodology and QA aspect of radon/thoron survey in Serbia	
	Plenary Session	Room A1
	Chairperson: Ahmed Meghzifene	
14:00	RAD 2014	
	Diana Nesheva-Slavova, Institute of Solid State Physics, Sofia, Bulgaria, Application of metal-oxide-semiconductor structures containing silicon nanocrystals in radiation dosimetry	
14:30	RAD 2014	
	Jasna Mihailović, University of Novi Sad, Serbia, Management of patients with differentiated thyroid carcinoma with radioiodine 131-I	
	Oral Session SEERAS	Room B
	Procedures and techniques Chairperson: Constantin Cosma	
14:00	T. Streil, V. Oeser, G. Horak, S. Kobelt, M. Duzinski, J. Sabol, THORON SCOUT - The first diffusion based radon and thoron monitor for long term measurements in buildings	
14:15	A. Sorimachi, S. Tokonami, Y. Omori, T. Ishikawa, Performance of the thoron chamber as the radioactive aerosol chamber	
14:30	O. Dukic, N. Stevanovic, V. Markovic, Time dependence of ²²² Rn and its progeny distributions in diffusion chamber	
14:45	G. Bátor, A. Csordás, D. Horváth, J. Somlai, T. Kovács, Comparing track shape analysis-based automated slide scanner system with traditional methods	
15:00	M. Jiranek, Sub-slab depressurization systems used in the Czech Republic and verification of their effectiveness	
15:15	A. A. Feyzullayev, Methodical investigation of radon measurements using alpha-track detector	
15:30	A. Gusev, M.I. Malmonge, High time resolution measurements of the radon progeny ²¹⁴ Pb in rainfalls	
15:45-16:00	SEERAS Refreshments	
	Oral Session RAD 2014	Room A
	Radiation measurements and radioecology Chairperson: Ines Krajcar Bronić	
15:00	D.C. Nguyen, M. Gargul, Determination of very low content of radium isotopes in drinking and mineral waters	
15:15	R. Kritsanuanuwat, H. Arae, M. Fukushi, S. Chanyotha, S. K. Sahoo, Natural radionuclides and radiation risk assessment in Southern Thailand soils	
15:30	R.C. Begy, A. R. Iurian, O. A. Dumitru, L. Preoteasa, Preliminary results of ²¹⁰ Pb dating method in the Danube delta Lacustrine System from Romania	
15:45	R.M. Margineanu, Underground laboratory in ultralow radiation background in Slanic-Prahova, Romania	
16:00	M. E. Vasyanovich, A. A. Ekinin, I. V. Yarmoshenko, Radionuclide ratio in TENORM studies	
16:15	D. Djordjević <i>et al.</i> , Physicochemical characteristics of urban aerosol of continental part of Balkans	

16:30 M. Cherepnev, I. Ippolitov, P. Nagorsky, S. Smirnov, V. Yakovleva, A. Vukolov, **Influence of soil humidity and weather changes on β - and γ -radiation fields in the ground atmosphere**

Oral Session RAD 2014

Radiobiology and radiation effects

Room D

Chairperson: Soile Tapio

15:00 V. Singh, **Preclinical development of a bridging therapy for radiation casualties**

15:15 I. Yarmoshenko, G. Malinovsky, L. Konshina, M. Zhukovsky, **Late cancer and non-cancer effects of chronic radiation exposure of bone marrow**

15:30 N. Kuzmina, A. Myazin, N. Lapteva, A. Rubanovich, **The study of aberrant methylation in blood leukocytes of irradiated parents and their children**

15:45 V.Yu. Nugis *et al.*, **Retrospective dose evaluation by means of classic cytogenetic method**

16:00 A. Kotava, **Development of state register of persons exposed to radiation as a result of the Chernobyl accident in Belarus**

Oral Session RAD 2014

Neutron and space radiation

Room E

Chairperson: Svetozar Popović

15:00 C. Oprea, A. Oprea, A. Mihul, **Photonuclear cross section and isomer ratio in photoneutron reactions on natural Sn**

15:15 G. Gambarini *et al.*, **Measurements at neutron beams of LVR-15 research reactor with Fricke gel and thermoluminescence dosimeters**

15:30 A. Badescu, A. Simion, **Simple radio arrays for extragalactic neutrinos**

15:45 N. Yagova, V. Pilipenko, A. Kozlovsky, B. Heilig, V. Gladyshev, **ULF waves and particle flux in the Earth's magnetosphere**

16:00 Ş. O. Gürdal, Ö. Gündüz, M. Tombakoğlu, **Analysis of neutron response of BeO-OSL personal dosimeters**

16:30-17:00

RAD 2014 Refreshments

Oral Session SEERAS

Field measurements

Room C

Chairperson: Janja Vaupotič

16:00 B. Papp, C. Cosma, A. Cucos (Dinu), **International intercomparison exercise of active radon devices and passive detectors at the First East European Radon Symposium (FERAS 2012)**

16:15 S. Forkapić, K. Jilek, P. Jovanovič, J. Nikolov, K. Bikit, **Thoron intercomparison measurements - problems, corrections and results**

16:30 G.-B. Neergård, T. R. Borgevad, **CCO GEM Radon Detectors ASGEM Radon Detectors AS - Revolutionizing radon measurement by eliminating latency.**

16:45 V. Yakovleva, A. Vukolov, M. Cherepnev, T. Streil, I. Ippolitov, P. Nagorsky, S. Smirnov, **Validity check of using α -, β - and γ -radiation detectors for soil radon monitoring**

17:00 M. Neznal, M. Neznal, **Field intercomparison measurement of soil-gas radon concentration - Practical introduction**

RAD 2014

Radioecology

Chairpersons: Nevenka Antović, Krzysztof Kozak

- RG1 A. Ion, **The influence of minerals, fossils and rocks displayed in geological collections on indoor radon levels**
- RG2 D. Strumińska-Parulska, B. Skwarzec, **Characterization of ^{241}Pu occurrence, distribution and bioaccumulation in seabirds**
- RG3 D. Strumińska-Parulska, B. Skwarzec, **^{241}Pu in the Southern Baltic Sea**
- RG4 D. Strumińska-Parulska, B. Skwarzec, K. Szymańska, **Polonium ^{210}Po and radiolead ^{210}Pb in hair of domestic animals**
- RG5 D. Maletić *et al.*, **Multivariate analysis of climate variables, teleconnection indices and activities of lead-210 and beryllium-7 in surface air in Belgrade, Serbia**
- RG6 G. Malinovsky, I. Yarmoshenko, V. Starichenko, **Assessment of contemporary radiation exposure of Murine rodents at the territories of the East-Ural radioactive trace**
- RG7 A. Gusev, M. I. Malmonge, **High time resolution measurements of the ^{214}Pb concentration in rainfalls**
- RG8 I. Antovic, N. Svrkota, M. Hadzibrahimovic, R. Zizic, **Radioecological research on three species of the genera *Liza* from the South Adriatic Sea**
- RG9 I. Yordanova, M. Banov, L. Misheva, D. Staneva, T. Bineva, **Natural radioactivity in virgin soils and soils from some areas with closed uranium mining facilities in Bulgaria**
- RG10 J. Ajtić, Đ. Stratimirović, V. Đurđević, D. Todorović, J. Nikolić, **Wavelet spectral analysis of teleconnection indices and activities of beryllium-7 and lead-210 in ground level air in Belgrade, Serbia**
- RG11 J. Petrović, R. Dragović, B. Gajić, M. Čujić, S. Dragović, **Vertical migration of ^{137}Cs in undisturbed arenosols of Banat, Serbia**
- RG12 Lj. Janković-Mandić, S. Dragović, M. Đorđević, M. Đokić, R. Dragović, **Radium-226 activity concentrations in well and spring waters in Serbia: spatial distribution and relation to geological formations**
- RG13 M. Petrovic, D. Vucic, J. Karamarkovic, **Dose assessment from building materials used in housing sector in Serbia**
- RG14 N. B. Sarap, M. M. Janković, D. J. Todorović, **Preliminary examination of the gross alpha and gross beta activity in vitamins**
- RG15 P. Otahal, J. Merta, **Radioactivity of private drinking water wells**
- RG16 P. Kovacheva, R. Djingova, **Impact of sharp temperature variations on the migration ability of ^{137}Cs in four soil types from Bulgaria**
- RG17 S. Forkapić, J. Nikolov, K. Bikit, J. Hansman, S. Milojković, **Radioactivity monitoring of the City of Niš**
- RG18 Z. Grsic *et al.*, **Mathematical modeling of total dose to a hypothetical resident in the environment of nuclear facility by contamination through the atmosphere**
- RG19 A. Boryło, B. Skwarzec, **Disequilibrium activity between uranium (^{234}U , ^{235}U , ^{238}U) isotopes in the environment around phosphogypsum waste heap in Northern Poland**
- RG20 A. Boryło, B. Skwarzec, **The potential sources of uranium isotopes (^{234}U , ^{235}U , ^{238}U) contamination in the Baltic Sea from Poland**
- RG21 R. Incze, S. Gyila, B. D. Burghel, M. Mircea, C. Cosma, **Some results on natural and artificial radioactivity in Covasna county (Romania)**
- RG22 A. R. Iurian, C. Cosma, C. Stih, **A practical experimental approach for the determination of gamma-emitting radionuclides in environmental samples**

- RG23 M. B. Radenković, J. D. Joksić, Š. S. Miljanić, **Synergy of chemical and isotopic signatures data for environmental fate studies**
- RG24 M. Cherepnev, I. Ippolitov, P. Nagorsky, S. Smirnov, V. Yakovleva, A. Vukolov, **Alpha-, beta- radioactive aerosols behavior in the ground atmosphere**
- RG25 R. C. Begy, O. A. Dumitru, A. R. Iurian, S. Hedvig, S. Kelemen, **Alfa and gamma spectrometry application in dating lakes sediments from Danube delta, Romania: preliminary results**
- RG26 G. Yaprak, Ö. Yaşar, **The natural radionuclide distribution in commercial Turkish natural stones**
- RG27 I. Vukasinovic, D. Todorovic, N. Nikolic, J. Nikolic, M. Rajacic, M. Jankovic, **Influence of soil properties on soil-to-plant transfer factors of natural radionuclides in the vicinity of coal fired power plants in Serbia**
- RG28 M. Rakić, M. Karaman, S. Forkapić, J. Hansman, I. Bikit, M. Matavulj, **Natural and artificial radionuclides in three wild mushroom species from Serbia**
- RG29 C. Saueia, M. Nisti, B. Mazzilli, **Comparison of ²¹⁰Pb determination in environmental samples by liquid scintillation counting and gas flow proportional counting**
- RG30 M. Nisti, C. Saueia, B. Mazzilli, **Determination of ¹⁴C efficiency by liquid scintillation counter using two methods: triple to double coincidence ratio and quench parameter external**
- RG31 S. Aközcan, **Natural and artificial radionuclide content of surface sediments in Candarli Gulf, Turkey**

RAD 2014

Non-ionizing radiation

Chairpersons: **Hargita Hegyesi, Zoran Stamenković**

- RH1 A. M. Marjanovic, I. Pavicic, I. Trosic, **Study on cell oxidation-reduction equilibrium after modulated radiofrequency radiation**
- RH2 B. Srdjenovic Conic *et al.*, **Effects of extremely low frequency electromagnetic fields on the antioxidative enzyme activities in human cancer cell line and micronuclei in human lymphocytes**
- RH3 D. Petrenyov, **The delayed activation of tissue macrophages is an untargeted effect of exposure to ionizing and non-ionizing radiation**
- RH4 D. Petrenyov, N. Timokhina, A. Naumau, **The peculiarities of human keratinocyte (HaCaT) responses to exposure to UV radiation *in vitro***
- RH5 L. Oprica, G. Vochita, D. E. Creanga, E. Ungureanu, Z. Olteanu, S. Miclaus, **Non-ionizing radiation impact on cellulolytic fungus enzymes**
- RH6 M. Grbić, A. Pavlović, B. Vulević, **Interlaboratory comparison of measuring and calculation results of electric field strength near 35 kV overhead power line**
- RH7 S. Ćirković, A. Ž. Ilić, J. L. Ristić-Djurović, R. Radiša, **Experimental electromagnet for *in vivo* exposure of small animals to ELF electromagnetic fields**
- RH8 Yu.P. Chukova, **Experimental data processing for bioeffects of electromagnetic radiation in different frequency intervals**
- RH9 Z. Mijatovic, Z. Podrascanin, A. Firanj, R. Kobilarov, **Sun's UV radiation and ozone layer thickness over the region of Novi Sad, Serbia**
- RH10 I. Luminosu, A. de Sabata, S. Ilie, D. Jovanović, D. Krstić, **Characteristics of solar radiation in region close to Timisoara**
- RH11 D. Krstić, D. Zigar, M. Dunjić, D. Petković, N. Cvetković, D. Sokolović, **Electromagnetic modeling of tooth with dental amalgam fillings exposed to mobile phone**
- RH12 M. Israel, M. Ivanova, V. Zaryabova, P. Ivanova, I. Topalova, H. Petkova, **New aspects of legislation concerning EMF exposure to medical personnel in MRI**
- RH13 M. Ivanova, M. Israel, I. Topalova, **UV exposure to personnel in medicine, science and industry**

- RH14 V. Prifti, L. Karteri, **Measurements of waveguides parameters**
- RH15 L. Ruçi, **Nokia windows mobile's power consumption measurements and analysis**

RAD 2014
Radiation physics
 Chairpersons: Frank Becker

- RI1 RI1 E. Bositykh, V. Sohoreva, **The possibility of using nuclear track membrane for ophthalmology**
- RI2 E. Ndreçka, E. Vataj, N. Civici, I. Gjipli, T. Dilo, **Application of EDXRF spectrometry for the analysis of ancient ceramics**
- RI3 H. K. Namburi, O. Marcinka, M. Miklos, E. Havlova Homzova, **Multi-purpose research facility: ⁶⁰Co gamma irradiation unit at research center ŘEŽ**
- RI4 N. Vasovic, R. Duane, A. Jaksic, **Optimized readout electronics for SPM gamma detector**
- RI5 P. Skorobogatov, **The latent effects in digital ICS under electrical overstress pulses and Arrhenius law**
- RI6 S. Bilińska, L. Markowski, **Application of optically stimulated exoelectron emission from CsCl in fast irradiation dose readouts**
- RI7 S. Popovic, L. Vuskovic, A. Samolov, M. Basovic, **Secondary electron emission and multipactor discharges**
- RI8 T.V. Chuvilskaya, **Interpretation and prediction of nuclear experimental results by the data-containing codes**
- RI9 A. Nikiforov, D. Boychenko, V. Telets, **Complex approach to microelectronics radiation hardness investigation**
- RI10 E. Mandowska, A. Mandowski, **Theoretical and experimental investigation of dose response in non-homogeneous OSL detectors**

RAD 2014
Radiation chemistry
 Chairpersons: Narcisa Vrinceanu

- RJ1 A. Negrón-Mendoza, **Gamma radiolysis of aconitic acid in aqueous solution**
- RJ2 B. Slavchev, B. Veleva, L. Dobrev, D. Dimitrova, A. Nikiforova, T. Simeonova, **Alpha and ICP-MS spectrometry application in analyzing variety of matrices and activity concentrations**
- RJ3 A.E. Cruz-Hernández, M. Colín-García, A. Heredia-Barbero, A. Negrón-Mendoza, S. Ramos, **Heterogeneous radiolysis of urea. Implications for astrobiology and prebiotic chemistry**
- RJ4 D. Niculae, F. Puicea, I. Esanu, C. Tuta, **Radiolabelling of peptides with ⁶⁸Ga from tin oxide based ⁶⁸Ge/⁶⁸Ga generator: postprocessing, chelators, automation and quality control**
- RJ5 I. Pucić, K. Kavkler, B. Mihaljević, **Radiation treatment of aged model textile samples**
- RJ6 K. Markov, B. Mihaljević, A. Domijan, J. Pleadin, ***In situ* reduction of aflatoxin B₁ level by gamma irradiation**
- RJ7 I. Pucić, V. Borjanović, **Thermal analysis of some irradiated poly(ethylene-terephthalate) nanocomposites**

RAD 2014
Biochemistry
 Chairpersons: Narcisa Vrinceanu

- RK1 D. Dimitrijevic, T. Cvetić Antić, **Splitting of UVC radiation dose reduces oxidative stress but increases damage in photosynthetic apparatus in PEA (*Pisum sativum* L.)**

- SE11 A. Csordás, F. Fabián, J. Somlai, T. Kovács, **Improvement of thoron calibration chamber at the Institute of radiochemistry and radioecology of University of Pannonia**
- SE12 V. Yakovleva, A. Vukolov, M. Cherepnev, **A very simple and cost-efficient method of radon exhalation monitoring in seismic active areas**

20:00-02:00

Gala Dinner, Nišlijška mehana TT Restaurant

Friday, May 30

08:00-20:00

SEERAS

Field intercomparison exercise - soil-gas radon concentration measurements
Niška Banja

Oral Session RAD 2014

Radiation measurements

Room A

Chairperson: **Barbara Obryk**

09:00

S. Bercea, E. Iliescu, I. Mitu, A. Celarel, C. Cenusă, **Dosimetry for a new research facility, ELI-NP**

09:15

B. Capoen *et al.*, **SOL-GEL derived ionic copper-doped glasses and microstructured optical fibers: A potential radiation dosimeter**

09:30

E. Bogacheva, S. Perov, Q. Balzano, N. Kuster, **VHF portable radio transmitters: theoretical and experimental dosimetry**

09:45

V. Petrović, G. Schoof, Z. Stamenković, **Characterization and verification of a latchup protection switch in radiation environment**

10:00

A. Jaksic, **Overview of RADFET technology and its applications**

10:15

M. S. Martínez-García, J. Torres del Río, A. J. Palma, A. B. Jaksic, J. Banqueri and M. A. Carvajal, **Multiple current method applied to characterization of RADFETs**

10:30

S. Kaya, A. O. Cetinkaya, A. Aktag, E. Yilmaz, **Effects of gamma-ray irradiation on interface states and series-resistance characteristics of Si₃N₄ MOS capacitors**

Oral Session RAD 2014

Radiobiology

Room B

Chairperson: **Tatjana Paunesku**

09:00

S. Tapio, **Use of proteomics in search for biomarkers of radiation exposure**

09:15

A. Moskalev *et al.*, **Mechanisms of radiation hormesis on *Drosophila* model**

09:30

B. Tóth Schilling, N. Sándor, G. Sáfrány, H. Hegyesi, **GDF-15 overexpression increase radiosensitivity of breast cancer cells**

09:45

J. K. Kim, J.-H. Kim, V. G. Petin, **Synergism model for the combined action of radiation and heat**

10:00

E. Lyapunova, L. Komarova, **Display of genetic instability of cells in the population of *Chlorella vulgaris* after sparsely and densely radiation exposure**

10:30-11:00

RAD 2014 Refreshments

Oral Session RAD 2014

Radiation detectors

Room A

Chairperson: **Alexander Nikiforov**

11:00

G. Kramberger *et al.*, **Review of recent results from RD50 collaboration on development of radiation hard particle detectors**

11:15

B. Moreno, M. Million, **Development by Landauer of a new passive dosimeter based on the optically stimulated luminescence technology for IEC 62387 compliance**

11:30

S. Chiriotti, D. Moro, V. Conte, P. Colautti, B. Grosswendt, E. Sterpin, S. Vynckier, **General aspects to calibrate TEPCs in terms of lineal energy**

- 11:45 R. Radu, E. Fretwurst, G. Lindstroem, L. C. Nistor, V. S. Nistor, I. Pintilie, **Comprehensive investigations of point and cluster radiation induced defects in silicon**
- 12:00 V. V. Kadilin, E. V. Ryabeva, E. M. Tyurin, V. T. Samossadny, S. V. Kolesnikov, V. O. Nebolsin, **Detectors on ionizing radiation on based of crystal scintillators structures**
- 12:15 A. Gligorova, **Development of a segmented silicon detector for on-sensor antiproton annihilations**

Oral Session RAD 2014

Radiobiology

Room B

Chairperson: Jin Kyu Kim

- 11:00 T. Paunesku, S. Raha, B. Wanzer and G. E. Woloschak, **Investigation of micro RNA (miR) expression in archival animal samples**
- 11:15 N. Anastasov, **Contribution of non-coding genome to susceptibility at low doses of radiation (studies on a cohort of Serbian children exposed to X-irradiation**
- 11:30 K. Stankova, E. Zaharieva, N. Aneva, O. Katzarska, P. Ostoich, R. Georgieva, R. Boteva, **Molecular markers for the assessment of radiation-induced oxidative stress in occupationally irradiated individuals**
- 11:45 G. Vochita, R. Focsa, D. Creanga, **Direct versus indirect radiation action in irradiated vegetal embryos**
- 12:00 Z. Barjaktarovic, **Ionising radiation induces persistent change in cardiac mitochondrial function of C57BL/6 and ApoE^{-/-} mice**
- 12:15 F. Ingel, S. Khussainova, G. Kosdauletova, E. Krivtsova, **In vitro radiosensitivity and adaptative response to gamma-irradiation of blood lymphocytes of children living in the Aral sea basin (zone of ecological disaster)**

Oral Session RAD 2014

Radiation measurements

Room D

Chairperson: Alberto Palma

- 11:00 K. Krefft, B. Drogoszewska, J. Kamińska, M. Juniewicz, G. Wołakiewicz, I. Jakacka, B. Ciesielski, **Application of EPR dosimetry in bone for verification of doses in radiotherapy patients**
- 11:15 K. Polaczek-Grelík, J. Derus, A. Gilka, A. Kawa-Iwanicka, M. Stefańczyk, **Secondary radiation in high-energy linac radiotherapy using intensity modulated techniques**
- 11:30 J. Burger, V. Cindro, A. Gorišek, G. Kramberger, I. Mandić, M. Zavrtnik, M. Mikuž, **Development of in-vivo diamond dosimetry for Brachytherapy**
- 11:45 M. Gryziński, **A new generation of recombination chambers**
- 12:00 B. Obryk, P. Bilski, K. Hodyr, P. Mika, **High-level TL dosimetry for high-temperature environment**

12:30-14:00

Lunch

14:00-15:30

Poster Sessions

Lobby

RAD 2014

Radiation measurements

Chairpersons: Robert-Csaba Begy, Ercan Yilmaz

- RL1 G.K. Gillmore, D. Wertheim, N. Petford, L. Fijalkowska-Lichwa, **Solid State Nuclear Track Etch Detectors, 2D and 3D analysis of alpha tracks**
- RL2 A. L. Amilcar, P. M. P. Santos, A. Bento, B. Quintana, **Absorbed dose and effective dose in food irradiation: Measurement and validation with different phantoms**
- RL3 B. Pourshahab, S. M. Hosseini Pooya, M. R. Abdi, C. Rasouli, **Measurement of spatial distribution of hard x-ray due to runaway electrons in damavand tokamak limiter**
- RL4 B. Šečerov, **Dosimetry in process control in radiation processing**

- RL5 Ch. Seokwon, S. A. Lim, J. S. Chae, **Spatio-temporal variations of anthropogenic radionuclides in the seawater of East Sea/Japan Sea before Fukushima accident**
- RL6 D. Joković, R. Banjanac, D. Maletić, V. Udovičić, N. Veselinović, B. Grabež, **A GEANT4 based method to estimate radon concentration inside lead castle of shielded germanium detectors**
- RL7 D. Fukumori, L. Campos Rodrigues, **Study of TL and OSL properties of electrofused alumina pellets**
- RL8 D. Krezhova, N. Petrov, S. Maneva, A. Stoev, **Spectral reflectance measurements for detection and monitoring of plant diseases**
- RL9 G. M. Liosi, F. Giacobbo, E. Pignoli, L. Marrone, G. Gambarini, M. Mariani, **Study of the effects of temporal variables on the response of Fricke-Xylenol Orange gel dosimeters**
- RL10 I. Jakonić, J. Nikolov, N. Todorović, B. Tenjović, I. Bikit, **Quench effects in tritium measurements by liquid scintillation counting**
- RL11 J. Nikolic, G. Pantelic, M. Zivanovic, M. Rajacic, D. Todorovic, **Comparison of two methods for HPGe detector efficiency calibration for charcoal canister radon measurement**
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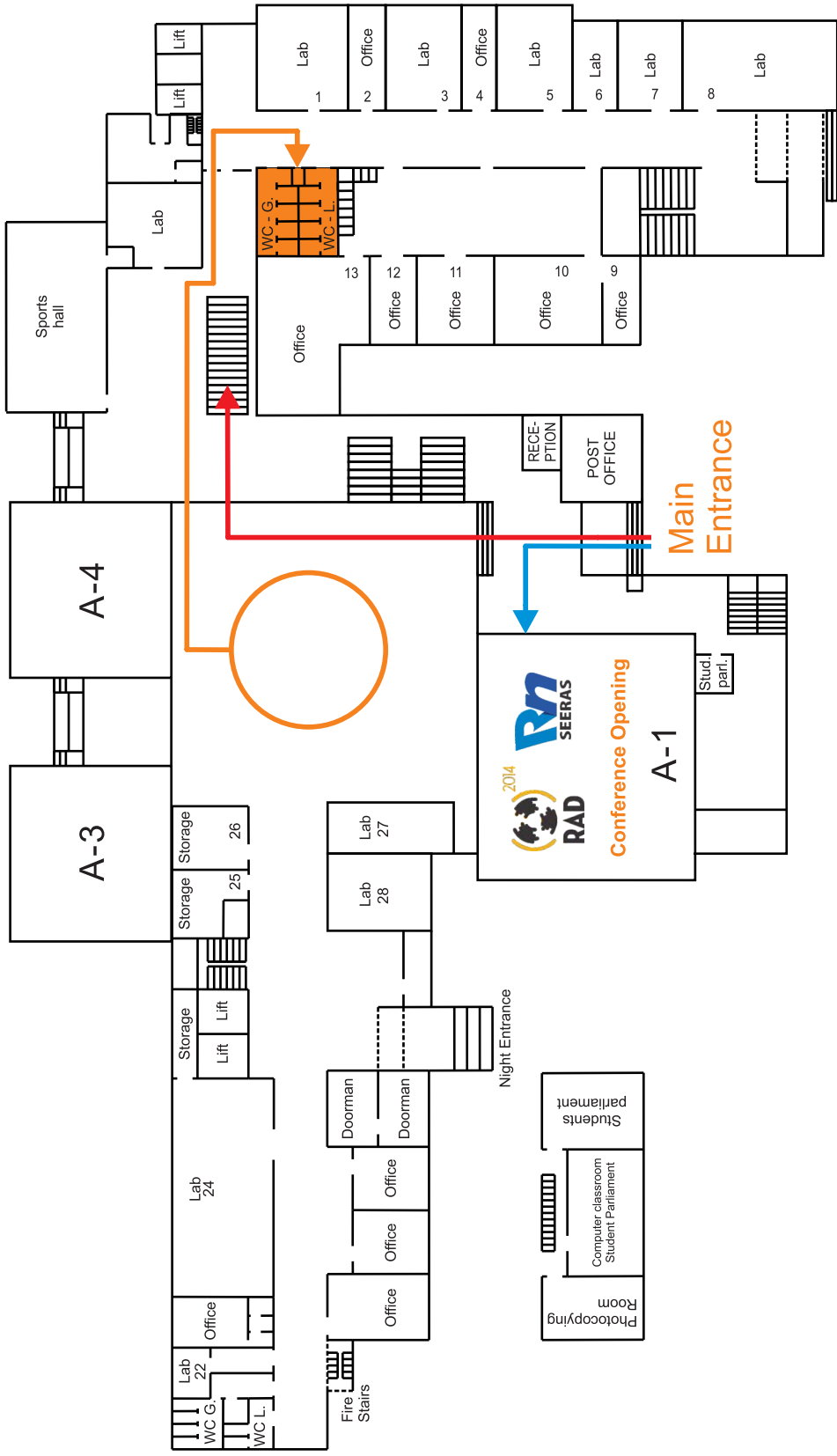


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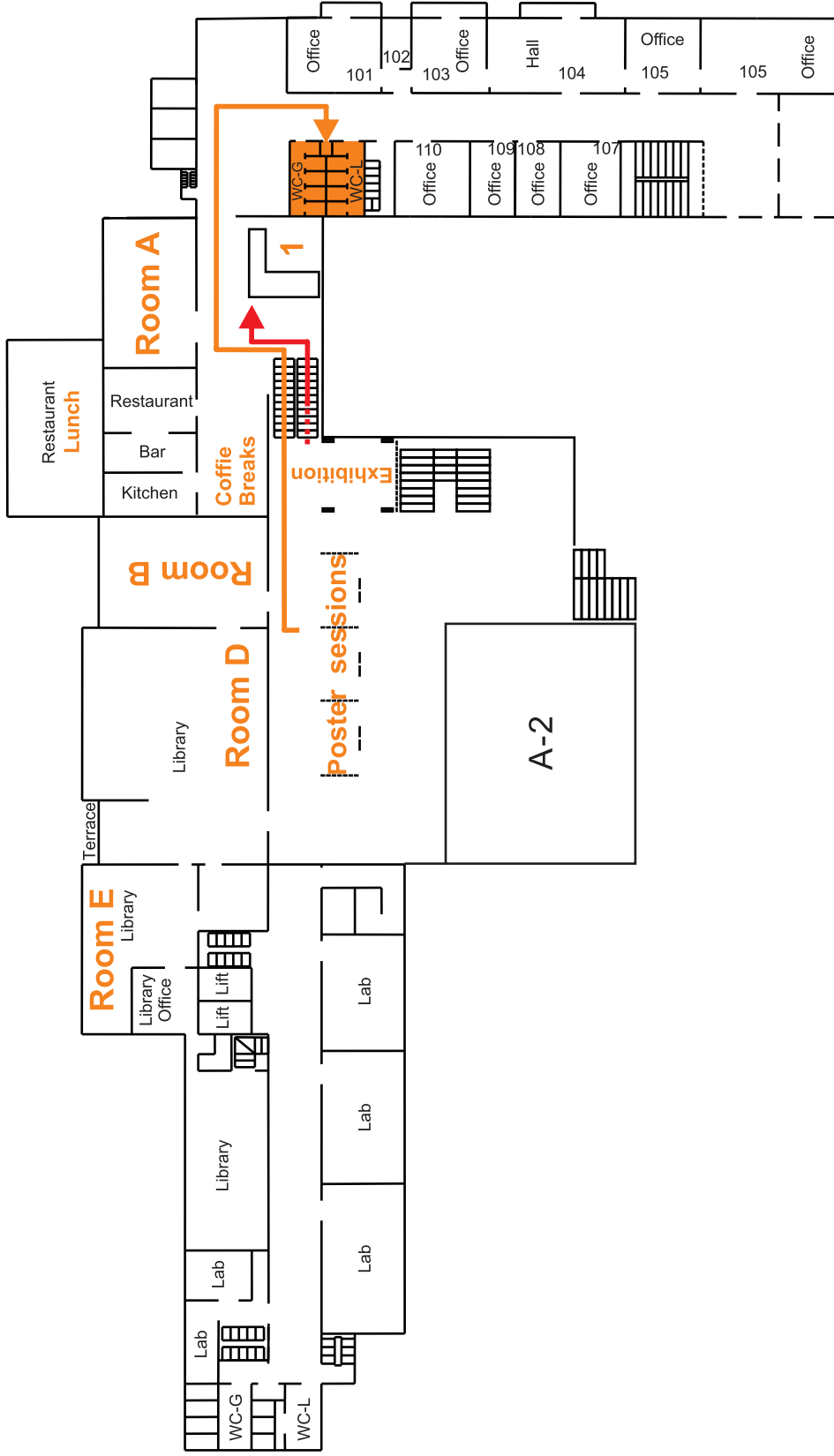
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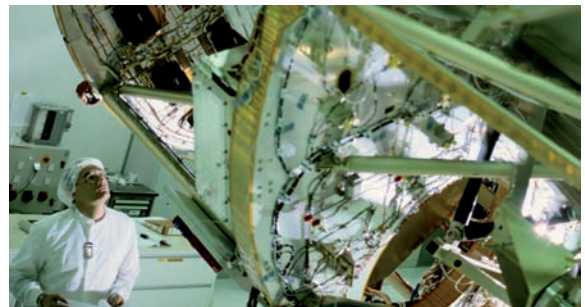


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Goran Ristić, Jugoslav Karamarković,
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