

PERSONAL INFORMATION

Name and surname	Jelena Stajić
Date and place of birth	13/03/1984, Kraljevo, Serbia
Scientific title	PhD in Physics
E-mail	stajicjelena11052012@gmail.com
Educational-scientific / educational-artistic field	Natural sciences
University, Faculty, Organizational unit	University of Kragujevac, Institute for Information Technologies, Kragujevac
Research field and areas	Physics, Radiation Physics

EDUCATION

BACHELOR

Year	
Place	
Institution	

MASTER STUDIES

Year	2007
Place	Kragujevac
Institution	Faculty of Science, University of Kragujevac

DOCTORAL DISSERTATION

Year	2016
Place	Kragujevac
Institution	Faculty of Science, University of Kragujevac
Title of doctoral dissertation	Investigation of Radon Emanation, Exhalation and Measuring Techniques
Scientific title	Senior Research Associate
Research area	Physics

PROFESSIONAL BIOGRAPHY – ELECTION IN RESEARCH OR SCIENTIFIC TITLE

Date	Institution	Scientific title
23/02/2009	Faculty of Science, University of Kragujevac	Junior Research Assistant
18/01/2012	Faculty of Science, University of Kragujevac	Research Assistant
01/03/2017	Faculty of Science, University of Kragujevac	Research Associate
29/11/2021	Faculty of Science, University of Kragujevac	Senior Research Associate

PROFESSIONAL BIOGRAPHY - TRAINING

Year	Institution	Duration

ENGAGEMENT IN THE FORMATION OF SCIENTIFIC PERSONNEL

Assistance in teaching courses: Electromagnetism, Optics and Biophysics (for undergraduate students of Physics, Biology and Ecology) at Faculty of Science, University of Kragujevac.

PARTICIPATION IN NATIONAL PROJECTS FINANCED BY MINISTRY OF EDUCATION/MINISTRY OF SCIENCE AND TECHNOLOGICAL DEVELOPMENT/SCIENCE FUND OF THE REPUBLIC OF SERBIA:

2007-2011 Project No 141023: „Theoretical and experimental investigations in microdosimetry and radioecology“;
2011-2019 Project No 171021: „Experimental and theoretical investigations in radiation physics and radioecology“

PARTICIPATION IN INTERNATIONAL PROJECTS

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL ASSOCIATIONS

Member of the scientific board of Radiation Protection Society of Serbia and Montenegro

ORGANIZATION OF NATIONAL/INTERNATIONAL SCIENTIFIC MEETINGS (CONFERENCES, CONGRESSES...)

LIST OF SCIENTIFIC PAPERS:

Monographs, Monographic studies, Thematic anthologies [1] Dragoslav Nikezic, Vladimir M. Markovic, Nenad Stevanovic, Vlade Urosevic, Biljana Milenkovic, Jelena Stajic , Radon diffusion through the medium, Handbook of Radon: Properties, Applications and Health, Ch. 12, 311-334, Nova Science Publishers, New York (2012).	Sum 1
<hr/>	
Papers published in scientific journals of international scientific importance [1] Jelena M. Stajic , Vladimir M. Markovic, Biljana Milenkovic, Nenad Stevanovic, Dragoslav Nikezic, Distribution of alpha particle tracks on CR-39 detector in radon diffusion chamber, Radiation Physics and Chemistry, (2021), vol. 181, 109340. DOI: 10.1016/j.radphyschem.2020.109340 [2] Vladimir M. Markovic, Jelena M. Stajic , Biljana Milenkovic, Nenad Stevanovic, Alpha track distribution on	Sum 30

lateral wall of cylindrical radon diffusion chamber, Radiation Physics and Chemistry, (2022), vol. 191, 109873.

DOI: 10.1016/j.radphyschem.2021.109873

[3] Stevanovic, N., Markovic, V.M., Milosevic M., Djurdjevic A., **Stajic J.M.**, Milenkovic B., Nikezic D. Correlations between track parameters in a solid-state nuclear track detector and its diffraction pattern. Radiation Physics and Chemistry, (2022) vol. 193, 109986.

DOI: 10.1016/j.radphyschem.2022.109986

[4] **Jelena Stajic**, Dragoslav Nikezic, Detection efficiency of a disk shaped detector with a critical detection angle for particles with a finite range emitted by a point-like source, Applied Radiation and Isotopes, (2012), vol. 70, 528-532.

DOI: 10.1016/j.apradiso.2011.10.016

[5] **Jelena M. Stajic**, Dragoslav Nikezic, Theoretical calculation of radon emanation fraction, Nuclear Instruments and Methods in Physics Research, Section B (2014), vol. 336, 19-25.

DOI: 10.1016/j.nimb.2014.06.013

[6] **Jelena M. Stajic**, Dragoslav Nikezic, The accuracy of radon and thoron progeny concentrations measured through air filtration Journal of Environmental Radioactivity, (2015), vol. 140, 50-58.

DOI: 10.1016/j.jenvrad.2014.11.002

[7] **Jelena M. Stajic**, Dragoslav Nikezic, Measurement of radon exhalation rates from some building materials used in Serbian construction, Journal of Radioanalytical and Nuclear Chemistry, (2015), vol. 303, 1943-1947.

DOI 10.1007/s10967-014-3726-5

[8] Biljana Milenkovic, **Jelena M. Stajic**, Ljiljana Gulan, Tijana Zeremski, Dragoslav Nikezic, Radioactivity levels and heavy metals in the urban soil of Central Serbia, Environmental Science and Pollution Research, (2015), vol. 22, 16732-16741.

DOI: 10.1007/s11356-015-4869-9

[9] **Jelena M. Stajic**, Biljana Milenkovic, Dragoslav Nikezic, Radon concentrations in schools and kindergartens in Kragujevac city, Central Serbia, *CLEAN – Soil, Air, Water*, (2015), vol. 43, 1361-1365.

DOI: 10.1002/clen.201400830

[10] **Jelena M. Stajic**, Biljana Milenkovic, Mira Pucarevic, Natasa Stojic, Ivana Vasiljevic, Dragoslav Nikezic, Exposure of school children to polycyclic aromatic hydrocarbons, heavy metals and radionuclides in the urban soil of Kragujevac City, Central Serbia, *Chemosphere*, (2016), vol. 146, 68-74.

DOI: 10.1016/j.chemosphere.2015.12.006

[11] Biljana Vuckovic, Ljiljana Gulan, Biljana Milenkovic, **Jelena M Stajic**, Gordana Milic, Indoor radon and thoron concentrations in some towns of central and south Serbia, *Journal of Environmental Management*, (2016), vol. 183, 938-944.

DOI: 10.1016/j.jenvman.2016.09.053

[12] Ljiljana Gulan, **Jelena M. Stajic**, Francesco Bochicchio, Carmela Carpentieri, Gordana Milic, Dragoslav Nikezic, Zora S. Zunic. Is high indoor radon concentration correlated with specific activity of radium in nearby soil? A study in Kosovo and Metohija. *Environmental Science and Pollution Research*, (2017), vol. 24, 19561-19568.

DOI: 10.1007/s11356-017-9538-8

[13] **Jelena M. Stajic**, Biljana Milenkovic, Dragoslav Nikezic. Study of CR-39 and Makrofol efficiency for radon measurements, *Radiation Measurements*, (2018), vol. 117, 19-23.

DOI: 10.1016/j.radmeas.2018.07.008

[14] Biljana Milenkovic, **Jelena M. Stajic**, Natasa Stojic, Mira Pucarevic, Snezana Strbac, Evaluation of heavy metals and radionuclides in fish and seafood products, *Chemosphere*, (2019), vol. 229, 324-331.

DOI: 10.1016/j.chemosphere.2019.04.189

[15] Ljiljana Gulan, Ivana Penjisević, **Jelena M. Stajic**, Biljana Milenković, Tijana Zeremski, Vladica Stevanović, Aleksandar Valjarević, Spa environments in Central Serbia:

Geothermal potential, radioactivity, heavy metals and PAHs, *Chemosphere*, (2020), vol. 242, 125171.

DOI: 10.1016/j.chemosphere.2019.125171

[16] Biljana Milenkovic, **Jelena M. Stajic**, Tijana Zeremski, Snezana Strbac, Natasa Stojic, Dragoslav Nikezic, Is Kragujevac city still a “hot spot” area, twenty years after the bombing?, *Chemosphere*, (2020), vol. 245, 125610.

DOI: 10.1016/j.chemosphere.2019.125610

[17] Dragoslav Nikezic, **Jelena M. Stajic**, Kwan Ngok Yu, Updates to TRACK_TEST and TRACK_VISION computer programs, *Polymers*, (2021), vol. 13, 560.

DOI: 10.3390/polym13040560

[18] Ljiljana Gulan, **Jelena M. Stajic**, Tijana Zeremski, Uroš Durlević and Aleksandar Valjarević, Radionuclides and Metals in the Parks of the City of Belgrade, Serbia: Spatial Distribution and Health Risk Assessment, *Forests*, (2022), vol. 13, 1648.

DOI: 10.3390/f13101648

[19] Ljiljana Gulan, **Jelena M. Stajic**, Dusica Spasic, Sofija Forkapic, Radon levels and indoor air quality after application of thermal retrofit measures – a case study, *Air Quality, Atmosphere & Health*, (2022).

DOI: 10.1007/s11869-022-01278-w

[20] **Jelena Stajic**, Dragoslav Nikezic Hit probability of a disk shaped detector with particles with a finite range emitted by a point-like source, *Applied Radiation and Isotopes*, (2011), vol. 69, 875-879.

DOI: 10.1016/j.apradiso.2011.02.011

[21] Ljiljana Gulan, Biljana Milenkovic, **Jelena Stajic**, Biljana Vuckovic, Dragana Krstic, Tijana Zeremski, Jordana Ninkov, Correlation between radioactivity levels and heavy metal content in the soils of North Kosovska Mitrovica environment, *Environmental Science: Processes & Impacts (Formerly the Journal of Environmental Monitoring)*, (2013), vol. 15, 1735-1742.

DOI:10.1039/c3em00208j

[22] Ljiljana R. Gulan, Francesco Bochicchio, Carmela Carpentieri, Gordana A. Milic, **Jelena M. Stajic**, Dragana Z. Krstic, Zdenka A. Stojanovska, Dragoslav R. Nikezic, Zora S. Zunic, High Annual Radon Concentration in Dwellings and Natural Radioactivity Content in Nearby Soil in Some Rural Areas of Kosovo and Metohija (Balkan region), Nuclear technology and radiation protection (2013), vol. 28, 60-67.

DOI: 10.2298/NTRP1301060G

[23] Dragoslav Nikezic, K.N. Yu, **Jelena M. Stajic**, Computer program for the sensitivity calculation of a CR-39 detector in a diffusion chamber for radon measurements, Review of Scientific Instruments, (2014), vol. 85, 022102.

DOI: 10.1063/1.4865157

[24] **Jelena M. Stajic**, Dragoslav Nikezic, Analysis of radon and thoron progeny measurements based on air filtration, Radiation Protection Dosimetry, (2015), vol. 163, 333-340.

DOI: 10.1093/rpd/ncu183

[25] Gorica Djelic, Dragana Krstic, Jelena M. Stajic, Biljana Milenkovic, Marina Topuzovic, Dragoslav Nikezic, Dusica Vucic, Tijana Zeremski, Milan Stankovic, Dragana Kostic, Transfer factors of natural radionuclides and ¹³⁷Cs from soil to plants used in traditional medicine in central Serbia, Journal of Environmental Radioactivity, (2016), vol. 158, 81-88.

DOI: 10.1016/j.jenvrad.2016.03.028

[26] Ljiljana Gulan, Aleksandar Valjarevic, Biljana Milenkovic, Vladica Stevanovic, Gordana Milic, **Jelena M. Stajic**, Environmental radioactivity with respect to geology of some Serbian spas. Journal of Radioanalytical and Nuclear Chemistry (2018), vol. 317, 571-578.

DOI: 10.1007/s10967-018-5914-1

[27] **Jelena M. Stajic**, Biljana Milenkovic, Dragoslav Nikezic, Energy window of Makrofol for alpha particle detection. Nuclear Instruments and Methods A, (2019), vol. 938, 10-13.

DOI: 10.1016/j.nima.2019.05.078

[28] Ljiljana Gulan, Tatjana Jakšić, Biljana Milenkovic, **Jelena**

<p>M. Stajic, Predrag Vasić, Zoran Simić, Nenad Zlatić, Mosses as bioindicators of radionuclide and metal pollution in northern Kosovo and Metohija mountain region, <i>Journal of Radioanalytical and Nuclear Chemistry</i>, (2020), vol. 326, 315-327.</p> <p>DOI: 10.1007/s10967-020-07358-4</p> <p>[29] Ljiljana Gulan, Jelena M. Stajic, Biljana Milenkovic, Tijana Zeremski, Stanko Milic, Dragana Krstic, Plant uptake and soil retention of radionuclides and metals in vineyard environments, <i>Environmental Science and Pollution Research</i>, (2021), vol. 28, 49651-49662.</p> <p>DOI: 10.1007/s11356-021-14239-0</p> <p>[30] Mirjana Ž. Grujović, Katarina G. Mladenović, Stefan M. Marković, Nevena H. Đukić, Jelena M. Stajić, Aleksandar M. Ostojić, Nenad M. Zlatić, Chemical, radiological and microbiological characterization of a drinking water source: a case study, <i>Letters in Applied Microbiology</i>, (2022), vol. 75(5), 1136-1150.</p> <p>DOI: 10.1111/lam.13778</p>	
<p>Proceedings of international scientific conferences</p> <p>[1] Biljana Milenković, Nenad Stevanović, Dragoslav Nikezić, Jelena Stajić, Vladimir Marković, Dragana Krstić, Analysis of proton tracks etched in reverse direction in PADC detector used for neutron irradiation, <i>The First International Conference on Radiation and Dosimetry in Various Fields of Research</i>, Niš, Serbia (2012), Proceedings, 93-96.</p> <p>[2] Milena P. Živković, Dragoslav Nikezić, Tatjana B. Miladinović, Jelena M. Stajić, Dragana Ž. Krstić, Radioactivity assessment of natural radionuclides and ¹³⁷Cs in commonly consumed foods, <i>1st International Conference on Chemo and Bioinformatics</i>, October 26-27, Kragujevac, Serbia, (2021), 145-148.</p>	<p>Sum</p> <p>4</p>

<p>[3] Ljiljana Gulan, Stanimirka Jovanović, Marija Mitrović, Jelena M. Stajić Ash radioactivity level and ambient dose equivalent rate in the vicinity of the TPP „Kosovo B“ Obilić. XXIII YuCorr, May 16-19, Divčibare, Serbia, Proceedings, (2022), str.158-163.</p> <p>[4] Biljana Vučković, Ljiljana Gulan, Biljana Milenković, Jelena Stajić, Gordana Milic, Indoor radon and thoron concentrations in southern part of Serbia, Fourth International Conference of Radiation and Applications in Various Fields of Research – RAD4 (2016), 23–27 May, Niš, Serbia, Book of Abstracts, University of Nis, Faculty of Electronic Engineering, Nis, Serbia, (2016), 500 – 500.</p>	
<p>Proceedings of national scientific conferences</p> <p>[1] Dragoslav Nikezić, Jelena Stajić, Monte Karlo simulacije u radijacionoj fizici i zaštiti od jonizujućih zračenja, Zbornik radova, YU INFO, Kopaonik (2010). ISBN: 978-86-85525-05-6</p> <p>[2] Jelena Stajić, Vladimir Marković, Dragana Krstić, Dragoslav Nikezić, Koncentracija prirodnih radionuklida u duvanu, Zbornik radova, XXVI Simpozijum DZZSCG, Tara, (2011), 65-68. ISBN: 978-86-7306-105-4</p> <p>[3] Nenad Stevanović, Vladimir Marković, Dragoslav Nikezić, Biljana Milenković, Jelena Stajić, Korekcija ljske za zaustavnu moć za niskoenergetske jone, Zbornik radova, XXVI Simpozijum DZZSCG, Tara, (2011), 14-18. ISBN: 978-86-7306-105-4</p> <p>[4] Ljiljana Gulan, Biljana Milenković, Jelena Stajić, Biljana Vučković, Dragana Krstić, Gordana Milić, Dragoslav</p>	<p>Sum 13</p>

Nikezić, Sadržaj prirodnih i veštačkih radionuklida u uzorcima zemljišta Kosovske Mitrovice, Zbornik radova, XXVII Simpozijum DZZSCG, Vrnjačka Banja, (2013), 101-105.

ISBN: 978-86-7306-115-3

[5] Biljana Milenković, **Jelena Stajić**, Ljiljana Gulan, Dragoslav Nikezić, Radioaktivnost zemljišta na teritoriji grada Kragujevca, Zbornik radova, XXVIII Simpozijum DZZSCG, Vršac, (2015), 134-141.

ISBN 978-86-7306-135-1

[6] Ljiljana Gulan, **Jelena Stajić**, Biljana Vučković, Jelena Živković Radovanović, Dušica Spasić, Dragana Krstić, Prostorna i profilna raspodela radionuklida u tlu na nekim lokacijama na Kosovu i Metohiji, Zbornik radova, XXVIII Simpozijum DZZSCG, Vršac, (2015), 142-147.

ISBN 978-86-7306-135-1

[7] Biljana Vučković, Ljiljana Gulan, Biljana Milenković, **Jelena Stajić**, Gordana Milić, Istraživanje koncentracije radona i torona u privatnim kućama na teritoriji grada Kruševca, Zbornik radova, XXVIII Simpozijum DZZSCG, Vršac, (2015), 193-198.

ISBN 978-86-7306-135-1

[8] Biljana Milenković, **Jelena Stajić**, Dragoslav Nikezić, Koncentracija radona, prirodnih i veštačkih radionuklida u kragujevačkim vrtićima, Zbornik radova, XXIX Simpozijum DZZSCG, Srebrno jezero, (2017), 173-178.

ISBN: 978-86-7306-144-3

[9] **Jelena M. Stajić**, Biljana Milenković, Dragoslav Nikezić, Koncentracija prirodnih radionuklida i ^{137}Cs duž reke Lepenice, Zbornik radova, XXX Simpozijum DZZSCG, Divčibare, (2019), 89-95.

ISBN: 978-86-7306-154-2

[10] Biljana Milenković, **Jelena M. Stajić**, Vladimir Marković, Nenad Stevanović, Dragana Krstić, Dragoslav Nikezić, Merenje koncentracije radona na teritoriji grada Kragujevca, Zbornik radova, XXX Simpozijum DZZSCG, Divčibare, (2019), 240-244.

ISBN: 978-86-7306-154-2

[11] Vladimir Marković, Nenad Stevanović, **Jelena M. Stajić**, Biljana Milenković, Dragoslav Nikezić, Gustina tragova čvrstih trag detektora izlaganim u difuzionim komorama, Zbornik radova, XXX Simpozijum DZZSCG, Divčibare, (2019), 288-294.

ISBN: 978-86-7306-154-2

[12] Nenad Stevanović, Vladimir Marković, Marko Milošević, **Jelena Stajić**, Biljana Milenković, Vremenska zavisnost gustine tragova na trag detektorima u difuzionoj komori, Zbornik radova, XXXI Simpozijum DZZSCG, Beograd, (2021), 169-174.

e-ISBN: 78-86-7306-161-0

[13] **Jelena Stajić**, Biljana Milenković, Nenad Stevanović, Vladimir M. Marković, Dragoslav Nikezić, Poređenje funkcija odgovora CR-39 detektora za detekciju alfa zračenja, Zbornik radova, XXXI Simpozijum DZZSCG, Beograd, (2021), 187-193.

e-ISBN: 78-86-7306-161-0

Monographs of national importance

[1] Biljana Milenković, **Jelena Stajić**, Ljiljana Gulan, Dragoslav Nikezić, Koncentracija ^{137}Cs u zemljištu na teritoriji grada Kragujevca, ČERNOBILJ 30 godina posle, Vinča, (2016), 206-213.

Sum

2

ISBN 978-86-7306-138-2	
[2] Dragana Krstić, Gorica Djelić, Marina Topuzović, Biljana Milenković, Jelena Stajić , Dragoslav Nikezić, Milan Stanković, Tijana Zeremski, Dragana Kostić, Dušica Vučić, Odredjivanje transfer faktora ¹³⁷ Cs iz tla u biljke koje se koriste u tradicionalnoj medicine, ČERNOBILJ 30 godina posle, Vinča, (2016), 256-264.	
ISBN 978-86-7306-138-2	
Scientific papers in national journals	Sum
Technical solutions	Sum
Patents	Sum

CITATION OF SCIENTIFIC PAPERS

239 (self-citations excluded)

BRIEF DESCRIPTION OF RESEARCH IN THE PREVIOUS PERIOD

The research was oriented towards investigating alpha particle detection with Solid State Nuclear Track Detectors (SSNTDs), considering detector response functions, calibration coefficients, energy window, and critical detection angles. The research also included examination of different methods for measuring radon and radon progeny concentrations in air, as well as mechanisms of radon emanation and radon exhalation. Experimental procedures, theoretical models, and numerical simulation methods were all applied in the research.

BRIEF DESCRIPTION OF PLANNED RESEARCH IN THE NEXT PERIOD

Different methods for estimating radon emanation power and radon exhalation rate will be compared; the factors that affect indoor radon levels will be explored. Further investigation will be conducted to study detector response and diffraction patterns of alpha particle tracks in solid state nuclear track detectors. Specific activities of natural and artificial radionuclides will be measured in soil, plants and water, and the correlations with the main factors that influence their distribution will be analyzed.