# CV – Milena P. Živković

Name: Milena P. Živković

**Date of Birth:** September 1, 1995 **Place of Birth:** Kragujevac, Serbia

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### **Education:**

PhD Candidate in Physics Faculty of Science, University of Kragujevac

2020 – Present

Research focus: Radiation and medical physics

Master's Degree in Physics Faculty of Science, University of Kragujevac 2018 – 2019

Bachelor's Degree in Physics Faculty of Science, University of Kragujevac 2014 – 2018

# **Professional Experience:**

Research Associate

Faculty of Science, University of Kragujevac

January 2022 - Present

Participating in the project "Experimental and Theoretical Research in Radiation Physics and Radioecology," funded by the Ministry of Education, Science, and Technological Development.

#### **Academic Achievements:**

- **Best Student Award** at the Faculty of Science, University of Kragujevac for three consecutive years
- **Invited Speaker** at 3 international conferences

- **Best researcher** for 2023
- **Co-author** of the monograph "Application of Monte Carlo Programs and Phantoms in Dosimetry"

## **Professional Affiliations:**

- German Physical Society
- Vice President of Green Peace Serbia
- **Special Editor** for *Imaging and Radiation Research*
- **Reviewer** for *Radiation Science and Technology*

#### **Skills:**

- Advanced Python programming
- Monte Carlo simulations for radiation transport
- Radiation therapy planning techniques
- Scientific writing and reviewing

#### **Publications:**

- 1. Milena Živković, Dragana Krstić, Tatjana B. Miladinović. AI-Enhanced Robotic Radiosurgery for Prostate Cancer Treatment: Recent Innovations and Prospects. 4th International Webinar on AI ML, data science and robotics, December16-17, 2023/webinar.
- 2. Krstic, Dragana; Nikezic, Dragoslav; Jeremic, Marija Z.; Dolicanin, Emil; Miladinovic, Tatjana B.; Zivkovic, Milena (2023). Comparison between MCNP and planning system in brachytherapy of cervical cancer. Applied Radiation and Isotopes, 192, 110614. https://doi.org/10.1016/j.apradiso.2022.110614.
- 3. Stajić, J.M., Nikic, B., Gulan, L., Živković, M., et al. (2023). Estimation of Radon Emanation Power: A Comparison of Different Methods. Air Quality, Atmosphere, and Health, 16, 2053–2061 https://doi.org/10.1007/s11869-023-01389-y.
- 4. Yu, Kwan Ngok; Watabe, Hiroshi; Zivkovic, Milena; Krstic, Dragana; Nikezic, Dragoslav; Kim, Kyeong Min; Yamaya, Taiga; Kawachi, Naoki; Tanaka, Hiroki; Haque, A.K.F.; Shahmohammadi Beni, Mehrdad (2023). DynamicMC: An Open-source GUI Program Coupled with MCNP for Modeling Relative Dynamic Movement of Radioactive Source and ORNL Phantom in a 3-dimensional Radiation Field. Health Physics, 124(4), 301-309, April 2023. https://doi.org/10.1097/HP.000000000001670.

- 5. Zivkovic, Milena; Beni, Mehrdad S.; Yu, Kwan Ngok; Watabe, Hiroshi; Krstic, Dragana; Nikezic, Dragoslav (2023). A dosimetric comparison between ICRP and ORNL phantoms from exposure to 137Cs contaminated soil. Radiation Physics and Chemistry, 207, 110878. https://doi.org/10.1016/j.radphyschem.2023.110878.
- 6. Mitrovic, M.; Ciraj-Bjelac, O.; Jovanovic, Z.; Krstic, N.; Nikezic, D.; Krstic, D.; Zivkovic, M.; Lazarevic-Macanovic, M. (2021). Voxel model of a rabbit: assessment of absorbed doses in organs after CT examination performed by two different protocols. Radiation and Environmental Biophysics, 60(4), 631-638. https://doi.org/10.1007/s00411-021-00941-7.
- 7. Zivkovic, Milena; Zlatic, Nenad M.; Krstic, Dragana Z.; Stankovic, Milan S. (2021). Health risk assessment of natural and artificial radionuclides in medicinal plants. Kragujevac Journal of Science, 43, 15-22. https://doi.org/10.5937/KgJSci2143015Q.
- 8. Krstic, Dragana Z.; Nikezic, Dragoslav R.; Zivkovic, Milena P.; Jeremic, Marija Z. (2021). Dose assessment with MCNP5/X code for boron neutron capture therapy of pancreas cancer. Nuclear Technology and Radiation Protection, 36(3), 294-298. https://doi.org/10.2298/NTRP2103294K.
- 9. Zivkovic, Milena P.; Miladinovic, Tatjana B.; Miladinovic, Aleksandar M.; Molnar, Una J.; Krstic, Dragana Z. (2022). Absorbed dose distribution in human eye simulated by FOTELP-VOX code and verified by volumetric modulated arc therapy treatment plan. Nuclear Technology and Radiation Protection, 37(1), 78-83. https://doi.org/10.2298/NTRP2201078Z.
- 10. Zivkovic, Milena P.; Zlatic, Nenad M.; Krstic, Dragana Z.; Stankovic, Milan S. (2021). Health risk assessment of natural and artificial radionuclides in medicinal plants. Kragujevac Journal of Science, 43, 15-22. https://doi.org/10.5937/KgJSci2143015Q.
- 11. Cimbaljević, Ž. M., Živković, M. P., Milošević, M. M., Krstić, D. Ž., Miladinović, T. B., Marković, V. M., & Stevanović, N. D. (2023). Gamma spectrometry analysis and health risk assessment of edible liquids. Kragujevac Journal of Science, 45, 15-20. https://doi.org/10.5937/KgJSci2345015C
- 12. Milošević, M. M., Cimbaljević, Ž. M., Živković, M. P., Stevanović, N. D., Marković, V. M., & Krstić, D. Z. (2023). Analysis of Specific absorption rate in the human head model exposed to radiofrequency radiation. Kragujevac Journal of Science, 45, 7-14. https://doi.org/10.5937/KgJSci2345007M
- 13. Krstic, Dragana; Nikezic, Dragoslav; Krstic, Ana; Zivkovic, Milena; Jeremic, Marija. The application of voxel and ORNL phantoms to the internal and external dosimetry. Book of abstracts, NINTH INTERNATIONAL CONFERENCE ON RADIATION IN VARIOUS FIELDS OF RESEARCH, RAD 9, Herceg Novi, Montenegro, June 14 18, 2021.
- 14. Zivkovic, Milena; Krstic, Dragana; Miladinovic, Tatjana B.; Miladinovic, Aleksandar; Cocic, Dusan. (2022). Absorbed dose in humerus for breast cancer and regional lymph nodes involvement simulated by FOTELP–VOX code comparison with calculations by treatment planning system. Book of abstracts, INTERNATIONAL CONFERENCE ON RADIATION APPLICATIONS (RAP 2022), Thessaloniki, Greece, June 6-10, 2022. www.rap-conference.org.
- 15. Krstic, Dragana; Miladinovic, Aleksandar; Miladinovic, Tatjana; Zivkovic, Milena; Acimovic Talijan, Sladjana; Krstic, Ana. (2022). Comparative dosimetric analysis of advanced VMAT and IMRT with a standard 3D conformal radiation planning technique for pancreatic cancer. BOOK OF ABSTRACTS. 10th JUBILEE INTERNATIONAL CONFERENCE ON RADIATION IN VARIOUS FIELDS OF RESEARCH (RAD 2022) SUMMER EDITION, 25–29.07.2022, HERCEG NOVI, MONTENEGRO. https://doi.org/10.21175/rad.sum.abstr.book.2022.11.4.

- 16. Zivkovic, Milena; Miladinovic, Tatjana B. (2021). COMPARISON OF FOTELP AND MCNP WITH VOXELISED GEOMETRY IN RADIOTHERAPY. INTERNATIONAL CONFERENCE ON RADIATION APPLICATIONS, RAP conference proceedings, vol. 6, pp. 97–100. https://doi.org/10.37392/rapproc.2021.20.
- 17. Zivkovic, Milena P.; Nikezic, Dragoslav; Miladinovic, Tatjana B.; Stajic, Jelena M.; Krstic, Dragana Z. (2021). Radioactivity assessment of natural radionuclides and 137Cs in commonly consumed foods. 1st International Conference on Chemo and Bioinformatics, Kragujevac, 145-148, October 2021, Serbia. https://doi.org/10.46793/ICCBI21.145Z.
- 18. Zivkovic, Milena P.; Nikezic, Dragoslav; Miladinovic, Tatjana B.; Krstic, Dragana Z. (2021). Overview of phantoms in dosimetry and radiation protection. 1st International Conference on Chemo and Bioinformatics, Kragujevac, 141-144, October 2021, Serbia. https://doi.org/10.46793/ICCBI21.141Z.
- 19. Miladinovic, Tatjana B.; Miladinovic, Aleksandar; Pavlovic, Nina; Nikezic, Dragoslav; Krstic, Dragana; Zivkovic, Milena. (2021). Dosimetric comparison of vmat and 3d conformal radiotherapy in preoperative rectal cancer. 1st International Conference on Chemo and Bioinformatics, Kragujevac, https://doi.org/10.46793/ICCBI21.181M.
- 20. Nina Pavlović, Tatjana B. Miladinović, Ivana Rosić, Aleksandar Miladinović, Milena Živković, Marija Z Jeremić, Irradiation of inoperable bilateral breast and regional lymphatic cancer with FIF technique, 10th Alpe-Adria Medical Physics Meeting (AAMPM) Ljubljana, Slovenia, June 1-3, 2022
- 21. Zivkovic, Milena; Krstic, Dragana; Nikezic, Dragoslav. (2021). Comparison of the vertical distribution of 137Cs in soil after the elapsed time of about a half of the half-life of caesium. INTERNATIONAL CONFERENCE ON RADIATION APPLICATIONS (RAP 2021), virtual online conference, September 6-8, 2021, Book of abstracts, pp. 19.
- 22. Bussolotti, G.R.; Krstic, Dragana; Nikezic, Dragoslav; Leal, A.S.; Zivkovic, Milena; Mendes, B.M. (2022). Computational Internal dosimetry of natural cisplatin activated in neutron flux: the Pt-191 contribution. BRAZILIAN JOURNAL OF RADIATION SCIENCES, 10-02A(2022), 01-17. First Latin-American Congress on Solid State Dosimetry and Radiation Measurements LASSD, 13-17 September, 2021. https://doi.org/10.15392/bjrs.v10i2A.1816.
- 23. Zivkovic, Milena; Krstic, Dragana; Miladinovic, Tatjana B.; Grbovic, Filip; Brankovic, Snezana. (2022). LEVELS OF RADIOACTIVITY OF NATURAL RADIONUCLIDES AND 137Cs ON CHARACTERISTIC LANDFILLS AND NATURAL HABITATS IN SERBIA. Proceeding. 1th International Conference "CONFERENCE ON ADVANCES IN SCIENCE AND TECHNOLOGY" COAST 2022, May 26-29, 2022, HERCEG NOVI, MONTENEGRO.
- 24. Vidakovic, Ivana; Zivkovic, Milena; Kuzmanovic, Ljubica; Krstic, Dragana; Milenkovc, Petar. Interesting experiments in optics and thermodynamics. Proceedings of the 9th International Conference on Physics Education in Secondary Schools, Aleksinac, October 15-17, 2021, pp. 87-92; held on April 8-10, 2022.
- 25. Dragana Krstić, Milena Zivković, Neda Milosavljević, Marija Živković Radojević, Aleksandar Miladinović, Tatjana B. Miladinović, Ana Krstić, The optimal choice of energy during radiotherapy planning of the left breast with deep-inspiration breath-hold technique, Elicsir, Project symposium, January 25-27, 2023, Faculty of Electronic Engineering, Niš, Serbia.
- 26. Zivkovic, Milena; Vidakovic, Ivana; Kuzmanovic, Ljubica; Krstic, Dragana; Milenkovc, Petar. Simulation of radioactive decay using hydrodynamic model. Proceedings of the International

Conference on Physics Education in Secondary Schools, Aleksinac, October 15-17, 2021, pp. 155-159; postponed due to COVID-19 and held on April 8-10, 2022.

- 27. Ferrari, Paolo; Ginjaume, Merce; Hupe, Olivier; O'Connor, Una; Vanhavere, Filip; Bakhanova, Elena; Becker, Franz; Campani, Luca; Carinou, Eleftheria; Clairand, Isabelle; Faj, Dario; Jansen, Jan; Jovanovic, Zoran; Knezevic, Zeljka; Krstic, Dragana; Mariotti, Francesco; Sans-Merce, Marc; Teles, Pedro; Zivkovic, Milena (2022). Review: What Is Worth Knowing in Interventional Practices about Medical Staff Radiation Exposure Monitoring: A Review of Recent Outcomes of EURADOS Working Group 12. Environments MDPI, 2022, 9(4), 53. The Annual National Radiation Protection Conference organized by the Italian Radiation Protection Association (AIRP) and held in Rome from the 29th September to the 1st October, 2021. https://doi.org/10.3390/environments9040053.
- 28. Zivkovic, Milena; Zlatic, Nenad; Krstic, Dragana; Stankovic, Milan; Nikezic, Dragoslav; Vidakovic, Ivana. (2022). Health risk assessment from natural and artificial radionuclides in medicinal plants. XXXI Symposium of the DZZSCG, 45-50.
- 29. Rajkovic, Dalibor; Zivkovic, Milena. (2018). Apparatus for digital observation of free fall and motion of bodies down an inclined plane. Physics Teaching 7.
- 30. Zivkovic, Milena; Krstic, Dragana; Vidakovic, Ivana; Djurdjevic, Aleksa. (2021). Determining the surface temperature of balls of different colors. Physics Teaching 10.
- 31. Vidakovic, Ivana; Zivkovic, Milena; Krstic, Dragana; Djurdevic, Aleksa. (2021). Measuring the speed of light in optical media. Physics Teaching 10.
- 32. Milena Živković, Tatjana B. Miladinović, Dragana Krstić, Aleksa Đurđević, Predrag Živković. "Selected Examples of Voxelized Geometry Application in Radiotherapy for High School Students." Proceedings of the 10th Jubilee International Conference on Physics Education in Secondary Schools, March 24-26, 2023, Aleksinac, Serbia.
- 33. Milena Živković, Tatjana B. Miladinović, Dragana Krstić, Aleksa Đurđević, Predrag Živković. "Superman Dossier." Proceedings of the 10th Jubilee International Conference on Physics Education in Secondary Schools, March 24-26, 2023, Aleksinac, Serbia.