

CURRICULUM VITAE

Nenad Stevanovic, PhD

Assistant professor

Mailing address

Department of Physics,

Faculty of Sciences, University of Kragujevac

34000 Kragujevac

R. Domanovic 12

SERBIA

e mail nstevanovic@kg.ac.rs



web page:

http://physics.kg.ac.rs/fizika/emioptika/Documents/CV_Nenad%20Stevanovic_eng.pdf

DATE OF THE BIRTH

06th of May, 1977.

PLACE OF BIRTH

Kragujevac, Serbia, (South Eastern Europe).

EDUCATION

BC -diploma in physics

Faculty of Science, University of Kragujevac, Serbia (1996-2000)

Master thesis: ***Recoil factor of ^{214}Pb***

Faculty of Science, University of Kragujevac. Serbia (2004)

M70 3p

Supervisor: Dr Dragoslav Nikezic, Full professor on Faculty of Science, Kragujevac

Doctoral in Physics (PhD): ***Calculation of stopping power by representing the projectile and target as an assembly of quantum oscillators***

Faculty of Science, University of Kragujevac. Serbia (2007)

M70 6p

Supervisor: Dr Dragoslav Nikezic, Full professor on Faculty of Science, Kragujevac

EMPLOYMENT

-2002. - 2005., Researcher at Faculty of Science, University of Kragujevac, on the project founded by Serbian Ministry of Science "Development of experimental and theoretical methods in radioecology", N0 1425.

- 2006. -2010. Researcher at Faculty of Science, University of Kragujevac, on the project founded by Serbian Ministry of Science "Theoretical and experimental investigations in microdosimetry and radioecology" , N0 141023.

- 2011. - Researcher at Faculty of Science, University of Kragujevac, on the project founded by Serbian Ministry of Science and Technological Development "Experimental and theoretical investigations in radiation physics and radioecology", N0 171021.

-2011. Assistant professor, University of Kragujevac, Faculty of Science

TEACHING/ Current Courses:

Electromagnetism 1
Electromagnetism 2
Optics
Practical exercises from EM1
Practical exercises from EM and Optics
Introduction to Programming

LANGUAGES

_ **English:** speaking, writing and reading correctly

COMPUTING

_ **Operating systems:** Windows
_ **Monte Carlo simulation codes:** PENELOPE, SRIM
_ **Programming languages:** Fortran, C++
_ **Office package:** Word, Excel, PowerPoint, Outlook, Access
_ **Drawing and image processing:** Photoshop, Corel Draw
_ **Others (Mathematica, SigmaPlot, Origin ...)**

MENTOR/ MEMBERSHIP IN COMMISSIONS FOR BSc, MSc and PhD:

1. Ana Djordjevic: **Elektricne prirode munje** (Bsc in physics, Mentor: M. Kovacevic, 2011.)
2. Marija Mancic: **Energija Sunca** (Bsc in physics, Mentor: N. Stevanovic, 2012.)
3. Jelena Vukadinovic: **Primena lasera u medicini** (Bsc in physics, Mentor: N. Stevanovic, 2012.)
4. Danijela Bogavac: **Jonizacija i ekscitacija molekula vode u celijama usled prolaska alfa cestice** (Bsc-master in physics, Mentor: N. Stevanovic, 2012.)
5. Dejan Simic: **Sunceve pege** (Bsc in physics, Mentor: N. Stevanovic, 2012.)
6. Danijela Djordjevic: **Meseceve mene** (Bsc in physics, Mentor: N. Stevanovic, 2012.)
7. Ana Rakocevic: **Gama spektrometrija** (Bsc in physics, Mentor: N. Stevanovic, 2012.)
8. Jadranka Jankovic: **Efektivna doza od prirodnih radionuklida** (Bsc in physics, Mentor: N. Stevanovic, 2012.)
9. Jasmina Dubovac: **Karakter Braunovog kretanja sa osvrtom na bioloske sisteme** (Bsc in physics, Mentor: D. Knezevic, 2012.)
10. Zorana Ramovic: **Helijum kao potencijalni izvor energije** (Bsc in physics, Mentor: D. Knezevic, 2012.)

11. Goran Markovic: **Helijum kao najmocniji superfluid** (Bsc in physics, Mentor: D. Knezevic, 2013.)
12. Marina Stamenkovic: **Interferencija svetlosti i njene primene** (Bsc in physics, Mentor: N. Stevanovic, 2013.)
13. Tomislav Stojanovic: **Elektromagnetni talasi** (Bsc in physics, Mentor: N. Stevanovic, 2013.)
14. Milan Nedeljkovic: **Odredjivanje koncentracije radona i njegovih potomaka u vazduhu gama spektrometrijskom metodom** (Master in physics, Mentor: N. Stevanovic, 2013.)
15. Olga Dukic: **Difuzija radona** (Master in physics, Mentor: N. Stevanovic, 2013.)
16. Milena Radojkovic: **Talasni fenomeni svetlosti** (Bsc in physics, Mentor: N. Stevanovic, 2013.)
17. Sanja Petrovic: **Parametri Jakobijevog modela** (Master in physics, Mentor: N. Stevanovic, 2014.)
18. Slobodan Vulic: **Teslin transformator** (Master in physics, Mentor: N. Stevanovic, 2014.)
19. Markovic Vladimir: **Doprinos efektivnoj dozi od beta i gama zračenja od radonovih i toronovih potomaka** (PhD, membership in commission, mentor was professor D. Nikezic, 2014.)

LIST OF PUBLICATIONS

Books

1. N. Stevanovic, V. Markovic and D. Nikezic. **Behavior of radon, thoron and their progeny in a room**, LAP Lambert Academic Publishing - ISBN-13: 978-3-659-68290-2, 2015 **M11 10p**

Book chapters

1. V. Markovic, N. Stevanovic, D. Krstic and D. Nikezic. **Beta and gamma dose assessment due to radon short lived progeny. *Handbook of Radon: Properties, Applications and Health*, Nova Publishers- ISBN: 978-1-62100-177-5, 63-100, 2012. **M13 6p****
2. D. Nikezic, V.M. Markovic, N. Stevanovic, V. Urosevic, B. Milenkovic and J. Stajic. **Radon diffusion through the medium. *Handbook of Radon: Properties, Applications and Health*, Nova Publishers- ISBN: 978-1-62100-177-5, 311-334, 2012. **M14 4p****
3. N. Stevanovic, B. Milenkovic, D. Nikezic. **Software for Determination of Track Parameters in Nuclear Track Detectors Etched in Reverse Direction. *Computer Source Code: Development, Analysis and Applications*. ISBN: 978-1-61122-807-6, 89-108, 2011. **M14 4p****
4. N. Stevanovic, V.M. Markovic, D. Nikezic. **Influence of Ventilation Rate on Radon and Thoron Progeny Concentrations in a Room. *Ventilation: Types, Standards and Problems*, Nova Publishers - ISBN: 978-1-61324-424-1. 111-134, 2011. **M14 4p****

1. Papers printed in International Journal on ISI list

1.1. N. Stevanovic, V.M. Markovic. **Diffraction pattern by rotated conical tracks in solid state nuclear track detectors** Optics & Laser Technology. Accepted for publication 2016. ISSN 0030-3992 **IF= 1.647 M22 5p**

1.2 A. V. Teodorović, D. M. Badjuk, N. Stevanović, R. Z. Pavlović, **Stabilization of long-chain intermediates in solution. Tridecyl radicals and cations**, Journal of Molecular Structure, 1083, 357-363, 2015. ISSN 0022-2860 **IF= 1.602 M23 3p**

1.3. B. Milenkovic, N. Stevanovic, D. Krstic, D. Nikezic, **Neutron detection by a CR-39 detector and analysis of proton tracks etched in the same and opposite directions**, Radiation Protection Dosimetry 161 (1-4):108-111, 2014 ISSN: 1742-3406 **IF= 0.909 M22 5p**

1.4 B. Milenkovic, N. Stevanovic, D. Nikezic, D. Kosutic. **Determination of a CR-39 detector response to neutrons from an Am-Be source** Applied Radiation and Isotopes, 90, 225-228, 2014. ISSN 0969-8043 **IF= 1.179 M21 8p**

1.5. V.M. Markovic, N. Stevanovic, D. Nikezic, Dž. F. Pucic, V. Urosevic , **Specific energy distribution within cytoplasm and nucleoplasm of a typical mammalian cell due to various beta radionuclides**. Journal of Radioanalytical and Nuclear Chemistry, 299(3), 1723-1730, 2014, ISSN: 0236-5731, DOI 10.1007/s10967-013-2874-3 **IF=1.467 M21 8p**

1.6. V.M. Markovic, D. Krstic, N. Stevanovic, D. Nikezic. **Photon albedo for water, concrete and iron at normal incidence and dependence on the thickness of reflecting material**. Nucl. Techn. & Rad. Prot. 28(1), 36-44, 2013 **IF= 1 M22 5p**

1.7. A V. Teodorovic, D. M. Badjuk, N. Stevanovic, R. Z. Pavlovic. **Stabilization of long-chain intermediates in solution. Octyl radicals and cations**. Journal of Molecular Structure 1040, 19-24, 2013. **IF=1.634 M23 3p**

1.8 V.M. Markovic, D. Krstic, D. Nikezic, N. Stevanovic. **Doses from radon progeny as a source of external beta and gamma radiation**. Radiat Environ Biophys, 51(4), 391-397, 2012. **IF=1.696 M22 5p**

1.9 N. Stevanovic, V.M. Markovic, M. Arsenijevic, D. Nikezic. **Influence of electron motion in target atom on stopping power for low-energetic ions**. Nucl. Techn. & Rad. Prot. 27(2), 113-116, 2012 **IF= 1.159 M22 5p**

1.10 B. Jovanović, D. Nikezić, N. Stevanović. **Applied mathematical modeling for calculating the probability of the cell killing per hit in the human lung**. Journal of Radioanalytical and Nuclear Chemistry, 290 (3), 607-613, 2011. **IF=1.52 M21 8p**

1.11.V. Markovic, N. Stevanovic and D. Nikezic. **Doses from beta radiation in sensitive layers of human lung and dose conversion factors due to $^{222}\text{Rn}/^{220}\text{Rn}$ progeny**. Radiation and Environmental Biophysics.50(3), 431-440, 2011. **IF=1.635 M22 5p**

- 1.12. B. Milenkovic, N. Stevanovic, D. Nikezic and M. Ivanovic. **Computer program Neutron_CR-39 for simulation of neutrons from an Am-Be source and calculation of proton track profiles.** Computer Phys Commun 182, 1536-1542, 2011 IF= 1.958 M21 8p
- 1.13. B. Milenković, D. Nikezić, N. Stevanović. **A simulation of neutron interaction from Am-Be source with the CR-39 detector.** Radiation Measurements 45, 1338-1341, 2010.
IF =0.973 M21 8p
- 1.14. N. Stevanovic, V.M. Markovic, D. Nikezic. **Relationship between deposition and attachment rates in Jacobi room model.** Journal of Environmental Radioactivity, 101, 349–352, 2010.
IF =1.114 M23 3p
- 1.15. N. Stevanovic V.M. Markovic, D. Nikezic. **Deposition rates of unattached and attached fractions in room at turbulent airflow and ventilation.** Journal of Environmental Radioactivity, 100, 585–589, 2009.
IF =1.114 M23 3p
- 1.16. B. Milenković, N. Stevanović, D. Krstic, D. Nikezić. **Numerical solving of the track wall equation in LR115 detectors etched in direct and reverse directions.** Radiation Measurement, 44, 57–62, 2009.
IF=1.267, M21 8p
- 1.17 N. Stevanovic V. Markovic, V. Urosevic and D. Nikezic. **Determination of parameters of Jacobi room model using the Brownian motion model.** Health Physics. 96(1): 48-54, 2009.
IF=0.902 M22 5p
- 1.18. V. Markovic, N. Stevanovic and D. Nikezic. **Absorbed fractions for electrons and beta particles in sensitive regions of human respiratory tract.** Radiat. Environ. Biophys., 47, 139–145, 2008.
IF=1.787 M22 5p
- 1.19. D. Nikezić, N. Stevanović, D. Kostić, S. Savović, K.C.C. Tse, K.N.Yu. **Solving the track wall equation by the finite difference method.** Radiation Measurement, 43, S76–S78, 2008.
IF=1.267, M21 8p
- 1.20. D. Krstic, D. Nikezic, N. Stevanovic, D. Vucic, **Radioactivity of some domestic and imported building materials from South Eastern Europe,** Radiation Measurements, 42 (10), 1731-1736, 2007.
IF=1.054, M21 8p
- 1.21. D. Nikezić and N. Stevanović. **Behavior of 220Rn progeny in diffusion chamber.** Nuclear Instruments and Methods A, 570, 182-186, 2007.
IF=1.224, M21 8p
- 1.22. D. Krstić, N. Stevanović, J. Milivojević and D. Nikezić. **Transfer of 137Cs from soil to plants.** Isotopes in Environmental Health Studies, 43(1), 1-9, 2007. IF=1.500, M22 5p
- 1.23. D. Nikezić and N. Stevanović. **Room model with three modal distributions of attached 220Rn progeny. Dose conversion factor for 220Rn progeny.** Radiation Protection Dosimetry, 123, 95-102, 2007.
IF=0.528, M23 3p
- 1.24. N. Stevanović and D. Nikezić. **Calculation of stopping power for partially stripped ion by using oscillator model.** Eur. Phys. J. D 42, 397–406, 2007. IF=1.988, M22 5p
- 1.25. D. Nikezic, B.M.F. Lau, N. Stevanovic and K.N.Yu. **Absorbed Dose in Target Cell Nuclei and Dose Conversion Coefficient of Radon Progeny in the Human Lung,** Journal of Environmental Radioactivity, 89, 18-29, 2006.
IF=1.243, M22 5p

- 1.26. N. Stevanović and D. Nikezić. **Stopping power. Projectile and target modeled as oscillators.** Physics Letters A, 340 (1-4), 290-298, 2005. **IF=1.55, M22 8p**
- 1.27. D. Nikezić and N. Stevanović. **Radon progeny behavior in diffusion chamber.** Nuclear Instruments and Methods B, 239 (4), 399-406, 2005. **IF=1.181, M21 8p**
- 1.28. D. Krstić, D. Nikezić, N. Stevanović i M. Jelić. **Vertical distribution of ^{137}Cs in soil.** Applied Radiation and Isotopes., 61(6), 1487, 2004. **IF=1.000, M21 8p**
- 1.29. N. Stevanović, D. Nikezić. **Recoil factor of ^{214}Pb .** Journal of Aerosol Science., 35(8), 1041, 2004. **IF=1.861, R51 8p**
- 1.30. D. Nikezić, N. Stevanović. **Room model with three modal distribution of attached radon progeny.** Health Physics., 87(4), 405-409, 2004. **IF=0.796, R51 8p**
- 1.31. D. Nikezić and N. Stevanović. **Influence of variability of ^{214}Pb recoil factor on lung dose.** Radiation Protection Dosimetry., 109, 197-199, 2004. **IF=0.680, R52 5p**

2. Papers on the international and national conferences

- 2.1. D. Krstić, D. Nikezić, V. Ljubenov i N. Stevanović. **Računanje efektivne doze u plućama i gonadama od ^{137}Cs u tlu.** Zbornik radova, XXII Simpozijum Jugoslovenskog Društva za Zaštitu od Zračenja, 2003. **M63**
- 2.2. D. Krstić, D. Nikezić, N. Stevanović i M. Jelić. **Vertikalna raspodela ^{137}Cs u tlu.** Zbornik radova, XXII Simpozijum JDZZ, 181-184. 2003. **M63**
- 2.3. N. Stevanović i D. Nikezić. **Zaustavna moć alfa čestica u CR-39 detektoru.** Zbornik radova, XXII Simpozijum JDZZ, 2003. **M63**
- 2.4. N. Stevanović, D. Nikezić, D. Krstić, D. Kostić, M.S.Kovačević. **Faktor uzmarka radonovih potomaka.** Zbornik radova, XXIII Simpozijum DZZSCG, 327-331, 2005. ISBN: 86-7306-075-3. **M63**
- 2.5. B. Milenkovic, N. Stevanovic, D. Krstic, D. Nikezic. **Numericko resavanje jednacine zida traga u LR115 detektoru nagrzanom u direktnom i suprotnom smeru.** Zbornik radova ETRAN, 2008. ISBN: 978-86-80509-63-1 **M63**
- 2.6. D. Krstić, D. Nikezić, N. Stevanović, D. Vučić. **Radioaktivnost nekih uvoznih gradjevinskih materijala.** Zbornik radova, XXIII Simpozijum DZZSCG, 309-311, 2005. ISBN: 86-7306-075-3. **M63**
- 2.7. B. Milenkovic, D. Nikezic, N. Stevanovic. **Simulacija odgovora CR-39 detektora na ozracivanje neutronima iz Am-Be izvora.** Zbornik radova, XXV Simpozijum DZZSCG, 274-278, 2009. ISBN: 978-86-7306-112-2. **M63**
- 2.8. N. Stevanović, V.M. Markovic, D. Nikezić. **Parametri Jakobijevog modela u prostoriji pri turbulentnom kretanju vazduha.** Zbornik radova, XXV Simpozijum DZZSCG, 345-349, 2009. ISBN: 978-86-7306-112-2. **M63**

- 2.9. B. Milenković, N. Stevanović, V. Marković, D. Nikezić. **Efikasnost detekcije protona nastalih u CR-39 detektoru ozračenom neutronima iz Am-Be izvora.** *ETRAN*, 2010. **M63**
- 2.10. N. Stevanovic, V. Markovic, D. Nikezic, B. Milenkovic, J. Stajic. **Korekcija ljske za zaustavnu moc za niskoenergetske jone.** *Zbornik radova, XXVI Simpozijum DZZSCG*, 14-17, 2011. ISBN: 978-86-7306-105-4. **M63**
- 2.11. B. Milenkovic, D. Nikezic, N. Stevanovic. **Korekcija ljske za zaustavnu moc za niskoenergetske jone.** *Zbornik radova, XXVI Simpozijum DZZSCG*, 306-310, 2011. ISBN: 978-86-7306-105-4. **M63**
- 2.12. V. Markovic, N. Stevanovic, D. Nikezic. **Raspodela specificne energije beta zracenja unutar celije.** *Zbornik radova, XXVI Simpozijum DZZSCG*, 224-227, 2011. ISBN: 978-86-7306-105-4. **M63**
- 2.13. J. Zivkovic Radovanovic, N. Stevanovic V. M. Markovic, D. Nikezic, B. Milenkovic. **Simulacija niskoenergetskih protona kroz celije.** *Zbornik radova, XXVII Simpozijum Društva za Zaštitu od Zracenja Srbije i Crne Gore, Vrnjacka Banja, Srbija*, pp 263-266, **ISBN: 978-86-7306-115-3**, 2013. **M63**
- 2.14. D. Bogavac, N. Stevanovic, V.M. Markovic, D. Nikezic, J. Stajic. **Jonizacija i ekscitacija molekula vode u celijama usled prolaska alfa cestica.** *Zbornik radova, XXVII Simpozijum Društva za Zaštitu od Zracenja Srbije i Crne Gore, Vrnjacka Banja, Srbija*, pp 241-245, **ISBN: 978-86-7306-115-3**, 2013. **M63**
- 2.15. N. Stevanovic, V.M. Markovic, D. Spasic. **Difrakcione slike na konusnim i sfernim objektima.** *Zbornik radova, XXVIII Simpozijum Društva za Zaštitu od Zracenja Srbije i Crne Gore, Vrnjacka Banja, Srbija*, pp 602-607, **ISBN: 978-86-7306-135-1**, 2015. **M63**