Curriculum Vitae Jovana Nikolov



PERSONAL INFORMATION

Jovana Nikolov



- University of Novi Sad, Faculty of Sciences, Department of Physics, Trg Dositeja Obradovica 3, 21000 Novi Sad, Serbia
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- jovana.nikolov@df.uns.ac.rs

Sex Female | Date of birth 13/01/1985 | Nationality Serbian

WORK EXPERIENCE

2019 - Associate Professor

Nuclear Physics Group, Department of Physics, Faculty of Sciences, University of Novi Sad Teaching courses: Introduction to Nuclear Physics (BSc), Physics of Medical Imaging (BSc), Hyperfine Interactions (BSc), Radioecology (MSc), Diagnostic Radiology Physics (MSc), Physics of NMR (MSc), Nuclear safety and security (MSc), Structure of atomic nuclei (PhD), Biophysics for Medicine students (BSc)

2014 - 2019 Assistant Professor

Nuclear Physics Group, Department of Physics, Faculty of Sciences, University of Novi Sad

- Teaching courses: Environmental Protection (BSc), Physics basics of Radiodiagnostic and Radiotherapy (BSc), Medical imagining (BSc), Radioecology (MSc), Radiology Physics (MSc), Physics of NMR (MSc), Nuclear safety and nuclear security (MSc), High Energy Physics (PhD).
- Assistant on courses: Nuclear Physics (BSc), Biophysics for pharmacy students

2011 - 2014 Research Associate

Nuclear Physics Group, Department of Physics, Faculty of Sciences, University of Novi Sad

2009 - 2011 Research Assistant

Nuclear Physics Group, Department of Physics, Faculty of Sciences, University of Novi Sad

EDUCATION AND TRAINING

2009 - 2013 PhD in Nuclear Physics

University of Novi Sad, Faculty of Sciences, Department of Physics/ CERN, ISOLDE - NICOLE collaboration

PhD thesis: "Nuclear structure investigation by low-temperature nuclear orientation methods", defended on September 30th, 2013, average grades 10.

2003 - 2009 MSc in Physics

University of Novi Sad, Faculty of Sciences, Department of Physics

PERSONAL SKILLS

Mother tongue(s) Serbian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

English

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Communication skills

good ability to adapt to multicultural environment

- gained throughout work experience abroad on experiments in international scientific groups
- research team spirit
- part of research laboratory for more than 13 years

International Activities

External training expert in Nuclear Security Division of International Atomic Energy Agency (IAEA) ITWG member – representative of Serbia in nuclear forensics international technical working group

- 2017 -
- 2022 co-chair of Task Group Guidelines in ITWG

GICNT (Global Initiative to Combat Nuclear Terrorism)

• 2018 – member of working groups: Nuclear Detection and Nuclear Forensics

INSEN - IAEA International Nuclear Security Education Network

• 2017 – point of contact for University of Novi Sad, Faculty of Sciences

IAEA ALMERA

• 2015 – point of contact for University of Novi Sad, Faculty of Sciences

Erasmus+ coordinator on Department of Physics, Faculty of Sciences, University of Novi Sad

2015 – 2020

Team Leader of University of Novi Sad group on NICOLE experiment, ISOLDE collaboration at CERN Member of DUNE collaboration

Member of Scientific Committees in few International Conferences

Host of Erasmus+ mobility for two professors: Prof.Isabel Lopes, University of Coimbra (teaching mobility 2022/2023) and Prof.Alexandra Ioannidou, Aristotle University of Thessaloniki (one teaching mobility 2018/2019 and one training mobility 2016/2017)

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Participation in projects

The Serbian Science and Diaspora Collaboration Programme, Vouchers for Knowledge Exchange, Science Fund of the Republic of Serbia, project "Boosting excellence of UNSPMF NPG in neutrino physics research" – GENESIS (approved in 2020 for one year, due to COVID-19 prolonged till the end of 2022)

Participant in the project, team member

IAEA CRP "Improving of non-destructive laboratory based and in-situ measuring methods to respond to a nuclear security event" 2019 – 2023

2019 – 2023 – chief scientific investigator / head of the project

COST Action CA19120 "WATer isotopeS in the critical zONe: from groundwater recharge to plant transpiration"

2020 – 2024 – MC Board Member

IAEA TC RER 7013 "Evaluating Groundwater Resources and Groundwater-Surface-Water Interactions in the Context Adapting to Climate Change"

• 2020 – 2024 – team member

MetroRADON - Metrology for Radon Monitoring (EMPIR 16ENV10)

2017 – 2020 – team member

Bilateral Scientific Project between Croatia and Serbia: "Optimisation of methods for radioactivity measurements (³H, ¹⁴C, ⁹⁰Sr, ²²²Rn) in environmental samples"

2016 – 2017 – head of the project

Bilateral Scientific Project between Croatia and Serbia: "¹⁴C and ¹³⁷Cs in sediments – comparison of methods and application of recent sediments"

• 2011 – 2012 – team member

CEEPUS Network "Education, training and research in radioecology"

2016/2017, 2017/2018. – main coordinator of the project

IPA Project Hungary – Serbia "Cooperation in medical physicist training and education – Mephyste"

2015 – 2016. Team member

Part of DANUBE-INCO.NET project, a coordination and support action funded under the 7th Framework Programme to address the official EU Strategy for the Danube Region (EUSDR) in the field of research and innovation (R&I)

• 2015 – 2017 – team member

Awards, prizes, etc.

"Djindjic Award" for the best young researcher in Autonomous Province of Vojvodina for the year 2013.

Reviewing scientific journals

Nuclear Instruments and Methods A (Elsevier), Applied Radiation and Isotopes (Elsevier), Journal of Environmental Radioactivity (Elsevier), Annals of Nuclear Energy (Elsevier), Science of the Total Environment (Elsevier), Radiation Measurements (Elsevier), Journal of Radioanalytical and Nuclear Chemistry (Springer), etc.

Associate Editor

Frontiers in Nuclear Engineering

Teaching and mentoring experience

Lecturer on courses: Environmental Protection (BSc in physics), Physics basics of Radiodiagnostic and Radiotherapy (BSc in physics), Medical imagining (BSc in physics), Radioecology (MSc in nuclear physics), Radiology Physics (MSc in medical physics), Physics of NMR (MSc in medical physics), Nuclear safety and nuclear security (MSc in nuclear physics), Measurement methods of nuclear and other radioactive material (MSc in forensics), Nuclear security and nuclear forensics (MSc in forensics), Measuring methods of nuclei structure parameters (PhD in nuclear physics), Diagnostic radiology – physics and medical aspects (PhD in medical physics), Physics for Medicine students (BSc)

Co-author of a University book "Nuclear Analytical Techniques of Liquid Scintillation Spectroscopy"

Co-author of a University book "Practical exercises in Nuclear Physcis"

Co-editor of monograph book "Radionuclides: Properties, Behavior and Potential Health Effects", NOVA Science Publisher 2020, ed. N.Todorović and J.Nikolov

Contributor to "European Atlas of Natural Radiation" published by JRC in 2020.

Supervisor on more than 20 Master and Bachelor thesis in the area of applied nuclear physics and medical physics – diagnostic radiology.

Currently, supervisor of 2 Ph.D.students.

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ADDITIONAL INFORMATION Publications

Author and co-author of more than 85 SCI publications. Some of them are listed below: Todorovic, N., **Nikolov, J.**, Stojkovic, I., Nuclear analytical methods of liquid scintillation counting, University book for students in Serbian.

Todorovic, N., Nikolov, J., Forkapic, S., Bikit, I., Mrdja, D., Krmar, M., Veskovic, M., Public exposure to radon in drinking water in SERBIA, Applied Radiation and Isotopes, Volume 70, Issue 3, March 2012, Pages 543-549.

Nikolov, J., Todorovic, N., Pantic, T.P., Forkapic, S., Mrdja, D., Bikit, I., Krmar, M., Veskovic, M., Exposure to radon in the radon spa Niška Banja, Serbia, Radiation Measurements, Volume 47, Issue 6, June 2012, Pages 443-450.

Ohtsubo, T., Stone, N.J., Stone, J.R., Towner, I.S., Bingham, C.R., Gaulard, C., Köster, U., Muto, S., Nikolov, J., Nishimura, K., Simpson, G.S., Soti, G., Veskovic, M., Walters, W.B., Wauters, F., Magnetic dipole moment of the doubly-closed-shell plus one proton nucleus Sc49, Physical Review Letters, Volume 109, Issue 3, 19 July 2012, Article number 032504

Todorović, N., **Nikolov, J.**, Tenjović, B., Bikit, I., Veskovic, M., Establishment of a method for measurement of gross alpha/beta activities in water from Vojvodina region, Radiation Measurements, Volume 47, Issue 11-12, November 2012, Pages 1053-1059.

Bikit, I., Mrda, D., Todorovic, N., **Nikolov, J.**, Krmar, M., Veskovic, M., Slivka, J., Hansman, J., Forkapic, S., Jovancevic, N., Airborne radioiodine in northern Serbia from Fukushima, Journal of Environmental Radioactivity, Volume 114, December 2012, Pages 89-93.

Nikolov, J., Todorovic, N., Jankovic, M., Vostinar, M., Bikit, I., Veskovic, M., Different methods for tritium determination in surface water by LSC, Applied Radiation and Isotopes, Volume 71, Issue 1, January 2013, Pages 51-56.

Mrdja, D., Bikit, I., Veskovic, M., Slivka, J., Todorovic, N., **Nikolov, J.**, Forkapic, S., Bikit, K., Time resolved spectroscopy of cosmic-ray muons induced background, Astroparticle Physics, Volume 42, 2013, Pages 103-111. Bikit, K., **Nikolov, J.**, Bikit, I., Mrda, D., Todorovic, N., Forkapic, S., Slivka, J., Veskovic, M., Reinvestigation of the irregularities in the ³H decay, Astroparticle Physics, Volume 47, 2013, Pages 38-44.

Ciraj-Bjelac, O., Petrovic, B., Todorovic, N., Lucic, S., **Nikolov, J.**, Veskovic, M., Application of Gamma Ray in Medicine, Chapter 13, Pages 321-345, in Gamma Rays, Technology, Applications and Health Implications, Editor: Istvan Bikit, Nova Science Publishers, New York, (2013)

Muto, S., Stone, N.J., Bingham, C.R., Stone, J.R., Walker, P.M., Audi, G., Gaulard, C., Köster, U., **Nikolov, J.**, Nishimura, K., Ohtsubo, T., Podolyak, Z., Risegari, L., Simpson, G.S., Veskovic, M., Walters, W.B., Magnetic properties of Hf 177 and Hf 180 in the strong-coupling deformed model, Physical Review C - Nuclear Physics, Volume 89, Issue 4, 7 April 2014, Article number 044309.

Jakonić, I., Todorović, N., **Nikolov**, J., Bronić, I.K., Tenjović, B., Vesković, M., Optimization of low-level LS counter Quantulus 1220 for tritium determination in water samples, Radiation Physics and Chemistry, Volume 98, May 2014, Pages 69-76.

Nikolov, J., Medić, Ž., Jovančević, N., Hansman, J., Todorović, N., Krmar, M., Applicability of the $Ge(n, \gamma)$ reaction for estimating thermal neutron flux, Physics Procedia, Volume 59, Issue C, 2014, Pages 71-77.

Pantić, T.P., Birke, M., Petrović, B., **Nikolov, J.**, Dragišić, V., Živanović, V., Hydrogeochemistry of thermal groundwaters in the Serbian crystalline core region, Journal of Geochemical Exploration, Volume 159, December 2015. Pages 101-114.

Nikolov, J., Todorović, N., Bikit, I., Pantić, T.P., Forkapić, S., Mrđa, D., Bikit, K., Radon in thermal waters in southeast part of Serbia, Radiation Protection Dosimetry, Volume 160, Issue 1-3, July 2014, Article number ncu094, Pages 239-243.

Vraničar A., **Nikolov J.**, Lazarević Đ., Rikalo A., Todorović N., Arbutina D., Travar M., Sample matrix influence on the efficiency function modelling for uranium isotopes determination by gamma spectrometry, *Radiation Physics and Chemistry*, Volume 192, March 2022 Article number 109891.

Vraničar A., **Nikolov J.**, Todorović N., Maksimović I., Mladenović M., Mrđa D., Travar M., Testing of EFFTRAN and Angle software in comparison to GEANT 4 simulations in gamma spectrometry of cylindrical and noncylindrical sample geometries, *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, Volume 98611, January 2021, Article number 164768.

Conferences

Participated in more than 30 International Conferences in the field of fundamental and applied nuclear physics.

Held an invited talk "Current trends in Nuclear Forensics" at conference "International conference on Radiation Applications" Thessaloniki, Greece, 6 – 10.6.2022.

Teaching in English

Professor at a course Biophysics for BSc students at Medical Faculty, University of Novi Sad Professor on 8 courses in English offered in the Course Catalogue for Erasmus+ students

Citations

707 citations (SCOPUS, 20.1.2023) Author h-index: 14

Signature