

Nemanja Aksic

Research Assistant

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Education: **2014 – 2018** BSc (Hons) in Electrical Engineering and Computing (240 ECTS; GPA 9.04/10.00)
University of Belgrade – School of Electrical Engineering – Department of Physical Electronic
module: Biomedical and Ecological Engineering.
2014 – 2018 BSc (Hons) in Chemistry (240 ECTS; GPA 9.17/10.00)
University of Belgrade – Faculty of Chemistry
2018 – 2019 MSc in Chemistry (60 ECTS; GPA 9.75/10.00)
University of Belgrade – Faculty of Chemistry
2020 – 2021 PhD candidate at Loke Bio-nanotechnology & Electronics-for-Large-scale Lab (LBELL group) (GPA 4.70/5.00)
Singapore University of Technology and Design (SUTD) – Science, Mathematics and Technology
2023 PhD candidate
University of Belgrade – Faculty of Chemistry
Supervisor of studies: Associate Professor, dr Tatjana Verbic, Faculty of Chemistry, UB
Supervisor of doctoral thesis: Principal Research Fellow, dr Uros Andjelkovic, ICTM, UB

Research Ranks: Institute of Chemistry, Technology and Metallurgy - University of Belgrade, Serbia
2024 – Research Assistant
2023 – Junior Research Assistant
Institute of Mining and Metallurgy, Bor, Serbia
2021 – 2022 Junior Research Assistant

Research Protein and glycan structure determination by mass spectrometry.

Interests: Proteomics and glycomics.

Clinical proteomics and protein biomarker research.
LC-MS/MS quantification of food contaminants.

Additional Professional Experience: **07 2024 – 09 2024** Visiting researcher – AG Engel, Group for Immunoproteomics, Department for Immunodynamics, Institute for Experimental Immunology and Imaging, University Hospital Essen, (Essen, Germany)
06 2024 – currently Field Service Engineer and Application Chemist for SCIEX LC-MS – East Diagnostics (Belgrade, Serbia)
03 2023 – currently Researcher – Laboratory for Protein Biotechnology, Proteomics and Glycomics (ICTM, Belgrade, Serbia)
03 2023 – currently Part-time Application Chemist – Analytical Method Development for LC-MS/MS, Field Test, Department for Food and Feed analysis (Belgrade, Serbia)
03 2022 – 03 2023 Head of Center for Laboratories – Laboratory for Chemical Testing and Geomechanics at Mining and Metallurgy Institute (Bor, Serbia)
11 2021 – 03 2023 Research scientist for instrumental analysis at Mining and Metallurgy Institute (Bor, Serbia)
09 2021 – 09 2022 Chemistry and Physics online tutor at 24HoursAnswers (New York, USA)
09 2021 – 10 2021 Chemistry teacher at The Eight Belgrade High School (Belgrade, Serbia)
01 2019 – 01 2020 Research scientist at Biotehnika IVD (Belgrade, Serbia), the daughter company of Ellie (Wisconsin, USA)
11 2018 – 12 2018 Innovation Vouchers Assistant – Innovation Fund (Belgrade, Serbia)
12 2016 – 08 2018 Physics teacher, Education Center – Korak napred (Belgrade, Serbia)
06 2015 – 01 2023 Senior Associate at Petnica Science Center – Department of Chemistry (Valjevo, Serbia)

Teaching activities: **2020 - 2021** Teaching assistant in Physics – Physical world for undergraduate students at Singapore University of Technology and Design, Singapore

Awards and Honors: **2024** DAAD Research Grant Award – German Academic Exchange Service (DAAD, Germany)
2024 Erasmus+ Traineeship – Proteomic Sample Preparation and Analysis with LC-TIMS-TOF Bruker System (Erasmus, EU)
2020 SUTD President's Graduate Fellowship PhD – Singapore Government
2020 Best poster award at Fostering Industrial Research Success Together (FIRST) 2020 research competition/poster showcase – Singapore
2014 – 2019 Scholarship for university students – Ministry of Education, Science and Technology Development - Serbia
2014 Winner of the Dositej Obradovic Award – Fund for young talents in Republic of Serbia
2014 Holder of the Vuk Karadzic diploma, best student award
2010 Holder of the Vuk Karadzic diploma, best student and best athlete award

Memberships: Serbian Chemical Society

Scientific 2022 Research Reinforcing in the Western Balkans in Offline and Online Monitoring and Source Identification of Atmospheric
Projects: Particles (WeBaSOOP), HORIZON EUROPE, No. 101060170

Development Innovation voucher:

and Industrial Development and validation of a new and improved method for the determination of cyanogenic glycosides in high-quality flour of fruit origin using the LC-MS/MS technique.

Projects: flour of fruit origin using the LC-MS/MS technique.

Technical solution:

Automatic meteorological station based on low-cost sensors AMS/2022, M84 Significantly improved technical solution at the national level, dr Visa Tasic, principal research fellow, dr Renata Kovacevic, research associate, Tatjana Apostolovski – Trujic, junior research assistant, dr Nikola Mirkov, research associate, mr Zvonko Damnjanovic, BSc mechanical engineering
Nemanja Aksic, junior research assistant, Jasna Petrović, research assistant.

Publications: Scientific papers:

2022

3. Stirbanovic, Z., Urosevic, D., Djordjevic, M., Sokolovic, J., **Aksic, N.**, Zivadinovic, N., Milutinovic, S. Application of Thionocarbamates in Copper Slag Flotation. *Metals* 12 (2022) 832 doi: 10.3390/met12050832

2. Stanic Nikola, Gomilanic Miljan, Doderovic Aleksandar, **Aksic Nemanja**. Assessment of dust emission at the limestone open pit "Milojević Brdo". *Mining and Metallurgy Engineering Bor* 2 (2022) 35-42 doi: 10.5937/mmeb22020355

2021

1. Denise Lee, Sophia Shuwn-Yi Chan, **Nemanja Aksic**, Natasa Bajalovic, and Desmond K. Loke. Ultralong-Time Recovery and Low-Voltage Electroporation for Biological Cell Monitoring Enabled by a Microsized Multipulse Framework. *ACS Omega* 6 (2021) 35325-35333 doi: 10.1021/acsomega.1c04257

Conference papers:

2024

1. Vatazevic Aleksandar, Vukovic Gorica, Puvaca Nikola, Agarski Miroslav, Zunic Antonije, **Aksic Nemanja**, Bursic Vojislava, Determination of ergot alkaloids in buckwheat flour by liquid chromatography coupled to tandem mass spectrometry, 14th Conference of the IOBC-WPRS Working Group of the Integrated Protection of Stored Products (IPSP), 16-20 September 2024, Novi Sad, Serbia, IOBC-WPRS, 173 (2024) 173–177, ISBN: 978-92-9067-360-6.

Theses:

Master thesis - Faculty of Chemistry:

Application of progesterone bioconjugates for the determination of the gravity by the immunoassay based on the fluorescent polarization, Supervisor: prof. dr Tatjana Verbic, Faculty of Chemistry, UB

Bachelor thesis - Faculty of Electrical Engineering:

Surface Modification of Composite Ion-Exchange Membranes by Silver Nanoparticles, prof. dr Milos Vujisic, - School of Electrical Engineering, UB

Bachelor thesis - Faculty of Chemistry:

Binding studies of UV filters for molecularly imprinted polymers (MIPs), Supervisor: prof. dr Tatjana Verbic, Faculty of Chemistry, UB

Conferences, Congresses and Summer schools:

1. **Nemanja Aksic**, Uros Andjelkovic, *Identification of proteins shed from the surface of Caco-2 cells by cysteine protease actinidin - comparison of two MS based-proteomic techniques*, 15th Mass Spectrometry School in Biotechnology and Medicine, 2-8 July 2023, Dubrovnik, Croatia.
2. **Nemanja Aksic**, Gorica Vukovic, Aleksandar Vatazevic, Sanja Novkovic, Vojislava Bursic, Nikola Puvaca, *Determination and health risk assessment of acrylamide levels in roasted coffee samples on the market of the Republic of Serbia*, 13th Congress of the Serbian Society of Toxicology with international participation & 1st TOXSEE Regional Conference, 10-12 May 2023, Belgrade, Serbia.
3. **Nemanja Aksic**, Renata Kovacevic, Visa Tasic, Tatjana Apostolovski Trujic, Bojan Radovic, Tamara Urosevic, Dejan Tanikic, *Extremely High Concentration of Arsenic in PM10 in the Vicinity of the Copper Smelter in Eastern Europe - Bor, Serbia*, 11th International Aerosol Conference, 4-9 September 2022, Athens, Greece.
4. **Nemanja Aksic**, Renata Kovacevic, Visa Tasic, Bojan Radović, Tamara Urošević, Tatjana Apostolovski Trujic, *Air quality in the vicinity of the copper mining; Case study: Bor, Eastern Serbia*, VIDIS summer school, 4-8 July 2022, Borkovac, Serbia
5. **Nemanja N. Aksic**, Desmond K. Loke, *Ultrafast Nanoscale Phase-Change Memory Enabled by Single-Pulse Conditioning*, Fostering Industrial Research Success Together (FIRST), Research competition/poster showcase, 22 July 2020, Singapore.
6. Milos P. Pesic, **Nemanja N. Aksic**, Tatjana Z. Verbic, University of Belgrade – Faculty of Chemistry, *Preparation of polymer sorbents for selective sorption of cinnamate UV-filters*, 56th Meeting of the Serbian Chemical Society, 7-8 June 2019, Nis, Serbia.