

Nemanja Aksic

Junior Research Assistant



Institute of
Chemistry
Technology &
Metallurgy

Address: University of Belgrade
Institute of Chemistry, Technology and Metallurgy (ICTM)
Department of Chemistry
Laboratory for Protein Biotechnology, Proteomics and Glycomics
Studentski trg 12-16, 11158 Belgrade, Serbia

E-mail: nemanja.aksic@ihtm.bg.ac.rs

ICTM Uros Lab
uroslabictm.com

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
Supervisor of doctoral thesis: Dr Uros Andjelkovic, ICTM

Research Ranks: Institute of Chemistry, Technology and Metallurgy - University of Belgrade, Serbia
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 based food quality control.

Additional **03 2023 - currently** Researcher - Laboratory for Protein Biotechnology, Proteomics and Glycomics (ICTM, Belgrade, Serbia)
Professional **03 2023 - currently** Part-time Application Chemist - Analytical Method Development for LC-MS/MS, Field Test -
Experience: 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 - currently 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 - currently Senior Associate at Petnica Science Center - Department of Chemistry (Valjevo, Serbia)

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

Awards and **2020** SUTD President's Graduate Fellowship PhD - Singapore Government
Honors: **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

Applied **Innovation voucher:**
solutions: **2023** Development and validation of LC-MS/MS based analytical method for determination of major cyanogenic glycosides in
flour made from fruit kernels, grains, roots, beans, nuts, or seed.

Technical improvement:

2022 Automatic weather station based on cheap AMS sensors, Dr Viša Tasić, Dr Renata Kovačević, Tatjana Apostolovski – Trujić, Dr Nikola Mirkov, Zvonko Damjanović, **Nemanja Aksić**, Jasna Petrović.

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, Gomilanovic 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/mmmb2202035S

2021

1. Denise Lee, Sophia Shuwn-Yi Chan, **Nemanja Aksic**, Natasa Bajalovic, 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

Theses:**Master work - 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

Bachelor thesis - Faculty of Electrical Engineering:

Surface Modification of Composite Ion-Exchange Membranes by Silver Nanoparticles, Prof. Dr Milos Vujisic

Bachelor thesis - Faculty of Chemistry:

Binding studies of UV filters for molecularly imprinted polymers (MIPs), Supervisor: Prof. Dr Tatjana Verbic

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) 2020 research competition/poster showcase, 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.