



Europass Curriculum Vitae



Personal information

Name / surname **Aleksandra Gezović**
Date of birth January 1, 1995
Address University of Montenegro, Faculty of Metallurgy and Technology, Cetinjski put bb, Podgorica, Montenegro
E-mail gezovic.a@ucg.ac.me

Current activities Teaching Assistant; PhD student at Faculty of Metallurgy and Technology, University of Montenegro

Research interest Electrochemistry, Materials chemistry, Corrosion (Green inhibitors), Energy storage and conversion (Li-, Na-ion batteries, carbon-based supercapacitors)

Work experience

Date Since November 2021
Profession **Teaching Assistant in the field of Chemistry**
Name and address Faculty of Metallurgy and technology, University of Montenegro, Cetinjski put bb, Podgorica, Montenegro
Date January 15, 2017 – October 15, 2017
Profession **Laboratory technician** at the Laboratory for Analytical Chemistry and Instrumental Methods
Name and address Faculty of Metallurgy and technology, University of Montenegro, Cetinjski put bb, Podgorica, Montenegro
Type of business Internship within the program of professional training of persons with higher education, realized by the Government of Montenegro

Education

Date October, 2017 – September, 2018
Qualification **MSc of Physical Chemistry**
Name of thesis „Na_{0.44}MnO₂ as a cathode material for aqueous sodium-ion batteries“
Research area Physical chemistry of materials, Electrochemistry - field of lithium / sodium ion batteries
The name of the institution that is issued a qualification University of Belgrade, Faculty of Physical Chemistry

Date September, 2016 – September, 2017
Qualification **Spec. Sci. Chemical technology**
Name of thesis „Corrosion of copper in 0.51 M NaCl solution and its protection with propolis extract“
Research area Physical Chemistry, Electrochemistry, Electrochemical Processes and Products
The name of the institution that is issued a qualification University of Montenegro, Faculty of Metallurgy and technology

Date September, 2013 – September, 2016
Qualification **BSc of Chemical technology**
Course Chemical technology
The name of the institution that is issued a qualification University of Montenegro, Faculty of Metallurgy and technology

Personal skills

Language **English B2**
Technical skills and competencies UV/VIS spectroscopy, Fourier-transform infrared spectroscopy (FTIR), Powder X-ray Diffractometry, Electrochemical measurements: Cyclic voltammetry, Chronopotentiometry, Galvanostatic charge/discharge
Computer skills and competencies Microsoft Office, OriginLab, Sigma Plot, Adobe Illustrator

Research / scientific activities

- Publications**
- Aleksandra Gezović**¹, Jana Mišurović¹, Branislav Milovanović, Mihajlo Etinski, Jugoslav Krstić, Veselinka Grudić, Robert Dominko, Slavko Mentus, Milica J. Vujković*, High Al-ion storage of vine shoots-derived activated carbon: New concept for affordable and sustainable supercapacitors, Journal of Power Sources, 538 (2022) 231561 <https://doi.org/10.1016/j.jpowsour.2022.231561>
 - A. Gezović**[#], M.J. Vujković^{#,*}, M. Milović, V. Grudić, R. Dominko, S. Mentus, Recent developments of Na₄M₃(PO₄)₂(P₂O₇) as the cathode material for alkaline-ion rechargeable batteries: challenges and outlook, Energy Storage Materials, 37 (2021) 243-273 <https://doi.org/10.1016/j.ensm.2021.02.011>
 - V. Grudić, I. Bošković, and **A. Gezović**, Inhibition of Copper Corrosion in NaCl Solution by Propolis Extract, Chem. Biochem. Eng. Q., 32 (3) (2018) 299–305 <https://doi.org/10.15255/CABEQ.2018.1357>

Conferences

1. **Aleksandra Gezović**, Jana Mišurović, Jugoslav Krstić, Alen Vižintin, Veselinka Grudić, Robert Dominko, Milica Vujković, How does activation affect Na storage properties of carbon obtained from vine shoots?, Materials for Sustainable Development Conference (MATSUS) (Materials-for-Sustainable-Development-Conference) Proceedings of MATSUS23 & Sustainable Technology Forum València (STECH23) (MATSUS23), #SusBat - Enabling Beyond Classical Li-ion Batteries through materials development and sustainability València, Spain, **2023** March 6th - 10th
2. Milica Vujković, **Aleksandra Gezović**, Danica Bajuk Bogdanović, Tamara Petrović, Veselinka Grudić, Slavko Mentus, What Drives the Synthesis of Mixed Polyanionic Na₄Fe₃(PO₄)₂P₂O₇ Cathode Material and Determines its Electrochemical Behavior?, Materials for Sustainable Development Conference (MATSUS) (Materials-for-Sustainable-Development-Conference) Proceedings of MATSUS23 & Sustainable Technology Forum València (STECH23) (MATSUS23), #SusBat - Enabling Beyond Classical Li-ion Batteries through materials development and sustainability València, Spain, **2023** March 6th - 10th
3. Jana Mišurović, **Aleksandra Gezović**, Blaž Tratnik, Alen Vižintin, Veselinka Grudić, Robert Dominko, Milica Vujković, Vine shoots-derived hard carbon as an anode for Na-ion batteries, Materials for Sustainable Development Conference (MATSUS) (Materials-for-Sustainable-Development-Conference) Proceedings of MATSUS23 & Sustainable Technology Forum València (STECH23) (MATSUS23), #SusBat - Enabling Beyond Classical Li-ion Batteries through materials development and sustainability València, Spain, **2023** March 6th - 10th
4. Tamara Petrović, Miloš Milović, **Aleksandra Gezović**, Jana Mišurović, Veselinka Grudić, Milica Vujković, Hybrid aqueous Ca-ion battery: Design and Performance, Twentieth Young Researchers Conference – Materials Science and Engineering, November 30 – December 2, **2022**, Belgrade, Serbia
5. **Aleksandra Gezović**, Miloš Milović, Danica Bajuk-Bogdanović, Veselinka Grudić, Slavko Mentus, Milica Vujković, pH-triggered sol-gel synthesis of Na₄Fe₃(PO₄)₂P₂O₇ cathode material, Twenty-third Annual YUCOMAT 2022 Conference, Herceg Novi, Montenegro, August 29 - September 2, **2022**
6. Jana Mišurović, **Aleksandra Gezović**, Jugoslav Krstić, Branislav Milovanović, Veselinka Grudić, Slavko Mentus, Milica Vujković, Comparative study of biomass-derived carbon interfacial processes in Aluminum-based and conventional acidic electrolyte, Twenty-third Annual YUCOMAT 2022 Conference, Herceg Novi, Montenegro, August 29 - September 2, **2022**
7. **Aleksandra Gezović**, Jana Mišurović, Jugoslav Krstić, Nikola Simović, Veselinka Grudić, Robert Dominko, Slavko Mentus, Milica J. Vujković, Al-ion Charge Storage Ability of Vine Shoots-derived Carbon, Contemporary Batteries and Supercapacitors – International Symposium Belgrade 2022, June 1-2, **2022**, Belgrade, Serbia
8. Milica J. Vujković, **Aleksandra Gezović**, Danica Bajuk-Bogdanović, Veselinka Grudić, Slavko Mentus, Towards alternative Li-free Electrode Materials: Synthesis and Phase Composition Interrelation, Contemporary Batteries and Supercapacitors – International Symposium Belgrade 2022, June 1-2, **2022**, Belgrade, Serbia
9. Veselinka Grudić, **Aleksandra Gezović**, Jana Mišurović, Jugoslav Krstić, Milica Vujković, Activated Carbon Derived from Vine Shoots as Electrode Material for High-Performance Supercapacitors, 22nd Annual Conference on Material Science YUCOMAT 2021 Herceg Novi, September 3-7, **2021**, Herceg Novi, Montenegro
10. **Aleksandra Gezović**, Milica Vujković, Veselinka Grudić, Miloš Milović, Danica Bajuk-Bogdanović and Slavko Mentus, Three-dimensional Na₄Fe₃(PO₄)₂P₂O₇/Na₂FeP₂O₇ polyanionic heterostructure: the synthesis and electrochemical behavior in the aqueous lithium and sodium nitrate solutions; 71st Annual Meeting of the International Society of Electrochemistry, 30st August to 4st September, **2020**
11. **Aleksandra Gezović**, Veselinka Grudić, Miloš Milović, Danica Bajuk-Bogdanović, Milica Vujković, Polyanionic cathode material Na₄Fe₃(PO₄)₂P₂O₇/C for aqueous sodium-ion batteries, Twenty-first YUCOMAT 2019 & Eleventh WRTCS 2019, September 2-6, **2019**, Herceg Novi, Montenegro
12. **Gezović Aleksandra**, Vujković Milica, Jugović Dragana, Janković Častvan Ivona, Stojković Simatović Ivana, Mentus Slavko, Synthesis, characterization and electrochemical properties of Na_{0.44}MnO₂ in NaNO₃ and LiNO₃ aqueous solution, 14th International Conference on Fundamental and Applied Aspects of Physical Chemistry, September 24-28, **2018**, 407-410, Belgrade, Serbia
13. **Aleksandra Gezović**, Milica Vujković, Dragana Jugović, Ivona Janković-Častvan and Ivana Stojković Simatović, "Na_{0.44}MnO₂ as a cathode material for aqueous sodium-ion batteries" 3rd International Symposium on Materials for Energy Storage and Conversion-mESC-IS, September 10th-12th, **2018**, Belgrade, Serbia
14. Stojan Božović, Sanja Martinez, Veselinka Grudić and **Aleksandra Gezović**, "Synergistic effect of propolis, tannin and benzoate on the corrosion behaviour of metals in 0.51 M NaCl solution", 23rd International conference of materials protection and industrial finish, KORMAT **2018**, Zagreb, Hrvatska

Projects

Date / Name / Role	2023 – 2025 / Biomass-derived carbons as anodes in sodium-ion batteries, Bilateral project between Montenegro and Slovenia / Participant, young researcher
Date / Name / Role	2023 – 2025 / Production of high-value products by recycling waste in the aluminum industry, Bilateral project between Montenegro and Slovenia / Participant, young researcher
Date / Name / Role	2021 – 2024 / SUPERCAR "Carbon-based Batteries and Supercapacitors" G5836, funded by NATO Science for Peace and Security (SPS) Programme. Project between Slovenia, Serbia and Montenegro / Participant, young researcher

Date / Name / Role	2020 – 2022 / BIOUGALJ "Green chemistry for sustainable energy: Activated carbon obtained from biomass as an electrode for energy storage", National Scientific Research Project, founded by Ministry of Science of Montenegro / Participant, young researcher
Date / Name / Role	2019-2023 / Green Chemical Engineering Network towards upscaling sustainable processes , COST Action CA18224 / Participant, young researcher
Date / Name / Role	November – December 2019 / Energy storage materials , Guest Lecturer Program, founded by Ministry of Science of Montenegro / Participant, young researcher
Other activities	<ul style="list-style-type: none"> ▪ Member of the organizational team and lecturer at the summer school for students "Methods for physicochemical characterization of energy storage materials" - September 19-25th, 2022. ▪ Technical Committee member of Contemporary Batteries and Supercapacitors – International Symposium Belgrade 2022, June 1-2, 2022, Belgrade, Serbia ▪ Lecture - How do batteries change the world? at the Engineering School of Science 2 in Pljevlja, by the NGO "Step with Science", 2021 ▪ Participant in "Montenegrin summer start up school", 2019
Trainings/mobility	<ul style="list-style-type: none"> ▪ Visiting researcher at National Institute of Chemistry, Ljubljana, Slovenia - Laboratory for Modern Battery Systems (Head of Laboratory Prof. Robert Dominko), realized within NATO SPS project Carbon-based Batteries and Supercapacitors, G5836, June 30 - July 29, 2022 ▪ Visiting PhD student at University of Belgrade, Faculty of Physical Chemistry, under supervision of Milica Vujković, realized through the project EKAMAB, "Ecological polyanionic cathode materials for lithium/sodium ion batteries", February 15 – May 15, 2019, February 15 – March 15, 2020 and June 15 – August 15 2020
Other achievements	<ul style="list-style-type: none"> ▪ The best poster presentation award at Twenty-third Annual YUCOMAT 2022 Conference, Herceg Novi, Montenegro, August 29 - September 2, 2022 ▪ Scholarship of the Ministry of Science of Montenegro for Ph.D. research in Montenegro, through the project EKAMAB, "Ecological polyanionic cathode materials for lithium/sodium ion batteries", for the period of January, 2019. – October, 2021