

Name and Surname: **Anđela Mitrović Rajić**

Academic or research title: **Research assistant**

Affiliation: „VINČA" Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade, Center of excellence for Hydrogen and renewable energy, Department of Physics, POB 522 Belgrade 11 000 Serbia

Citation (without self-citation) and h factor: /

Current research interest: **Nanomaterials**
Production and storage of hydrogen
Photocatalytic hydrogen production
Natural materials for adsorption of pollutants

EDUCATION

2018.-2023. PhD in physical chemistry, Faculty of Physical Chemistry, University of Belgrade
Theme: Mechanochemical and thermal modification of pyrophyllite for applications in electrochemical sensors and membranes

2018. MSc in physical chemistry, University of Belgrade, Faculty of physical chemistry
Theme: Determination of fraction of X-ray diffraction on the radiotherapy device ELEKTA by using (γ , n) nuclear reactions

2017. BSc in physical chemistry, University of Belgrade, Faculty of physical chemistry
Theme: Mosses as phyto-indicators of toxic and radioactive elements in the Earth

INTERNSHIP AND TRAINING

22.-28. april 2018. International School on Nuclear Methods for Environmental and Life Sciences, Bečići, Montenegro

09.-27. september 2019. International Student Practice, Dubna, Russia

22. november- 22. december 2021. Military University of Technology, University of Warsaw, Poland, NAWA PROM PROGRAMME

RELEVANT INTERNATIONAL AND NATIONAL PROJECTS

01/2019-12/2019 **National project** - Synthesis, processing and characterization of nanostructured materials for application in the fields of energy, mechanical engineering, environment and biomedicine (III 45012) Subproject: Experimental and theoretical study of materials for hydrogen storage

2020 – 2021 **Proof of Concept:** From modified pyrophyllite - natural clay to electrochemical sensors for detection of pesticide traces in food and water

AWARDS

2018 Best oral presentation on III Congress CNIRS TMF in Belgrade, Serbia

LIST OF RELEVANT REFERENCES

Journal papers

1. **A. Mitrović Rajić**, T. Pantić, S. Milošević Govedarović, B. Paskaš Mamula, N. Filipović, J. Grbović Novaković, S. Dimitrijević, Influence of mechanochemical activation on the thermal behavior of pyrophyllite, *Science of Sintering*, (2023)
2. **A. Mitrović Rajić**, J. Milićević, J. Grbović Novaković. Development of modified pyrophyllite carbon paste electrode for carbendazim detection, *Materials and Manufacturing Processes*, (2022)
3. I. Milanović, S. Milošević Govedarović, M. Lukić, Z. Jovanović, J. Rmuš, **A. Mitrović Rajić**, J. Grbović Novaković, S. Kurko, Study of milling time impact on hydrogen desorption from $\text{Li}_x\text{AlH}_4\text{-Fe}_2\text{O}_3$ composites, *Processing and Application of Ceramics*, 16(3) (2022) 259–266

Conference papers

1. T. Pantić, K. Žagar Soderžnik, S. Šturm, S. Drev, **A. Mitrović**, S. Kurko, B. Paskaš Mamula, N. Novaković, J. Grbović Novaković, S. Milošević Govedarović, Microstructure and thermal behavior of Mg-V thin films for solid state hydrogen storage, MCM2019, 14th Multinational Congress on Microscopy, September 15-20, 2019, Belgrade, Serbia, pg. 484-487;
2. **A. Mitrović**, T. Pantić, S. Dimitrijević, A. Ivanović, N. Novaković, S. Kurko, S. Milošević Govedarović, J. Grbović Novaković, Electrochemical sensors based on pyrophyllite – Parsovic, MCM2019, 14th Multinational Congress on Microscopy, September 15-20, 2019, Belgrade, Serbia, pg. 494-497.
3. **A. Mitrović Rajić**, T. Pantić, S. Kurko, J. Rmuš, A. M. Brudzisz, D. Giziński, J. Grbović Novaković, W. J. Stępniewski, Nanostructures formed by copper passivation as catalysts for hydrogen generation, mESC-IS 2022, 6th International Symposium on Materials for Energy Storage and Conversion, July 5.-8., 2022, Bol, island of Brač, Croatia, pg.52;
4. B. Babić, M. Prvulović, J. Rmuš, **A. Mitrović Rajić**, S. Milošević Govedarović, I. Milanović, S. Kurko, Effect of metallic and metal-oxide catalysts on LiAlH_4 decomposition, mESC-IS 2022, 6th International Symposium on Materials for Energy Storage and Conversion, July 5.-8. 2022, Bol, island of Brač, Croatia, Book of Abstracts, pg. 23
5. J. Rmuš, A. Mitrović, A. Mraković, Ž. Mravik, T. Pantić, I. Stojković Simatović, S. Kurko, Increasing catalytic activity of molybdenum disulfide for hydrogen evolution reaction, Twenty second Annual Conference YUCOMAT 2021, August 30.- September 3. 2021, Herceg Novi, Montenegro, pg. 77
6. **A. Mitrović**, J. Milićević, S. Milošević Govedarović, S. Kurko, T. Pantić, J. Rmuš, Ž. Mravik, J. Grbović Novaković, Natural clay pyrophyllite „Parsovići“ as electrochemical sensors for pesticides, Eighteenth Young Researchers Conference – Materials Science and Engineering, December 4-6, 2019, Belgrade, Serbia, Program and the book of abstracts, pg. 80;
7. **J. Rmuš**, A. Mraković, Ž. Mravik, A. Mitrović, I. Milanović, I. Stojković Simatović, S. Kurko, Ion beam irradiated molybdenum disulfide for improved hydrogen evolution reaction, Eighteenth Young Researchers Conference – Materials Science and Engineering, December 4-6, 2019, Belgrade, Serbia, Program and the Book of Abstracts, pg. 61
8. S. Kurko, L. Laversenne, J. Rmuš, T. Pantić, A. Mraković, **A. Mitrović**, J. Grbović Novaković, S. Milošević Govedarović, Effect of pyrophyllite and $\text{VO}_2(\text{B})$ on hydrogen sorption properties of $\text{Mg}_{12}\text{Al}_{12}$, mESC-IS 2019, 4th Int. Symposium on Materials for Energy Storage and Conversion, September 11-13, 2019, Akyaka-Mugla, Turkey pg.84;
9. S. Milošević Govedarović, T. Pantić, S. Kurko, **A. Mitrović**, J. Rmuš, Ž. Mravik, J. Grbović Novaković, Improved hydrogen sorption characteristics of MgH_2 by addition of metal oxides and pyrophyllite, Hydrogen-Metal Systems, Gordon Research Conference, Understanding the Interaction of Hydrogen with Materials from the Atomic Level to Systems, June 30 - July 5, 2019, Castelldefels, Spain, poster 16.W/T;

10. S. Milošević Govedarović, T. Pantić, J. Rmuš, **A. Mitrović**, M. Medić Ilić, J. Grbović Novaković, The role of natural clay in solid-state hydrogen storage, Solid state science and research conference, 26-29.06.2019, Zagreb, Croatia, The book of abstracts, pg. 70;
11. **A. Mitrović**, J. Milicević, S. Milošević Govedarović, S. Kurko, T. Pantić, J. Rmuš, Ž. Mravik, J. Grbović Novaković, Pyrophyllite as electrochemical sensors for pesticides, Solid state science and research conference, 26-29.06.2019, Zagreb, Croatia, The book of abstracts, pg. 123;
12. **A. Mitrović**, J. Milicević, S. Milošević Govedarović, S. Kurko, T. Pantić, J. Rmuš, Ž. Mravik, J. Grbović Novaković, Electrochemical sensors based on pyrophyllite, 5th Conference of The Serbian Society for Ceramic Materials, 11-13.06.2019, Belgrade, Serbia Programme and the book of abstract pg. 97;
13. **A. Mitrović**, M. Daković, Determination of fraction of scattered X-radiation on the ELEKTA radiotherapy device using (γ , n) nuclear reactions, Seventeenth Young Researchers Conference – Materials Science and Engineering, December 5-7, 2018, Belgrade, Serbia, Program and the book of abstracts, pg. 54.