

University of Belgrade  
Institute of Chemistry, Technology and Metallurgy  
National Institute  
Center for Catalysis and Chemical Engineering  
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### Academic Qualifications

University of Belgrade Faculty of Chemistry / Institute of Chemistry, Technology and Metallurgy  
2008 – 2010 *Ph.D. in Material Science / Environmental Chemistry*

Dissertation Title: Synthesis, Characterization and sorption properties of bentonite modified by tetraalkylammonium ions.

2006 – 2008 *Master of Philosophy in Material Science / Environmental Chemistry*

Thesis Title: Synthesis, characterization and application of organobentonites as a sorbents of textile dyes.

2005 *BS in Chemistry – Graduate project in Organic synthesis*: Project Title: Synthesis of 2-[(4-phenylpiperidine-1-yl) alkyl]-1H-benzimidazoles.

### Research Interests

Hybrid inorganic-organic interfaces, natural silicate materials, (bio)-organo clay nanocomposites, transition metal catalysts, advanced oxidation processes, environmental protection, water and soil treatment, adsorption, material characterization.

### Professional Experience

**Center for Catalysis and Chemical Engineering Institute of Chemistry, Technology and Metallurgy University of Belgrade**

2020 – present Principal Research Fellow

2016 – 2020 Assistant Research Professor

2011–2016 Associate Research Professor

2009 – 2011 Research Assistant

2006 –2009 Research Trainee

## Research Experience

- *Nanostructural, functional and composite materials in catalytic and sorptive processes*, Projekat III 45001, 2011/2014; National Project supported by Government of Republic of Serbia.
- *Mesoporous and nanomaterials in catalytic and sorptive processes*, Project ON 166001 B, 2008/2010; National Project supported by Government of Republic of Serbia.
- *Investigation and development of technologies for production of new products based on secondary raw mineral materials from Kolubara coal basin*, Project TR 6712B, 2005/2007; National Project supported by Government of Republic of Serbia.
- *Synthesis and catalytic properties of heterogeneous catalysts*, 2010- 2012. Bilateral Project with *Institute of Catalysis, Bulgarian Academy of Sciences*.
- *Rational design of hybrid organic-inorganic interfaces: the next step towards advanced functional materials* COST action MP1202
- *Conceiving Wastewater Treatment in 2020 - Energetic, environmental and economic challenges* COST action ES1202
- *Hooking together European research in Atomic Layer Deposition*, COST action MP1402 – HERALD
- *Advanced Engineering and Research of aeroGels for Environment and Life Sciences*, COST action CA18125

## Workshops and mobilities

- COST MP1202 Training School: Material characterization of hybrid organic-inorganic interfaces, Bordeaux, France, April 2013.
- COST MP 1202 Scientific Workshop on Applications of Hybrid Materials Interfaces Istanbul, Turkey, September 2014.
- COST MP1402 Training School: Chemistry of atomic layer deposition – BELUX 3, Luxembourg, 2018.
- CEEPUS mobility, The Faculty of Food Technology, J.J. Strossmayer University of Osijek, 2021.

## Foreign visits

Short term scientific mission (2013) - Department of New Architectures in Materials Chemistry, Materials Science Institute of Madrid, Spain. Advisors: Dr. Eduardo Ruiz-Hitzky and Dr. Pilar Aranda.

## Memberships and Activities

- Vice-president of Serbian Ceramic Society
- Member of: Society of Physical Chemists of Serbia, Serbian Ceramic Society, Association of Italian and Serbian Scientists and Scholars.
- Member of Management Committee COST Action MP 1202 "Rational design of organo-inorganic hybrid interfaces: the next step towards advanced functional materials"
- Member substitute at COST Action CA 18125" Advanced Engineering and Research of aeroGels for Environment and Life Sciences"

- Member of Organization Board at Serbian Ceramic Society Conference – Advanced Ceramics and Applications.
- Member of Organization Board at International Conference on Fundamental and Applied Aspects of Physical Chemistry.

### Supervisory

Supervised PhD, Master and Graduate projects.

### Reviewing scientific journals and projects:

Reviewer at international journals: Journal of Hazardous Materials, Microporous and Mesoporous Materials, Ionics, Water Science and Technology, Chemosphere, Materials Bulletin and Journal of Contaminant Hydrology, Chemical Engineering Journal, Journal of the Serbian Society, etc.

Reviewer of bilateral project for Ministry of Education, Science and Technological development of the Republic of Serbia.

### List of five selected publications:

1. Nataša Jović-Jovičić, Zorica Mojović, Miloš Mojović, Predrag Banković, Marija Ajduković, Aleksandra Milutinović-Nikolić, Dušan Jovanović, Electrochemical behavior of immobilized hemoglobin in alkaline solution, Applied Surface Science, 400 (2017) 347-354.

Impact Factor 3.150 (2015); Category Materials Science, Coatings & Films (1/18) - M21a

ISSN 0169-4332; DOI: 10.1016/j.apsusc.2016.12.151

2. N. Jović-Jovičić, M. Mojović, D. Stanković, B. Nedić-Vasiljević, A. Milutinović-Nikolić, P. Banković, Z. Mojović, Characterization and electrochemical properties of organomodified and corresponding derived carbonized clay, Electrochimica Acta, 296 (2019) 387-396.

Impact Factor 4.940 (2018); Category: Electrochemistry (5/26)

ISSN 0013-4686; DOI: 10.1016/j.electacta.2018.11.031

3. N. Jović-Jovičić, Z. Mojović, M. Darder, P. Aranda, E. Ruiz-Hitzky, P. Banković, D. Jovanović, A. Milutinović-Nikolić, Smectite-chitosan-based electrodes in electrochemical detection of phenol and its derivatives, Applied Clay Science, 124-125 (2016) 62-68.

Applied Clay Science

Impact Factor 2.467 (2014); Category: Mineralogy (7/28)

ISSN 0169-1317; DOI: 10.1016/j.clay.2016.01.052

4. N. Jović-Jovičić, A. Milutinović-Nikolić, M. Žunić, Z. Mojović, P. Banković, I. Gržetić, D. Jovanović, Synergic adsorption Pb<sup>2+</sup> and reactive dye - RB5 on two series organomodified bentonites, Journal of Contaminant Hydrology, 150 (2013) 1-11.

Impact Factor 2.885 (2012); Category Water Resources (6/80) 2012 – M21a

ISSN 0169-7722; DOI: 10.1016/j.jconhyd.2013.03.004

5. T. Mudrinić, S. Marinović, A. Milutinović-Nikolić, N. Jović-Jovičić, M. Ajduković, Z. Mojović, P. Banković, Novel non-enzymatic glucose sensing material based on pillared clay modified with cobalt. Sensors and Actuators B: Chemical, 299 (2019) 126976 (10 pages).

Impact Factor 6.393 (2018); Category: Analytical (6/84) – M21a

ISSN 0925-4005; DOI: 10.1016/j.snb.2019.126976

### Professional Skills

Synthesis of hybrid organic-inorganic (bio)nanocomposites, metal-oxides based catalyst and performing adsorption and advanced oxidation catalytic process.

Material characterization methods: low temperature N<sub>2</sub> physisorption, Infrared spectroscopy, X-ray fluorescence spectrometry method for qualitative and quantitative analysis (XRF), X-ray powder diffraction (XRD), Mercury Porosimetry.

**Language skills**

Serbian (Native), English (C1)

**Publication list:**

- Total of peer reviewed scientific journals is 44 with 7 and 18 in top 10% and 30% journals in their field, respectively.
- More than 70 announcements at international conferences;
- Citation number (excluding self-citations) from SCOPUS citation databases: 528 (December, 2021)
- Hirsch index from SCOPUS citation databases: 15

**Teaching Experience**

- BGV Logic School, Belgrade, 2009 – Present

Chemistry course for entrance exam on University: General, Inorganic, Organic and Biochemistry.

- University of Belgrade – Faculty of Chemistry

Co-lecture on course: Selected topics of Catalysis (577H1)

**Link to the: Public RIS page:**

<https://ris2.mpn.gov.rs/istrazivaci>

ORCID: <https://orcid.org/0000-0001-9940-9508>

SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=24070957800>