

JOVICA BRANKOVIĆ

Assistant

University of Kragujevac, Faculty of Science, Department of Chemistry

EDUCATION

University of Kragujevac, Faculty of Science

2019 – present
Chemistry, PhD

University of Kragujevac, Faculty of Science

2018 – 2019
Master's degree – Chemistry

University of Kragujevac, Faculty of Science

2014 – 2018
Bachelor's degree – Chemistry (Research & Development)

Medical school

2009 – 2013
Secondary School
Čuprija, Serbia

PUBLICATIONS

- T. Marković, S. Popović, S. Matić, M. Mitrović, M. Anđić, A. Kočović, M. Vukić, V. Petrović, **J. Branković**, N. Vuković, D. Todorović, M. Kačaniova, D. Baskić, Insights into Molecular Mechanisms of Anticancer Activity of Juniperus communis Essential Oil in HeLa and HCT 116 Cells. *Plants* 2024, 13, 2351
- **J. Branković**, V. Matejić, D. Simijonović, Z. Petrović, M. Vukić, M. Kačaniova, S. Rakić, V. Petrović, Molecular encapsulation of the protocatechuic and vanillic acid derivatives with β -cyclodextrin: Structural determination, antibacterial assessment, and molecular docking analysis. *Journal of Molecular Structure* 2024, 1312, 138615.
- **J. Branković**, V. Matejić, D. Simijonović, M. Vukić, M. Kačaniova, M. Živanović, A. Mirić, J. Košarić, M. Branković, V. Petrović, Novel *N*-pyrocatechoyl and *N*-pyrogalloyl hydrazone antioxidants endowed with cytotoxic and antibacterial activity. *Archiv der Pharmazie* 2024, 357, e2300725.
- N. Vuković, M. Vukić, **J. Branković**, V. Petrović, L. Galovičova, N. Čmikova, M. Kačaniova, The antimicrobial and antibiofilm potential of the *Piper nigrum* L. essential oil: *in vitro*, *in situ*, and *in silico* study. *Industrial Crops & Products* 2024, 209, 118075.
- **J. Branković**, V. M. Milovanović, Z. D. Petrović, D. Simijonović, V. P. Petrović, Pyrazolone-type compounds (part II): *in vitro* and *in silico* evaluation of antioxidant potential; structure–activity relationship. *RSC Advances*, 2023, 13, 2884
- **J. Branković**, V. M. Milovanović, D. Simijonović, S. Novaković, Z. D. Petrović, S. S. Trifunović, G. A. Bogdanović, V. P. Petrović, Pyrazolone-type compounds: synthesis and *in silico* assessment of antiviral potential against key proteins of SARS-CoV-2. *RSC Advances*, 2022, 12, 16054
- **J. Branković**, N. Milivojević, V. Milovanović, D. Simijonović, Z. Petrović, Z. Marković, D. Šeklić, M. Živanović, M. Vukić, V. Petrović, Evaluation of antioxidant and cytotoxic properties of phenolic *N*-acylhydrazones: Structure-activity relationship, *Royal Society Open Science* 2022, 9, 211853
- **J. Branković**, M. Krokidis, I. Dousi, K. Papadopoulos, Z. Petrović, V. Petrović, Antioxidant and Cytotoxic Activities of Selected Salicylidene Imines: Experimental and Computational Study. *Molecular Diversity* 2022, 26, 3115–3128
- V. Milovanović, **J. Branković**, Pirazolski derivati: „zelena“ sinteza i medicinski značaj, *Hemijski pregled*, 62 (2021) 80-85, ISSN: 0440-6826
- V. Milovanović, Z. Petrović, S. Novaković, G. Bogdanović, D. Simijonović, M. Mladenović, **J. Branković**, V. Petrović, Pyrazole Derivatives of Medically Relevant Phenolic Acids: Insight into Antioxidative and Anti-LOX Activity. *Medicinal Chemistry* (Los. Angeles), 2021, 17 (8), 807–819

PROFILE

Date of birth: 24.01.1994.

Place of birth: Jagodina, Serbia

Nationality: Serbian

Present citizenship: Serbia

CONTACT

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RESEARCH

- organic and bioorganic chemistry
- antioxidant activity
- density functional theory (DFT)
- molecular docking
- medicinal chemistry
- enzyme inhibition

PROJECTS

- Program for scientific research and artistic projects for young researchers and artists funded by the Center for Scientific Research of SANU and University of Kragujevac and the University of Kragujevac:
 - 1) "*In silico* design of potential antiviral pyrazolone-type agents: S and Mpro proteins of virus SARS-CoV-2 as targets" – **PyrAnt**
 - 2) "Deep eutectic solvents: A "green" route to benzimidazole-chalcone hybrids with potential antioxidant profile" – **GreenBICH**

AWARDS

- Award from the Serbian Chemical Society for extraordinary success during the studies of chemistry
- Plaque of the city of Jagodina, for exceptional results achieved in natural science competitions during primary school.
- Diploma "Vuk Karadžić" for all excellent marks throughout primary school.

LANGUAGES

- Serbian (mother)
- English
- Romanian

COMPUTER SKILLS

- The Internet in search and use of pertinent information
- Microsoft Office
- ChemOffice;
- Origin
- Gaussian, GaussView
- Multiple molecular docking software
- Graphical design software (Photoshop, Illustrator)

COURSES

- **Coca-Cola Youth Empowered**, 2018
Coca-Cola HBC Serbia, Kragujevac
(Skills development: Professional orientation, successful communication, project management, business planning, and business administration)
- **Summer school "Jagodinski animirani film"**, 2006.

OTHER INFORMATION

- Professional Societies: Serbian Chemical Society