


# Marko Mitić

## Curriculum Vitae

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 [ResearchGate](#)  
[Google Scholar](#)

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### Personal information

Birth Date **June 04, 1991**  
Birth Place **Ljubljana, Slovenia**

### Work experience

Feb 2017–Present **Teaching Assistant**, *The University of Belgrade, Faculty of Physical Chemistry.*  
Subjects:

- **Atomic spectroscopy**
- **Molecular spectroscopy**
- **Physical chemistry 1 (study program Chemistry, Faculty of Chemistry)**
- **Physical chemistry 2 (study program Chemistry, Faculty of Chemistry)**

Dec 2016–Present **National project**, *Ministry of Education, Science and Technological Development, Republic of Serbia.*

" **Structure and dynamics of molecular systems in the ground and excited electronic states**" (OI 172040)

### Education

2015–Present **PhD in Physical Chemistry - Quantum Chemistry**, *The University of Belgrade, Faculty of Physical Chemistry.*

Research field - Quantum Chemistry

2014–2015 **MSc in Physical Chemistry**, *The University of Belgrade, Faculty of Physical Chemistry*, 60 ECTS, *GPA – 10.00/10.00.*

Master's Thesis: *Ab initio* calculation of the vibronic spectrum in the  $X^2\Pi_u$  electronic state of  $C_2H_2^+$ , Advisor: Dr Stanka Jerosimić, Associate Professor

2010–2014 **BSc in Physical Chemistry**, *The University of Belgrade, Faculty of Physical Chemistry*, 240 ECTS, *GPA – 9.59/10.00.*

Bachelor's Thesis: Investigation of geometry and stability of small potassium – bromide  $K_nBr_m$  clusters with *ab initio* methods, Advisor: Dr Stanka Jerosimić, Assistant Professor

2006–2010 **Secondary School of Chemistry.**

Technician in Environmental Protection

### Research Interest

- Theoretical Spectroscopy
- Quantum Chemistry
- Astrochemistry

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## Workshops and Schools

- Aug 31 - Sep 6, 2017 **New avenues in molecular theories: From the lab to beyond the Earth**, *Summer school in Belgrade, Serbia*, Joint Training School of COST actions CM1401 and CM1405.
- Aug 29 - Sep 9, 2016 **Astrochemistry: from Space to Earth**, *Summer school in Grenoble, France*, Université Grenoble Alpes и COST Action CM1401 "Our Astrochemical History".

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## Memberships

- Society of Physical Chemists of Serbia
- Serbian Chemical Society
- Committee for physical chemistry, Department of Chemical and Biological Sciences, Serbian Academy of Science and Arts

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## Awards

- Apr – Dec, 2016 Scholarship of Ministry of Education, Science and Technological Development, Republic of Serbia
- 2016 Award for the best Master's thesis, Fund of Nenad M. Kostić for Chemical Sciences
- 2016 Award from Society of Physical Chemists of Serbia for great success during studies of physical chemistry
- 2015 Special award from Serbian Chemical Society for great success during studies in year 2015
- 2015 Award of the Fund of Sister Bulajić for the best bachelor's thesis at Faculty of Physical Chemistry
- 2012–2014 Award of the Municipality Obrenovac to the Best Students in Obrenovac Territory
- 2012, 2014 Scholarship of Thermal Power Plants "Nikola Tesla" from Obrenovac
- 2012, 2013 Scholarship of City of Belgrade

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## Computer skills

- Operational Systems Windows, Linux (Debian, openSUSE, Linux Mint, Ubuntu)
- Programming Languages (level) Python (intermediate), Fortran (beginner), MATLAB (intermediate), Latex (advanced)
- Software Packages Wolfram Mathematica, OriginLab

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## Languages

- Serbian **Mothertongue**
- English **Intermediate**

*Con conversationally fluent*

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## Other Relevant Informations

- 2013–2015 Administrator of Faculty of Physical Chemistry Student Web Page
- 2012–2014 President of the Center for Scientific Research of Students at Faculty of Physical Chemistry University of Belgrade
- 2008–2010 Petnica Science Center, Department of Chemistry

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## Seminar Talks

М. Митић, "*Ab initio* study of non-adiabatic effects in small molecules", Astronomy and Physics Colloquium/Seminar, Physics Department, Faculty of Sciences in Novi Sad, April 15, 2016.

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## Publications

2. M. Mitić, R. Ranković, M. Milovanović, S. Jerosimić, M. Perić, "Underlying theory of a model for the Renner-Teller effect in any-atomic linear molecules on example of the  $X^2\Pi_u$  electronic state of  $C_5^-$ ", *Chemical Physics*, **464**, 55 (2016), doi: [10.1016/j.chemphys.2015.11.002](https://doi.org/10.1016/j.chemphys.2015.11.002).

1. M. Perić, S. Jerosimić, M. Mitić, M. Milovanović, R. Ranković, "Underlying theory of a model for the Renner-Teller effect in tetra-atomic molecules:  $X^2\Pi_u$  electronic state of  $C_2H_2^+$ ", *The Journal of Chemical Physics*, **142**, 174306 (2015), doi: [10.1063/1.4919285](https://doi.org/10.1063/1.4919285).

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## Poster Presentations

5. M. Milovanović, M. Mitić, "*Ab initio* study of the vibronic spectrum in the  $X^2\Pi_u$  state of the  $C_6^-$ : Variational approach", New avenues in molecular theories: From the lab to beyond the Earth (Joint Training School of COST actions CM1401 and CM1405), Aug 31- Sep 6, 2017, Belgrade, Serbia, Book of Abstracts, p. 36.

4. S. Jerosimić, M. Mitić, R. Ranković, M. Milovanović, M. Perić, "The low-lying vibronic spectrum in the  $X^2\Pi_u$  state of the  $C_5^-$  ion computed variationally", The Astrochemical Week (COST Action CM1401), January 16-20, 2017, Faro, Portugal, Booklet, p. 40.

3. M. Mitić, M. Milovanović, M. Perić, "Theoretical study of vibronic and spin-orbit coupling in the  $X^2\Pi_u$  electronic state of copper dicarbonyl complex  $Cu(CO)_2$ ", Fourth Conference of Young Chemist of Serbia, Belgrade, Serbia, November 5, 2016, Book of Abstracts, p. 98.

2. F. Veljković, M. Mitić, M. Milovanović, S. Jerosimić, D. Drakulić, S. Veličković, "Theoretical and experimental evaluation of  $K_2Br^+$  and  $K_3Br^+$  clusters ionization energies", 13th International Conference on Fundamental and Applied Aspects of Physical Chemistry, "Physical Chemistry 2016", September 26-30, 2016, Belgrade, Serbia, Proceedings Vol. I, p. 107-110.

1. M. Mitić, "Renner-Teller effect in tetra-atomic molecules: Calculation of non-adiabatic matrix elements and the vibronic spectrum of  $X^2\Pi_u$  electronic state of  $C_2H_2^+$ ", Third Conference of Young Chemist of Serbia, Belgrade, Serbia, October 24, 2015, Book of Abstracts, p. 95.