Radomir Ranković – Curriculum Vitae

Education:

2010 Ph.D. in Physical Chemistry at the University of Belgrade - Faculty of Physical Chemistry
2003 B.Sc. in Physical Chemistry at the University of Belgrade - Faculty of Physical Chemistry

Proffesional positions:

2013- Assistant Professor, University of Belgrade - Faculty of Physical Chemistry
2010-2013 Teaching Assistant, University of Belgrade - Faculty of Physical Chemistry
2003-2010 Assistant Trainee, University of Belgrade - Faculty of Physical Chemistry

Research interests: Quantum chemistry, Renner-Teller effect, spin-orbit coupling

Participation in national projects:

1) 2010- "Structure and dynamics of the molecular systems in the ground and excited electronic states", Ministry of Science and education, Republic of Serbia, 172040

Bibliography:

1. **Book**:

   „Atomistics, Worked examples and experimental work", University of Belgrade - Faculty of Physical Chemistry, Belgrade, 2010. CIP 539.1(075.8)(076), ISBN 978-86-82139-35-5. 2nd. ed. 2016.

2. **Scientific papers:**

   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 (2015) 174306
   2) M. Perić, S. Jerosimić, R. Ranković, M. Krmar, J. Radić-Perić, „An *ab initio* model for handling the Renner-Teller effect in tetra-atomic molecules. I. Introduction of coordinates and the Hamiltonian", *Chemical Physics* 330 (2006) 60.
   3) R. Ranković, S. Jerosimić, M. Perić, „Theoretical investigation of the vibronic spectrum in the $X\ ^2\Pi_u$ electronic state of C_6^+", *The Journal of Chemical Physics* 128 (2008) 154302.
   4) R. Ranković, S. Jerosimić, M. Perić, „Theoretical investigation of vibronic and spin-orbit effects in the ground $X\ ^2\Pi_u$ electronic state of the dicyanoacetylene cation", *The Journal of Chemical Physics* 135 (2011) 024314.

5) M. Mitić, R. Ranković, M. Milovanović, S. Jerosimić, M. Perić, „Underlying theory of a model for the Renner-Teller effect in any-atomic molecules on example of the $X^2\Pi_u$ electronic state of C_5^-", Chemical Physics 464 (2016) 55
6) M. Mladenović, M. Perić, R. Ranković, B. Engels, „An *ab initio* study of the hyperfine structure in the $X\ ^2\Pi$ electronic state of HCCS-calculation of vibronically averaged components of the anizotropic hyperfine tensor", *Molecular Physics* 103 (2005) 587.
7) M. Perić, R. Ranković, S. Jerosimić, „Renner-Teller effect in six-atomic molecules: *Ab initio* investigation of the vibronic spectrum of C_6^-", *Chemical Physics* 344 (2008) 35.
8) M. Mitić, M. Milovanović, R. Ranković, S. Jerosimić, M. Perić, „Variational calculation of the vibronic spectrum in the $X\ ^2\Pi_u$ electronic state of C_6^- ", *J. Serb. Chem. Soc*. (2018) doi: JSC171129001M
9) R. Ranković, S. Stojadinović, M. Sarvan, B. Kasalica, M. Krmar, J. Radić-Perić, M. Perić, „A multidisciplinary study on magnesium (Review)", *J. Serb. Chem. Soc*. 77(11) (2012), 1483.