CURRICULUM VITAE

Name: **Marta Olszówka**

Nationality: Polish

Date of birth: 30 March 1989

Email: olszowka.marta@gmail.com

Education

2010 - 2015 **PhD in Chemistry**
Institute of Physics
University of Silesia in Katowice, Poland

2006 – 2010 M.Sc. in Chemistry, with a specialisation in **theoretical chemistry** at University of Silesia in Katowice

2006 - 2015 English language course in **English Language Centre** at University of Silesia

Professional experience

since Apr 2015 **postdoctoral researcher**
Department of Chemistry and Industrial Chemistry
University of Pisa, Italy
Field of research: theoretical chemistry, development of computational chemistry software

Oct 2010 - Jan 2015 **junior researcher** and **academic teacher**
Faculty of Mathematics, Physics and Chemistry
University of Silesia in Katowice, Poland
Field of research: theoretical chemistry, molecular modeling

Feb 2011 – Jun 2013 **academic teacher** at Silesian School of Medicine in Katowice
Teaching subjects: biochemistry and cosmetic chemistry

Fellowship programmes

Oct 2012 – Sep 2013 TWING project
"Design, synthesis, in vivo and in vitro research of new chlorin-based photosensitisers for photodynamic therapy"

Oct 2013 – Feb 2015 FORSZT project
"New computational methods for determining properties and energy of biomolecules"

Personal Qualities

Computer programing (Fortran 77/90, Bash scripts)

Good communication skills

Languages: Polish – native, English – fluent, Italian – basic

Driving licence

Academic achievements

Articles:

"An Effective Fully Polarizable QM/MM Approach to Model Vibrational Circular Dichroism Spectra of Systems in Aqueous Solutions" T. Giovannini, M. Olszowka, C. Cappelli, J. Chem. Theory Comput. (2016)

"A computational approach to the resonance Raman spectrum of doxorubicin in aqueous solution", M. Olszówka, R. Russo, G. Mancini, C. Cappelli, Theoretical Chemistry Accounts (2016)

“Coupled cluster calculations in the (0,2) and (2,0) sectors of the Fock space for the lowest electronic states of the O2 molecule”, M. Olszówka, M. Musiał, Molecular Physics (2014)

”The equation-of-motion coupled cluster method for triple electron attached states”, M. Musiał, M. Olszówka, D. Lyakh, R. Bartlett, The Journal of Chemical Physics, 137, 174102 (2012)

Conferences - talks:

"Effective modelling of RR spectra of doxorubicin in aqueous solution" M. Olszowka, G. Mancini, T. Giovannini, R. Russo, C. Cappelli. Italian Meeting on Raman Spectroscopies and Non Linear Optical Effects, Padova, Italy 2016

"Effective modelling of RR spectra of large molecules in solution. Application to doxorubicin in aqueous solution." M. Olszowka, G. Mancini, T. Giovannini, R. Russo, C. Cappelli. EnLight Workshop, Pisa, Italy 2016

"A computational approach to the resonance Raman spectra of doxorubicin in aqueous solution" M. Olszowka, G. Mancini, T. Giovannini, R. Russo, C. Cappelli. Sigma Aldrich Young Chemists Symposium, Rimini, Italy 2015

“Investigation of carbon nanostructures using coupled cluster and density functional theory.” Doctoral students’ conference “Between sciences”, Chorzów, Poland 2014

“Application of the multireference coupled cluster method to the excited states of oxygen.” Doctoral students’ conference “Between sciences”, Chorzów, Poland 2013

Conferences - posters:

"A Fully Polarizable QM/MM/PCM Approach to Modeling Vibrational Circular Dichroism and Raman Optical Activity Spectra" 4th National Congress of the Division of Theoretical and Computational Chemistry of SCI; Pisa, Italy 2016

"Analytical third derivatives for a Fully Polarizable QM/ Classical Hamiltonian" 3rd National Congress of the Division of Theoretical and Computational Chemistry of SCI; Rome, Italy 2015

Molecular Modelling in Chemistry and Biochemistry; Cluj-Napoca, Romania 2014

57 Conference of Polish Chemical Society; Częstochowa, Poland 2014
– award winning poster

56 Conference of Polish Chemical Society; Siedlce, Poland 2013

Central European Symposium on Theoretical Chemistry; Znojmo, Czech Republic 2013

9th European Conference on Theoretical Chemistry; Sopron, Hungary 2013

Central European Symposium on Theoretical Chemistry; Mariapfarr, Austria 2012

55 Conference of Polish Chemical Society; Białystok, Poland 2012

54 Conference of Polish Chemical Society; Lublin, Poland 2011

Schools, workshops

Molecular Response Properties Winter School; Bagneres de Luchon, France 2016

Workshop on Theoretical Chemistry; Mariapfarr, Austria 2013

Hobbies / interests

Mountain hiking, cross-country skiing.