Curriculum Vitae

Name: **Marcin Witkowski**

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Professional experience

07.2016 - now **Laboratory of Technology of Novel Functional Materials**, Centre of New Technologies, University of Warsaw
Position: **Theoretical chemist** in *BIS-TRIS. Theoretical modeling of redox-tailored bi and tri-heterometallic transition metal complexes as devices for molecular electronics* OPUS NCN Project

09.2015 - now Community Lower Secondary School named after Paweł Jasienica in Warsaw.
Position: Teacher of facultative classes in physics

10.2015 - now Scholarship Committee of the Faculty of Physics, University of Warsaw
Position: Voluntary Service as a vice chairman of the Committee.
Authorised to work with personal data.

11.2014 - 10.2015 Scholarship Committee of the Faculty of Physics, University of Warsaw
Position: Voluntary Service as a member of the Committee.
Authorised to work with personal data.

Scientific internships and main achievements

04.2017 Participation in XIX Session of ICM Users, Warsaw, Poland with an oral presentation *Modelowanie widm oscylacyjnych molekuł organicznych* (*Modelling of vibrational spectra of organic molecules* in Polish)

03.2017 Participation in 60th International Conference for Students of Physics and Natural Sciences Open Readings 2017, Vilnius, Lithuania with an **oral presentation** *Heavy Metal Ions Sensing By Surface-Enhanced Raman Scattering Spectroscopy Using Hybrid Magnetic Fe_3O_4/Ag Nanoparticles*.

12.2016 Awarded with a **scholarship** of ***Minister of Science and Higher Education*** for best students

10.2016 Participation in **International Congress of Young Chemists YoungChem**, Częstochowa, Poland with an **oral presentation** *Application of hybrid Fe_3O_4/Ag magnetic nanoparticles for surface-enhanced Raman scattering spectroscopy* and a poster *Theoretical studies on vibrational spectra of 5-substituted rhodanines*
Awarded for the 2nd place in the oral presentation category

07.2016 Successful participation in 10th International Summer School on Nanosciences & Nanotechnology, Organic Electronics and Nanomedicine, Thessaloniki, Greece

07.2016 Participation in **13th International Conference on Nanosciences & Nanotechnology**, Thessaloniki, Greece with a poster *The influence of crystallite size on the magnetic properties of Fe_3O_4 nanoparticles*

06.2016 Participation in Symposium of Young Scientists of Faculty of Physics, Warsaw, Poland with a poster ***DFT studies on vibrational spectra of rhodanine derivatives***

10.2014 Participation in **International Congress of Young Chemists YoungChem**, Szczecin, Poland with a poster *The influence of sample preparation on Raman spectrometry spectrum with the application of SERS effect*.
Awarded for being the youngest participant in the history of Congress.

05.2014 Participation in **Intel International Science and Engineering Fair** (Intel ISEF), Los Angeles, USA with a poster *The influence of sample preparation on Raman spectrometry spectrum with the application of SERS effect*

03.2014 Participation in International Science Festival E(x)plory 2014, Gdynia, Poland with a poster *Wpływ przygotowania próbki na otrzymywane widmo spektrofotometrii Ramana z uwzględnieniem efektu SERS (The influence of sample preparation on Raman spectrometry spectrum with the application of SERS effect* in Polish).
Awarded with an honourable mention and an accreditation for representing Poland at Intel ISEF.

09.2013 Participation in III National Forum of Young Chemists, Wrocław, Poland with a poster *Synteza i zastosowania związków wykazujących luminescencję* (*Synthesis and applications of luminescent compounds* in Polish)

08.2013 Two-week internship in Institute for Sustainable Technologies, National Research Institute.
Training in optical spectroscopy (FT-IR, ATR-FT-IR, UV/VIS and Raman) and X-ray (XPS and XRF) analytical methods

12.2011 One week internship in Institute of Organic Chemistry, Polish Academy of Sciences organised by Polish Children's Fund.
General training in organic chemistry and in organic crystallography

Finalist of National Olympiad in Chemistry (twice, in 2013 and 2014) and National Olympiad in Astronomy (in 2014).

Education

10.2014 - now	**Faculty of Physics** and **Faculty of Chemistry, University of Warsaw.** Undergraduate studies in **Nanostructure Engineering**
09.2011 - 05.2014	Secondary School No. 6 in Radom named after Jan Kochanowski

Skills

Languages	Polish – native speaker English – C1 level acknowledged by an internal exam of the University
Computer skills	Intermediate skills in **Gaussian quantum chemistry software**, including usage of parallel computing at Interdisciplinary Centre for Mathematical and Computational Modelling (ICM). Intermediate skills in programming (C++ and Python). Intermediate experience with Linux - based operating systems. Intermediate skills in usage of Wolfram Mathematica software and advanced skills in Microsoft Office.
Lab equipment	Micro-Raman setups (Labram Horiba Jobin-Yvon) Quantum Design MPMS7 SQUID magnetometer

Scientific interests

Magnetic properties of nanoparticles, surface-enhanced Raman spectroscopy, applications of density functional theory methods for interpreting results of spectroscopic experiments.