

## Curriculum Vitae

### Personal Info

Ana-Maria-Raluca Gherman

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### Research Experience

Present

Scientific researcher in Physics, National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca (April 1<sup>st</sup> 2019 - present)

Past

Assistant researcher in Physics National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca (July 18<sup>th</sup> 2016 – March 31<sup>st</sup> 2019)

Formal Education

PhD student, **Doctoral School of Physics, Faculty of Physics**, Babeş-Bolyai University, Cluj-Napoca (2015 – present); scientific coordinator: Prof. Dr. Vasile Chiş; research field: *computational chemistry and molecular modelling*

**Biophysics and Medical Physics, Faculty of Physics**, Babeş-Bolyai University, Cluj-Napoca (2013 – 2015) – Master's Degree; thesis: "Molecular structure of biotin molecule (vitamin B7)"

**Pedagogical Studies in Medical Physics, 2<sup>nd</sup> Level**, DPPD, Babeş-Bolyai University, Cluj-Napoca (2013 – 2015)

**Medical Physics**, Faculty of Physics, Babeş-Bolyai University, Cluj-Napoca (2010 – 2013) – Bachelor Degree; thesis: „Studiul carbamazepinei prin metode experimentale și teoretice” (*Study of carbamazepine molecule by using experimental and theoretical methods*)

**Pedagogical Studies in Medical Physics, 1<sup>st</sup> Level**, DPPD, Babeş-Bolyai University, Cluj-Napoca (2010 – 2013)

Scientific Activities

⇒ research visit – October 21<sup>st</sup> – December 21<sup>st</sup> 2015 – Institut für Physik, TU Chemnitz, Germany (Prof. Dr. DRT Zahn's research group); activities: DFT calculations on intermediary synthesis compounds of Heme B;

⇒ *Erasmus Mobility for Placement* – October 15<sup>th</sup> 2014 – February 28<sup>th</sup> 2015 – Scuola Normale Superiore Di Pisa, Italy, supervisor: prof. Vincenzo Barone; field: *computational chemistry*; activities: DFT (geometry optimization and harmonic/anharmonic frequency) calculations, using Gaussian software.

Research Projects

Member:

⇒ "Development of a microfluidic portable device for pathogens' rapid SERS detection (mifSERS)", PN-III-P2-2.1-PED-2016-0983, project manager: Nicoleta Elena DINA, perioada: January 20<sup>th</sup> 2018 – December 31<sup>st</sup> 2018;

⇒ "Pathogenic microorganisms' rapid detection and identification using high sensitive Raman spectroscopy", PN-II-RU-TE-2014-4-0862, project manager: Nicoleta Elena DINA, July 13<sup>th</sup> 2016 – November 9<sup>th</sup> 2017;

### Personal skills and competences

Mother tongue

Romanian

Foreign languages

English – advanced

French – medium

Spanish – conversational

Italian – beginner

German – beginner

Computer skills	<p>I have advanced skills in using Microsoft Office software package, Fox Pro, Origin, GaussView, and Gaussian, the multivariate analysis software The Unscrambler, graphic design software (Adobe InDesign, Photoshop), Linux server, and the internet (including social networks and blogging platforms).</p> <p>I have basic skills in programming (C++, HTML, java script, and CSS), and in using Wolfram Mathematica and Matlab softwares.</p>
Member of scientific communities	<p>Associate member of The Romanian College of Medical Physicists (July 13<sup>th</sup> 2015 – present)</p>