

Eszter Sarolta Pós · Curriculum Vitae

Personal Data

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Born: 19th August 1992, Budapest
Hungarian



Current position

2020 – **Max Planck Institute for Structure and Dynamics of Matter,
Hamburg, Germany**
Post-doctoral researcher

Studies

2016 – 2020 **University of Cambridge, United Kingdom**
Trinity College
PhD in Chemistry under the supervision of Prof. Stuart Althorpe
(Path Integral Molecular Dynamics)

The research project focuses on understanding quantum rate theory and recrossing of the barrier using Matsubara Dynamics and possibly develop a new simulation method that will give a better estimate to reaction rates compared to Ring Polymer Molecular Dynamics.

2014 – 2016 **Katholieke Universiteit Leuven, Belgium**
Erasmus Mundus Master of Theoretical Chemistry and Computational Modelling

– Summa cum laude Master's Degree

2011 – 2014 **Eötvös Loránd University, Budapest, Hungary**
Bachelor of Chemistry

- Bachelor's Degree with Honours
- ‘**Excellent student of the faculty**’, Faculty of Sciences
- ‘**Scholarship of the Hungarian Republic**’ 2013/2014
- **Bolyai Collegium** 2011/2012, 2012/2013, 2013/2014

2003 – 2011 **ELTE Radnóti Miklós High School, Budapest, Hungary**

- **Silver Medal** (39th place) at the **43rd International Chemistry Olympiad** Ankara, Turkey (2011)

Research

KULeuven Supervisor: Prof. Jeremy N. Harvey
- *Multiscale modelling of the enzymatic hydroxylation of camphor*, 2015/2016
- *Empirical Valence Bond Dynamical Simulation of Alkene Hydroboration*, 2014/2015

ELTE Supervisor: Prof. Péter Szalay and Dr György Tarczay
- *Electronic properties of the DNA molecule with special attention to the*

stacked pairs of nucleotides, 2013/2014
- *Matrix-Isolation UV and computational study of the excitation spectrum of adenine, 2011-2013*

Awards, activities

- **1st place** on the Poster Competition at CESTC2013, Znojmo, Czech Republic (2013)
Matrix-Isolation UV and computational study of the excitation spectrum of adenine
- Participation at the EUCCO-CC9 Conference, Sopron, Hungary; poster (2013)
- National Competition of Research Students (OTDK): **Special Award** (2013)
- University Competition of Research Students (TDK): **1st place** (2012)
- Scholarship of the Prime Minister of Hungary (2012)
- 1st place at the National Conference of high school Research Students
presentation: *Visible Consequences of Quantum Mechanics in Nature* (2011)

Language skills

English	ESOL CAE C1 level, April 2011
Latin	Origo B2 level, October 2010
Arabic	intermediate
Spanish	intermediate
German	beginner

Other activities

Programming	Fortran, Python, Shell scripting <i>My PhD project focuses on the quantum dynamical description of reactive chemical processes and as such involves deriving and implementing different methods and models and running simulations to evaluate the ability of the models in providing an insightful description of the problem.</i>
Teaching	<i>Mathematics Supervisor for the Natural Sciences Course, Cambridge</i> <i>Associate Fellow of the Higher Education Academy (in process)</i> <i>Extra classes for talented high school students in Chemistry and Mathematics</i> <i>Tutoring younger children for Maths</i> <i>Organizer of Game of Dragons - maths challenge for children</i>
Choir	<i>Member of the Lutherania Choir, Budapest</i>
Instruments	<i>Playing the violin</i>
Sports	<i>Pentathlon (3 years), Running, Triathlon</i>
Volunteer	<i>Long-time scout, Blood donor, Environmental Services</i>

April 5, 2021