# Martin Vondrák

Date of Birth: 29. 7. 1996

Email: vondrak@fhi-berlin.mpg.de

Phone number:  $+49\ 160\ 2659298$ 

#### Current research interest

• Machine learning electrostatic interactions in materials

#### Past Research interests

- Molecular mechanics simulations of graphene
- Interactions of small RNA hairpins with graphene
- Molecular dynamics simulations of graphene based supercapacitors

### Work Experience

2021-now	Ph.D. candidate position in Fritz Haber Institut MPG, Germany
2015 – 2021	Science center Fort Science
	I worked as an edutainer in math, physics and chemistry exhibitions.

#### Education

2021-now	Ph.D. candidate in Fritz Haber Institut MPG, Germany
2019 – 2021	MSc in Physical Chemistry, Palacký University, Czech Republic
	Final exams with marks (the scale of grades from A (best) to F (worst)): Modeling of biostructures and bioinformatics ( <b>A</b> ), Quantum Chemistry and Chemical Structure ( <b>A</b> ), Analytical Chemistry ( <b>A</b> ), Physical Chemistry ( <b>A</b> ), Final MSc Thesis Defense ( <b>A</b> )
2019 – 2021	Qualification Course for Teachers of Chemistry, Palacký University, CR
2016–2019	BSc in Chemistry, Palacký University, Czech Republic Final exams with marks (the scale of grades from A (best) to F (worst)): General and Inorganic Chemistry (A), Organic Chemistry (A), Analytical Chemistry (B), Physical Chemistry (A), Final BC Thesis Defense (A)

## Publications and Awards

2022	Author of Pykal, M. et al. Accessibility of Grafted Functional Groups Limits Reactivity of Covalent Graphene Derivatives. Appl. Surf. Sci. 598, (2022)
2018	Coauthor of Li, Q. et al. RNA nanopatterning on graphene. 2D Mater. 5, (2018)
2016	Students' Professional Activities, 3rd place in Chemistry category Name of the project: Structural Changes Accompanying the Process of Graphene Oxidation
2015	Czech Little Head Genus 2015 Award
2015	The Learned Society Award for Students' Professional Activities
2015	Students' Professional Activities, 2nd shared (50 $\%$ ) place in Chemistry category Name of the project: The Catalysis of the Nucleolytic Ribozymes
2015	Students' Professional Activities, 4th place in Math category Name of the project: Statistical Analysis of Composition Tables in Coordinates
2014	Students' Professional Activities, 5th place in Math category Name of the project: Statistic Analysis of Independence in Four-field Data Tables

## Other Activities

2019	Foundation of Reproducibilitea in Olomouc, Czech Republic
	Czech branch of global journal club started 2016 at University of Oxford initiative focused on open and reproducible science, founded and organized by Chemistry Club UP
2017	Foundation of Chemistry club UP
	Student organization at Palacký University holding lectures from chemistry given by experts, popularizing chemistry for high school students and organizing excursions in chemistry laboratories
2016	Participation on the international conference MILSET Expo-Sciences Europe 2016
	Presentation of the project The Catalysis of the Nucleolytic Ribozymes at the MILSET Expo-Sciences Europe 2016 in Toulouse, France
2015	World Science Conference – Israel
	Workshops and lectures from Nobel laureates, research-based Israeli companies, and researchers from Hebrew University of Jerusalem.

## Skills

- $\bullet\,$  Active user of Linux
- Active user of Python and Latex
- $\bullet\,$  Passive knowledge of C and C#
- $\bullet\,$  English Language C1 level in CAE exam