# Matteo BRUSCHI
## M.Sc. in Chemistry

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ℹ Born 26 July 1995, Negrar (VR), Italy

## 🎓 EDUCATION

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|---|---|
| 23 Apr 2020<br>02 Oct 2017 | **M.Sc. IN CHEMISTRY** \| Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy<br>*Thesis*: "Stochastic Models of Disorder in Excitonic Systems: Localization, Decoherence and Optical Response"<br>*Supervisor*: Prof. Barbara Fresch<br>*Final grade*: 110/110 cum Laude<br>[Theoretical Chemistry] [Exciton dynamics] [Anderson localization] [Haken-Strobl model] |
| 18 Dec 2018<br>20 Aug 2018 | **ERASMUS+ STUDIES** \| Department of Chemistry, NTNU, Trondheim, Norway<br>Courses from the Master's Degree Programme in Applied Theoretical Chemistry |
| 28 Sep 2017<br>29 Sep 2014 | **B.Sc. IN CHEMISTRY** \| Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy<br>*Thesis*: "In Silico Oxidation of Bioinspired Organodichalcogenides of Glutathione Peroxidase: an ASA-EDA Approach"<br>*Supervisor*: Prof. Laura Orian<br>*Final grade*: 110/110<br>[Computational Chemistry] [Catalysis] [Chalcogens] [GPx] |

## 💼 PROFESSIONAL EXPERIENCES

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| Today<br>01 Jun 2020 | **RESEARCH FELLOW** \| Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy<br>*Project*: "Exciton Dynamics in Quantum Dots Solids for the Design of Logic Processing at the Nanoscale"<br>*Supervisor*: Prof. Barbara Fresch<br>*Funding*: COPAC (H2020 FETOPEN-1-2016-2017-766563) |
| 31 Jul 2019<br>01 Mar 2019 | **TUTOR FOR SCHOOL OF SCIENCE** \| Università degli Studi di Padova, Padova, Italy<br>*Courses*: Organic Chemistry 1 and Analytical Chemistry 1 |
| 17 Aug 2018<br>20 Jul 2018 | **SCHOLARSHIP** \| Institut de Química Computacional i Catàlisi, Universitat de Girona, Girona, Spain<br>*Project*: "Bioinspired in Silico Oxidation of Organomonochalcogenides by $H_2O_2$"<br>*Supervisor*: Prof. Marcel Swart<br>*Funding*: HPC-EUROPA3 (H2020 INFRAIA-2016-1-730897) |

## 💼 SCHOOLS AND SEMINARS

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| 28 – 29 Apr 2020 | **Training course** – "High Performance Molecular Dynamics", CINECA, Online Lessons, Italy |
| 26 – 29 Nov 2019 | **Training course** – "Introduction to Fortran for Scientific Computing", CINECA, Bologna, Italy |
| 01 – 03 Oct 2019 | **Training course** – "Introduction to Python Programming", CINECA, Rome, Italy |
| 15 – 17 Jul 2019 | **Summer School** in History and Philosophy of Science – "Frontiere della Conoscenza: Big Data nelle Scienze Fisiche, Sociali, Umanistiche e della Vita", CISFIS, Padova, Italy |

## ⚗ OTHER EXPERIENCES

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| 27 Sep 2019 | **Staff Member** – "European Researchers' Night - Venetonight", Padova, Italy |
| 12 Feb 2019 | **Speaker** – "Viaggio nella Tavola Periodica", Padova, Italy |
| 29 Sep 2018 | **Staff Member** – European Researchers' Night - Venetonight, Padova, Italy |
| 23 Sep 2017 | **Staff Member** – "NEMEC - Non è magia, è chimica", Padova, Italy |
| 19 Sep 2015 | **Staff Member** – "NEMEC - Non è magia, è chimica", Padova, Italy |

## ☰ Skills

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| Operative Systems | Linux, MacOS, Windows |
| Programming | Python, Fortran 90, Bash |
| Scientific Software | Matlab, Mathematica |
| Chemistry Software | Gaussian, ADF, Avogadro |
| Text Editors | Office Suite, LaTeX |

## 🌐 Languages

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|---|---|---|
| Italian | ●●●●● | Native |
| English | ●●●●○ | Fluent |

## 66 Publications

[1]  M. Bortoli, M. Bruschi, M. Swart, L. Orian Sequential Oxidations of Phenylchalcogenides by $H_2O_2$: "Insights in the Redox Behavior of Selenium from a DFT Analysis" *New J. Chem.* **44**, 6724-6731 (2020).

[2]  M. Bortoli, F. Zaccaria, M. Dalla Tiezza, M. Bruschi, C. Fonseca Guerra, F. M. Bickelhaupt, L. Orian "Oxidation of Organic Diselenides and Ditellurides by $H_2O_2$ for Bioinspired Catalyst Design" *Phys. Chem. Chem. Phys.* **20**, 20874-20885 (2018).

Padova, 17 June 2020

Matteo Bruschi