## Matteo Bruschi M.Sc. in Chemistry

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- ♀ Lungadige Matteotti 14, 37126 Verona (VR), Italy
- i Born 26 July 1995, Negrar (VR), Italy





### EXPERIENCE

Present 01 Jun 2020	<ul> <li>RESEARCH FELLOW   Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy</li> <li>&gt; Project: "Exciton Dynamics in Quantum Dots Solids for the Design of Logic Processing at the Nanoscale"</li> <li>&gt; Supervisor: Prof. Barbara Fresch</li> <li>&gt; Funding: COPAC (H2020 FETOPEN-1-2016-2017-766563)</li> </ul>
31 Jul 2019 01 Mar 2019	TEACHING ASSISTANT   Università degli Studi di Padova, Padova, Italy > Courses: Organic Chemistry 1 and Analytical Chemistry 1
18 Dec 2018 20 Aug 2018	ERASMUS+ STUDIES   Department of Chemistry, NTNU, Trondheim, Norway  > Courses from Master's Degree Programme in Applied Theoretical Chemistry
17 Aug 2018 20 Jul 2018	<ul> <li>SCHOLARSHIP   Institut de Química Computacional i Catàlisi, Universitat de Girona, Girona, Spain</li> <li>&gt; Project: "Bioinspired in Silico Oxidation of Organomonochalcogenides by H<sub>2</sub>O<sub>2</sub>"</li> <li>&gt; Supervisor: Prof. Marcel Swart</li> <li>&gt; Funding: HPC-EUROPA3 (H2020 INFRAIA-2016-1-730897)</li> </ul>



## EDUCATION

#### 23 Apr 2020 02 Oct 2017

M.Sc. IN CHEMISTRY | Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy

- > Thesis: "Stochastic Models of Disorder in Excitonic Systems: Localization, Decoherence and Optical Response"
- > Supervisor: Prof. Barbara Fresch
- > Final grade: 110/110 cum Laude

Theoretical Chemistry | Exciton dynamics | Anderson localization | Haken-Strobl model

### 28 Sep 2017 29 Sep 2014

B.Sc. IN CHEMISTRY | Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Padova, Italy

- > Thesis: "In Silico Oxidation of Bioinspired Organodichalcogenides of Glutathione Peroxidase: an ASA-EDA Approach"
- > Supervisor: Prof. Laura Orian
- > Final grade: 110/110

Computational Chemistry Catalysis Chalcogens GPx



## SCHOOLS AND SEMINARS

20 – 31 Jul 2020	Summer School – "Qiskit Global Summer School", IBM, Online Session
28 – 29 Apr 2020	Training Course – "High Performance Molecular Dynamics", CINECA, Online Session
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



## VOLUNTARY ACTIVITIES

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



LANGUAGES

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

Italian • • • • Native English • • • Tluent

# **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<sub>2</sub>O<sub>2</sub> for Bioinspired Catalyst Design" *Phys. Chem. Chem. Phys.* **20**, 20874-20885 (2018).

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali" e dell'art. 13 del GDPR (Regolamento UE 2016/679).

Verona, 01 August 2020

MATTEO BRUSCHI

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