

Loletti Marta

EDUCATION

2021-2023
Perugia - Italy

Master's degree in chemical sciences
Università degli studi di Perugia
Curriculum Theoretical Chemistry and Computational modelling (Erasmus Mundus TCCM)

From 09/2022 to 01/2023
Paris - France

Erasmus+ Study programme
Université Paris Sorbonne
▪ Coursework in Modelling Electronic Structure : electronic structure modelling, fundamental principles of quantum chemistry and associated computational techniques to simulate and analyse electronic properties of complex materials.

▪ Coursework in Surface and Interface chemistry : chemical surfaces and interfaces, chemical interactions on solid surfaces, experimental techniques, modelling interactions using simulation softwares

2018-2021
Perugia - Italy

Bachelor degree in chemistry
Università degli studi di Perugia

Additional courses

- Online course in *Advanced Theoretical Chemistry* by Professor Jeremy Harvey (University of KU Leuven, Leuven, Belgium) incentrated in writing a code for modelling simple atomic liquids using Monte Carlo simulation.
- Doctoral course of *Functional Materials & Devices* held by Professor Sergei Manzhos (Tokyo Institute of Technology) with arguments : atomistic build-up of materials, crystal structures and systems and major characterization techniques (XRD, XPS, IR, CV, DSC, TGA). Wide study of electrochemical power sources: batteries, fuel cells and key related material types and properties, ionic conductors and catalysts, different types of solar cells and LED.
- Master course in *Multiscale Modelling of Complex Molecular Systems* which introduced different models from micro to mesoscale to treat complex biological systems.
- Online seminar *Machine learning in computational chemistry: the connections* by Professor Sergei Manzhos (Tokyo Institute of Technology).

WORK EXPERIENCE

From 02/2022
to 08/2022
(Barcelona-Spain)

Research assistant | Institute of Material Science of Barcelona (ICMAB)
Research project on theoretical investigations on CaTiO_3 , focusing in structural, electronic, and optical features for photoconversion mechanisms

From 05/2021
to 08/2021
(Prague-Czech Republic)

Research assistant | Institute of Organic Chemistry and Biochemistry (IOCB)
Research project that sees the study of organic compounds for applications in photovoltaic energy through the use of fluorescence anisotropy technique resolved over time and time-correlated single photon counting (TCSPC)

SKILLS

- Experience in conducting literature reviews, analysing and synthesizing scientific papers.
- Familiarity with safety protocols and procedures to maintain a safe working environment.
- Proficient in *programming languages* such as R, Fortran (77 and 90), and Python
- Extensive knowledge of *computational chemistry software* (VASP, VASPkit, VMD, VESTA,...)
- Advanced proficiency in the *Microsoft Office Suite* (Word, PowerPoint, Excel).
- Proficiency with *communication platforms* such as Skype, Teams, Google Meet, and Zoom.
- Proficient in manipulating *PDF documents* and *photo editing* software

LANGUAGES

Mother tongue:	Italian
English:	C1
French:	B2
Spanish:	A2