

# Tommaso Moretti

Date of birth: [REDACTED]/1998

Nationality: [REDACTED]

## CONTACT



## ABOUT ME

I am a chemist who combines my expertise in chemistry with a deep passion for exploring the social and economic implications of my field of study. By understanding the broader context and potential applications of chemistry, I strive to contribute to the betterment of society and create positive impacts in areas such as healthcare, energy, environmental sustainability, and materials science. Through my work, I aim to bridge the gap between scientific advancements and their practical implementation, leveraging my knowledge to drive innovation, improve lives, and foster a more sustainable and prosperous future

## EDUCATION AND TRAINING

**01/10/2017 - 29/09/2021** Perugia, Italy

**Bachelor degree** University of Perugia

The specific educational objectives of the cds aim at achieving a good basic methodological preparation, with constantly updated and high-quality cultural content, which allows students to master the main aspects of the different areas of Chemistry. The preparation achieved, which also includes the fundamental elements of mathematics, physics and computer science proper to scientific training, is appropriate both to the profitable deepening of the studies in the subsequent training cycle (Master's Degree or Euromaster Chemistry) both entering the labor market in professional fields that require chemical, theoretical and laboratory skills, and familiarity with the scientific method and with notions and physical-mathematical and computer tools.

**Address** Piazza dell'Università, 1 - 06123 Perugia - ITALIA, 06135, Perugia, Italy **Website** <http://www.dccb.unipg.it/> **Field of study** Chemistry

**Final grade** 95/110 **Thesis** Study and validation of in silico methods to predict the tautomerization of organic compounds

**01/09/2021 - 26/09/2023** Perugia, Italy

**Master degree** University of Perugia

Computational chemistry is a multidisciplinary field that combines principles of chemistry, physics, and computer science to simulate and predict the behavior of chemical systems using computational models and algorithms.

Computational chemistry is revolutionizing the way we understand and explore the intricacies of chemical systems by leveraging advanced algorithms, quantum mechanics, molecular dynamics simulations, and machine learning techniques. This field enables researchers to investigate molecular structures, reaction mechanisms, spectroscopic properties, and even design new molecules with tailored properties, all through the power of computational simulations. By providing invaluable insights and predictions, computational chemistry significantly accelerates the discovery and development of new drugs, materials, catalysts, and environmentally sustainable solutions. Furthermore, it plays a pivotal role in optimizing chemical processes, reducing experimental costs, and guiding experimental design, ultimately leading to more efficient and cost-effective outcomes

**Address** Piazza dell'Università, 1, 06123, Perugia, Italy **Website** <http://www.dccb.unipg.it/> **Field of study** Inter-disciplinary programmes and

qualifications involving natural sciences, mathematics and statistics

**Final grade** 110/110 **Level in EQF** EQF level 7 **Type of credits** CFU

**Number of credits** 120 **Thesis** Computational approach of storage systems

## WORK EXPERIENCE

**15/12/2023 - CURRENT** Perugia, Italy

**University research assistant** University of Perugia

As a research assistant, I am dedicated to the computational theoretical study of materials using density functional theory (DFT). My work primarily focuses on investigating and optimizing materials for energy applications, contributing to advancements in energy storage and conversion technologies through detailed computational analysis and modeling.

## LANGUAGE SKILLS

**MOTHER TONGUE(S):** Italian

**Other language(s):**

English

**Listening** C1

**Reading** C1

**Writing** B2

**Spoken production** B2

**Spoken interaction** B2

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*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## DIGITAL SKILLS

Google Drive Microsoft Word Google Docs LinkedIn Outlook Conoscenza del sistema LINUX Organizational and planning skills Instagram Good listener and communicator Team-work oriented

### MICROSOFT OFFICE

Microsoft Excel Microsoft Powerpoint Zoom

## PLACEMENTS AND INTERNSHIPS

**08/2015 – 09/2015**

- **Training internship Tecnocibus Srl chemical and microbiological analysis sector Agrofood**

Analysis of food samples, environmental analyses, laboratory administrative management

Link <https://www.tecnocibus.it/>

**08/2016 – 09/2016**

- **Internship Institute Zooprofylactic of Umbria and Marche: diagnostics department**

Collection of necroscopic samples, preparation of bacterial seeds, analysis and detection of bacterial strains of interest, preparation of samples for subsequent analysis, sample preparation and use of HPLC and PCR

Link <https://www.izsum.it/IZSUM/>

**20/07/2021 – 25/08/2021**

- **Internship Institute Zooprofylactic of Umbria and Marche: UOC Officina Farmaceutica - in laboratories C10TERR (Cultivation Land Production Centre), C10VACC (Stabulogenic Vaccine Production Centre) -C10PAK (Antigen Production Centre/Diagnostic Kits)**

The aim of the internship was to acquire theoretical and practical knowledge in the field of the production of perform microbiological tests on organic food and matrices- acquire theoretical and practical knowledge about lyophilisation process- Acquire theoretical knowledge on the operation of machinery such as autoclaves, fermenters, dispensers, freeze-drying machines - Acquire theoretical knowledge about the production phase of the stabulogen vaccine and the bacterium/virus isolation process. Acquire theoretical knowledge on the production of recombinant proteins and monoclonal antibodies.

Link <https://www.izsum.it/IZSUM/>

## SOCIAL AND POLITICAL ACTIVITIES

**01/10/2017 – 01/10/2022** University of Perugia

- **Activities of university representation**

Being part of an association is an experience that I highly recommend to anyone who chooses to undertake a course in higher education, allows the student to develop critical thinking in front of the university reality, to learn the means to carry out an election campaign such as communication skills, organization, project writing, event organization, student assistance, and in my case, having been treasurer of the association, to manage funds and resources.

Personally, I was elected student representative for 4 years in a row, in the second two years of office and in the fifth year overall I became a member of the executive board of the association and then leave the baton to devote myself to academic studies towards the end of my path.

I will always be grateful to those who taught me how to manage this association, remaining always detached from political parties to pursue only student goals without any influence of any kind

Link <https://linktr.ee/ideeinmovimento.pg>

## MANAGEMENT AND LEADERSHIP SKILLS

### ● **MANAGEMENT 4 SCIENTISTS0 :Advanced training course for graduates in technical and scientific disciplines.**

In technological enterprises, such as those operating in the chemical industry, graduates in technical-scientific subjects have a fundamental role because they perform essential functions, such as those in analysis or research laboratories. In their professional growth, these professionals can also seize opportunities in less technical areas such as Regulatory affairs, marketing, or sales. In both cases, it is necessary to have a culture open to the economic and management aspects. The path "Management 4 Scientists: Advanced training course for graduates in technical-scientific disciplines" developed by LIUC Business School in collaboration with Federchimica, it is aimed at young talents in scientific subjects with the intention of developing "all-round" professional profiles capable of covering not only the technical dimension, but also the aspects of managerial matrix nowadays more and more indispensable for the professional development in the enterprises to high scientific-technological content.

Link <https://www.liucbs.it/formazione-manageriale/formazione-a-catalogo/management-4-technicians/>

## CONFERENCES AND SEMINARS

**28/01/2024 – 02/02/2024** Brixen

### ● **Winter workshop on Materials for Energy**

I delivered a detailed presentation on anode materials for emerging chemical systems, highlighting their potential applications and advancements in the field

Link <https://www.wwme2024.com/>

**Perugia 02/07/2024**