

Curriculum Vitae

Benedetta MENNUCCI

PERSONAL INFORMATION

Date of Birth: 06/05/1969

Nationality: Italian

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Education

- 1994: “Laurea” in Chemistry (cum laude) at the University of Pisa
- 1994-95: research fellowship at the University of Colorado at Boulder & the Carnegie-Mellon, University of Pittsburgh (USA).
- 1999: Ph.D. in Chemistry at the University of Pisa.

Current & previous positions

- 2012-now: Full Professor in Physical Chemistry at the Dept. of Chemistry of the University of Pisa
- 2010-2013: Adjunct Professor at the Center for Theoretical and Computational Chemistry (Tromsø and Oslo, Norway), established in 2007 as Center of Excellence of the Research Council of Norway.
- 2002-2012: Associate Professor in Physical Chemistry at the Dept. of Chemistry of the University of Pisa.

Institutional responsibilities

- 2022-now: Vice-Rector for the Promotion of the Research of the University of Pisa
- 2016-2019: President of the Bachelor and Master courses in Chemistry for the Department of Chemistry of the University of Pisa
- 2014-2016: President of the Theoretical and Computational Chemistry Division of the Italian Chemical Society
- 2012-2015: Coordinator of the PhD School in Chemical and Material Sciences of the University of Pisa

Honors and awards

- 2024 “Ordine del Cherubino” of the University of Pisa
- 2022 “Premio del Ministro della Cultura per la Chimica” of the Accademia dei Lincei
- 2021 Elected one of the 50 most inspiring women in the STEM field in Italy (<https://italy.inspiringfifty.org/italy-2021-1>).
- 2020 “Cesare Pisani Medal” of the Italian Chemical Society (SCI) in recognition to the contribution to the development of chemical sciences with reference to aspects of theoretical-computational modeling.
- 2015 Elected member of the Board of the World Association of Theoretical and Computational Chemists (WATOC)
- 2014 Elected Member of the International Academy of Quantum Molecular Science (IAQMS)

Editorial activities

- 2014-2023: Senior Editor for the Journal of Physical Chemistry Letters (ACS)

- 2019-now: Member of the Editorial Advisory Board of Journal of Chemical Theory and Computation (ACS)
- 2019-now: Member of the Editorial Advisory Board of Cell Reports Physical Chemistry (Cell Press)
- 2014-now: Member of the Editorial Board of Theoretical Chemistry Accounts (Springer)
- 2018-2023: Member of the Editorial Advisory Board of Chemical Reviews (ACS)

Selected plenary/invited lectures (last 10 years)

- European Congress on Photosynthesis Research, Padova (Italy) 2024
- Gordon Research Conference, Photosensory Receptors and Signal Transduction, Lucca (Italy), 2024
- Computational molecular medicine across three decades, Trieste (Italy) 2023
- XLIX Congress of the Physical Chemistry Division of the Italian Chemical Society, Turin (Italy) 2023
- CECAM workshop, Biomolecular simulation and machine learning in the exascale era: first applications and perspectives, Pisa (Italy) 2023
- PSI-K 2022, Lausanne (Switzerland) 2022
- 28th PhotoIUPAC, Amsterdam (The Netherlands) 2022
- PACIFICHEM symposium “Solvation and Binding to Biomolecules”, Virtual, 2022
- 57th Symposium on Theoretical Chemistry (STC), Wurzburg (Germany), virtual, 2021
- 19th Congress of the European Society for Photobiology (ESP), Salzburg (Austria), virtual, 2021
- 9th Molecular Quantum Mechanics (MQM) conference, Heidelberg (Germany) 2019
- 7th Current Trends in Theoretical Chemistry (CTCC) conference, Krakov (Poland) 2019
- ACS National Meeting, Symposium “Advances in Data Collection & Analysis of Biomolecular Structures”, Orlando (USA) 2019
- 10th International Society for Theoretical Chemical Physics (ISTCP) Conference, Tromsø (Norway) 2019
- 11th Triennial Congress of the World Association of Theoretical and Computational Chemists (WATOC), Munich (Germany) 2017
- International Conference on Photochemistry (ICP), Strasbourg (France) 2017
- 17th European Seminar on Computational Methods in Quantum Chemistry (ESCMQC) Harper-Adams University (UK) 2017
- ACS National Meeting, Symposium “Sunlight-Driven Processes: Exposing the Mechanisms Underlying Productive Photoactivities”, San Francisco (USA) 2017
- Computational Molecular Science, Warwick (UK) 2017
- Gordon Research Conference, Theory and Simulation Across Scales in Molecular Science, Girona (Spain), 2016
- CECAM Workshop, Interface processes in photochemical water splitting: Theory meets experiment, Lausanne, Switzerland) 2016
- Theory and Applications of Computational Chemistry (TACC), Seattle (USA) 2016
- ACS National Meeting, Symposium “Advanced Potential Energy Surfaces: Classical Simulation Models & Methods”, Philadelphia (USA), 2016
- 17th International Congress on Photosynthesis Research, Light Harvesting Satellite Meeting, Egmond aan Zee (The Netherlands), 2016
- 9th International Society for Theoretical Chemical Physics (ISTCP) Conference, Grand Forks (USA) 2016
- 15th International Congress of Quantum Chemistry (ICQC), Beijing (China) 2015
- Excited States and Time-dependent Electronic Structure Theory, Telluride (USA) 2015
- 10th European Conference on Computational Chemistry (EuChem), Fulda (Germany) 2015
- Quantum effects in Biological Systems (QuEBS), Florence (Italy), 2015
- Lorentz Center Workshop “Good Vibrations for Energy Management in Biomolecules”, Leiden (The Netherlands) 2015

Selected organization of international Schools and workshops (last 10 years)

- 2015-2018 Annual European Winter School in Physical Organic Chemistry, e-WISPOC, Brixen (Italy)
- 2015 ACS national Meeting Symposium “Computational Chemical Dynamics: Advancing our Understanding of Chemical Processes in Gas-Phase, Biomolecular & Condensed-Phase Systems”, Denver (USA)
- 2017 WATOC satellite meeting “Coding Solvation”, Livorno (Italy)
- 2017 11th Congress of the World Association of Theoretical and Computational Chemists (WATOC), Munich (Germany), (International Advisory Committee)
- 2017 FemEx workshop “Promoting Female Excellence in Theoretical and Computational Chemistry, Putten (The Netherlands) (Scientific advisory board)
- 2018: Workshop on Theoretical Chemistry: “Modeling of Environment Effects in Quantum Chemistry”, Mariapfarr (Austria)
- 2018 International Congress on Quantum Chemistry (ICQC) Satellite meeting “Photoinduced processes in Embedded Systems”, Pisa (Italy)
- 2021 PACIFICHEM symposium “Solvation and Binding to Biomolecules”, Virtual

Ongoing teaching activities at the University of Pisa

- Introductory course on molecular modeling for the Master in Biotechnology
- first-level course on quantum mechanics and statistical thermodynamics for the Bachelor in Chemistry
- advanced course on hybrid quantum/classical methods for the Master in Chemistry.

Supervision of students and postdoctoral fellows (last 10 years)

- supervisor of 25 “Tesi di Laurea Magistrale” (equivalent to Master Thesis)
- supervisor of 13 PhD Theses,
- supervisor of 16 postdocs

Research Grants (last 10 years)

[2024-2027] MSCA Doctoral Network (Horizon Europe) *Photosynthetic Antennas in a Computational Microscope: Training a new generation of computational scientists* (PhotoCam)

[2023-2025] PRIN 2022, *Molecular Control of Photoprotection in Photosynthetic Organisms* (PhotoControl)

[2019-2023] PRIN 2017, *From natural to artificial light-harvesting systems: unveiling fundamental processes towards a bio-inspired materials design* (HARVEST)

[2019-2024] FARE Ricerca in Italia (MUR), *A quantum-chemistry based multiscale strategy for Light-Driven Pharmacology* (Quantum-LIP)

[2018-2023] European Research Council (ERC) Advanced grant: *Light-Induced Function: from Excitation to Signal through Time and Space* (LIFETimeS).

[2011-2016] European Research Council (ERC) Starting grant: *The interplay between quantum coherence and environment in the photosynthetic electronic energy transfer and light- harvesting: a quantum chemical picture* (EnLight).

Scientific activity

337 Articles + 12 Book chapters

50750 citations (WoS - August 2024)

H-index = 76 (WoS - August 2024)