

Curriculum Vitae

Prof. Dr. Paolo Melchiorre

Professor of Chemistry at the Industrial Chemistry Department 'Toso Montanari'
University of Bologna (UNIBO), Italy

Date of birth: 29 May 1973 - Nationality: Italian



Web site: <https://melchiorrelab.weebly.com/>; <https://www.unibo.it/sitoweb/p.melchiorre/en>

Researcher unique identifiers: Researcher ID: K-9301-2014 [\[link\]](#); ORCID: 0000-0001-8722-4602 [\[link\]](#)

The following list summarises the most important steps of my educational and professional career:

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|---|-------------------------------|-----------|
| • MSc in Chemistry | University of Bologna (Italy) | 1993-1999 |
| • PhD in Chemical Sciences | University of Bologna | 2000-2003 |
| • Research Period at Center for Catalysis | University of Århus (DK) | 2002 |
| • Postdoctoral Fellow in Chemistry | University of Bologna | 2003-2006 |
| • Assistant Professor | University of Bologna | 2007-2009 |
| • ICIQ Group Leader and ICREA Professor | ICIQ, Tarragona (Spain) | 2009-2022 |

CURRENT POSITION

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|------------------------|-----------------------|-------------------|
| Professor of Chemistry | University of Bologna | from October 2022 |
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FELLOWSHIPS, AWARDS and DISTINCTIONS

- 2007 Recipient of the "G. Ciamician" Gold Medal of the Italian Chemical Society
- 2008 Recipient of the *Liebig Lectureship* awarded by the German Chemical Society
- 2009 *Thieme Journal Prize*
- 2009 ICREA (Institutió Catalana de Recerca i Estudis Avançats) Research Professor
- 2011 *Young Talented Lecture* in the 17th European Symposium on Organic Chemistry (ESOC 2011), Crete
- 2011 **ERC Starting Grant** to carry out the 5-year project "ORGA-NAUT: Exploring Chemical Reactivity with Organocatalysis"
- 2013 *JSPS Fellowship* under the FY2013 Program for Research in Japan
- 2014 *Erdtman Lecture 2014* – October 2014, Stockholm, Sweden (presented annually to an organic chemist, worldwide)
- 2015 *Thieme Lecture* – DOMINOCAT SYMPOSIUM, Aachen, Germany
- 2016 **ERC Consolidator Grant** to carry out the 5-year project "CATA-LUX: Light-Driven Asymmetric Organocatalysis"
- 2016 Prize for Scientific Excellence from the Royal Spanish Chemical Society (RSEQ)
- 2019 "*Giorgio Modena*" Medal from the Italian Chemical Society
- 2019 **ERC Proof of Concept** to carry out the project "*LIGHT-COAT*" on photo-polymerisations
- 2020 Fellow of the Royal Society of Chemistry (*FRSC*)
- 2021 Pedler Award of the Royal Society of Chemistry (*RSC*) "*for the development of asymmetric photocatalytic methodologies based on excited state intermediates*"
- 2023 *Xingda Lecture*, Peking University, China (presented annually to an organic chemist, worldwide)
- 2024 **ERC Advanced Grant** to carry out the 5-year project "*PHOTOZYME: Enhancing the Potential of Enzymatic Catalysis with Light*"

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2007 – 2024 I have supervised and mentored a total of 32 PhD students (24 PhDs already granted, 8 presently working in my research team), 48 postdoctoral researchers (4 presently working in my research group), and 25 visiting scientists (including Master students, visiting PhD students, and visiting Professors on a 3-12-month tenure).

Contributions to careers of early-stage researchers. Some of my past associates have gone on to independent *academic careers*. Examples follow (*name*, time, present position): *Armando Carlone* (PhD 2005-2008) Associate Professor at University of L'Aquila, Italy; *Yankai Liu* (Marie Curie Fellow 2011-13) Assistant Professor at Ocean University, Qingdao, China; *Igor D. Jurberg* (Postdoc 2012) Assistant Professor at Campinas University, Brazil; *Indranil Chatterjee* (Postdoc 2012-2014) Professor at IIT Ropar, Punjab, India; *Xu Tian* (PhD 2010-2014) 'Thousand Talents Fellow' at Guangzhou Medical University, China; *Mattia Silvi* (PhD 2011-2015) Research Fellow at Nottingham University, UK; *Luca Dell'Amico* (Marie Curie Fellow 2015-2016) Associate Professor at the University of Padua, Italy; *Ana Bahamonde* (PhD 2014-2017) Assistant Professor at University of California, Riverside, USA; *Sudipta Raha Roy* (Marie Curie Fellow 2018-2019) Professor at IIT Delhi, India; *Zhong-Yan Cao* (Marie Curie Fellow 2017-2018) Professor at Zhejiang

University of Technology, Hangzhou, China; *Giacomo Crisenza* (Marie Curie Fellow 2020-2021) Lecturer at the University of Manchester; UK.

Selected industry-related careers – *Giulia Bergonzini* (PhD 2009-2013) to Astra Zeneca, Goteborg, Sweden; *Carlo Cassani* (PhD 2009-2013) to Astra Zeneca, Goteborg, Sweden; *Elena Arceo Rebollo* (Postdoc 2011-2014) to Verisk Analytics Inc, Washington, USA; *Bertrand Schweitzer-Chaput* (Postdoc 2015-2019) and *Pablo Bonilla* (PhD 2016-2020) to Janssen, Beerse, Belgium; *Riccardo DiSanza* (Postdoc 2020-2021) to Signature Discovery, Nottingham, UK; *Jan Vilím* (Postdoc 2021-2022) to Loschmidt Laboratories/Enantis, Brno, Cz; *Catherine Holden* (Marie Curie fellow 2018-2020) to Syngenta Crop Protection, Jealott's Hill, UK.

TEACHING ACTIVITIES

During my time at ICIQ, I taught 'Stereoselective and Asymmetric Synthesis' at the graduate level (30 hours a year). At the University of Bologna, I am teaching advanced organic chemistry, photocatalysis, and asymmetric catalysis at undergraduate and graduate levels (140 hours a year)

In addition, Professor Melchiorre has delivered advanced courses dedicated to PhD students in many International Schools.

INSTITUTIONAL RESPONSIBILITIES

2022 - present Delegate for Research of the Industrial Chemistry Department '*Toso Montanari*', UNIBO

2019 - present Associate Editor for *Chemical Science*, the flagship Royal Society of Chemistry journal

2020 Member of the ICIQ Scientific Strategy Committee

2019 - present Guest Editor for an upcoming (2022) special issue in Photocatalysis for *Chemical Reviews*

2013 ICIQ Seminar Manager, in charge of the 2013 seminar program at ICIQ (info [here](#))

2009 - present Jury member for 25 PhD theses at Spanish & international universities

REVIEWING ACTIVITIES

2013 – now Member of the *Advanced Synthesis and Catalysis* (Wiley) Academic Advisory Board

2013 – now Member of the International Advisory Board of *ChemCatChem* (Wiley)

2016 – now Member of the International Advisory Board of *ChemPhotoChem* (Wiley)

2005 – now Served as referee for the following international journals, among others: *Nature*, *Nature Chemistry*, *Angew. Chem. Int. Ed.*, *J. Am. Chem. Soc.*; *Chem. Sci.* etc.

2018 – 2019 In 2018 and 2019, one of the top three contributing referees for ACIE (39 and 35 referee reports, respectively – personal communication from the Editorial Board).

2017 – now Occasional scientific consultant for Janssen, Syngenta, Bayer, and Merck.

2008 – now Evaluator of scientific proposals for different national scientific agencies, including: *ERCEA*; the Deutsche Forschungsgemeinschaft (*DFG*, Germany); the Swiss National Science Foundation (*SNF*, Switzerland); the National Science Foundation (*NSF*, USA); Agence Nationale de la Recherche (*ANR*, France); etc.

2015 – now Evaluator for career promotion: University of Manchester (UK); Institute of Transformative Bio-Molecules (ITbM), Nagoya; the National University of Singapore, among others.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2004 Member of Società Chimica Italiana (SCI)

2010 Member of the American Chemical Society (ACS) and Real Sociedad Española de Química

2020 Member of the Royal Society of Chemistry (RSC)

MAJOR COLLABORATIONS

2018 - present Scientific collaboration with Syngenta (Jealott's Hill – UK) on the design of photochemical radical cascade processes for the preparation of bio-relevant chiral molecules.

2018 - 2019 Scientific collaboration with Bayer AG Pharmaceuticals (Wuppertal – Germany) on the development of new photoredox methodologies for amide synthesis. Part of the scientific results published in *Angew. Chem. Int. Ed.* **2020**, 59, 5248–5253 [\[link\]](#).

LEADERSHIP in INDUSTRIAL INNOVATION or DESIGN

In 2020, he co-founded *Trellum Technologies Ltd*, a spin-off of ICIQ. *Trellum Technologies* brings together several ICIQ research groups, pooling their expertise and know-how on photocatalysis and reactor-building in order to provide a new line of photoreactors for photochemical applications, including in industrial settings.

Research Record

Paolo Melchiorre has authored more than 140 publications in international journals with a high impact factor: e.g. 3 × *Nature*; 46 × *Angewandte Chemie*; 4 × *Nature Chemistry*; 1 × *Nature Catalysis*; 1 × *Nature Protocols*; 1 × *PNAS*; 14 × *the Journal of American Chemical Society*. **h factor = 83** - His papers have attracted a total of **20000** citations (source: *Google Scholar as of May, 2024*) [\[link\]](#)