

Elena Selli

Education and academic career

1972 – Maturità Classica

November 1977 – Degree (Laurea, 5 years) in Chemistry *cum laude* at the Scuola Normale Superiore, Pisa, and at the University of Pisa

1978 - 1981 – Perfezionanda (PhD student) of the Scuola Normale Superiore, for one year (1978) *at the Institut für Physikalische Chemie* of the Ruhr Universität Bochum, Germany

1981 - 1983 – Ricercatore universitario confermato of Physical Chemistry at the Scuola Normale Superiore

1983 - 1998 – Ricercatore universitario confermato of Physical Chemistry at the University of Milano (UniMi)

1998 - 2010 – Associate professor of Physical Chemistry at the University of Milano

2010 - now – Full professor of Physical Chemistry at the University of Milano

Appointments

2016 - 2018 – President of the Physical Chemistry Division of the Italian Chemical Society (SCI)

2012 - 2014 – President of the Italian Photochemistry Group, Italian section of the European Photochemistry Association

2012 - 2014 – Coordinator of the Photochemistry Interdivisional Group of SCI

Member of International Scientific Boards

2008 - 2014 and 2018 - now – Board of the International Conference of Photochemical Conversion and Storage of Solar Energy (IPS): IPS-18 Conference in Seoul, Korea (2010), IPS-19 Conference in Pasadena, CA, USA (2012), IPS-20 Conference in Berlin, Germany (2014) and IPS-22 Conference in Hefei, China (2018)

2012 - now – Scientific International Committee of the European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA): SPEA7 in Oporto, Portugal (2012), SPEA8 in Thessaloniki, Greece (2014), SPEA9 in Strasbourg, France (2016); SPEA10 in Almeria, Spain (2018); SPEA11 in Torino, Italy (2022)

2013 - now – Scientific Committee of the International Conference on Semiconductor Photochemistry (SP): SP4 in Prague, Czech Republic (2013), SP5 in Saint Petersburg (2015), SP6 in Oldenburg, Germany (2017). Chair of SP7 – 7th International Conference on Semiconductor Photochemistry, Milano, 11-14 September 2019

2021 – Coordinator of the Organizing Committee of the XXVII National Congress of the Italian Chemical Society, 14-23 September 2021; in the scientific committee of the Physical Chemistry Division, as Past President of the Division.

Member of the American Chemical Society.

Teaching and other activities at UniMi

Since 1980, long experience in teaching courses of Physical Chemistry and Physical Chemistry Laboratory for the degrees in Chemistry and in Industrial Chemistry. In the last years:

- Physical Chemistry II, Bachelor Degree in Chemistry, since 2011
- Physical Chemistry I, Bachelor Degree in Industrial Chemistry, since 2013
- Photochemistry (now in English), Master Degrees in Chemical Sciences and in Industrial Chemistry, since 1994

She is (or has been)

- member of the Board of the Doctorate School in Chemistry of UniMi.
- president of the Admission Committee to the Master in Industrial Chemistry (in English), 2010-2020
- UniMi delegate of the European Chemistry Thematic Network. She organized the *EC2E2N Annual Meeting 2012* in Milano, 25-28 April 2012
- delegate of the UniMi Rector in the Board of the Consorzio La Chimica per l'Ambiente, up to 2014
- responsible for the SmartMatLab Center, Dept. of Chemistry, UniMi, from 2014
- UniMi coordinator of the Erasmus program for Chemistry, up to 2014

- member of many commissions (giunta di Dipartimento, commissione valutazione e programmazione, didattica, tutorato, etc.) of the Dept. of Chemistry, UniMi
- Supervisor of many undergraduate, PhD students and post-docs, including one Marie Skłodowska-Curie Global Fellowship recipient.

Teaching outside UniMi (selection)

- Uppsala University (Sweden), September 2013, Erasmus exchange teacher
- Ellwangen (Germany), October 2013, "Photocatalysis for energy and environment", SPP 1613 Summer School for PhD students
- University of Palermo, 8 – 19 April 2013, "Innovative Methods for Hydrogen Production", 40 h-course
- Otranto, June 2015, "Solar Energy Conversion", School of the Physical Chemistry Division of SCI

Research Activity

For many years involved in studies on the kinetic aspects of photoinduced processes, her interests are mainly focused on the mechanistic aspects of photocatalysis on semiconductors for environmental and energy applications, in particular on the effects that surface and bulk modification of photoactive materials have on their photo(electro)catalytic activity and on the reaction paths of thermodynamically uphill and downhill photocatalytic reactions. Main aim is the development of sensitive and efficient photocatalytic composite materials and devices for solar energy conversion processes, such as hydrogen production from water.

She authored or co-authored more than 200 scientific papers, 11 book chapters, 2 patents and presented more than 250 communications, including several invited talks, seminars and plenary lectures at international conferences. Her present h-index is 49 (Scopus).

Reviewer and Evaluation Activity

Evaluator of PhD thesis and/or member of the *Defence* Jury

University of Melbourne, Australia (2011); University of New South Wales, Australia (2012, 2016); Thapar University, Patiala, India (2014); Universitat Jaume I, Spain (2020); Université de Pau et des Pays de l'Adour, France (2013); University of Alicante, Spain (2015); Università dell'Insubria (2012, 2018); Università di Torino (2012, 2018); Università di Perugia (2012); Politecnico di Milano (2021)

Reviewer and Editorial Activity

Active reviewer for the American Chemical Society, the Royal Society of Chemistry and for Elsevier and Springer journals; Guest Editor of Special issues: Environmental Science and Pollution Research (Springer, 2017), Catalysis Today (Elsevier, 2018); Surfaces (MDPI, 2020); Topics in Catalysis (Springer, 2020)

Evaluation activity

- Rapporteur of the "Regenerative produced fuels by light driven water splitting" of the *Deutsche Forschungsgemeinschaft* (DFG), 2012, and in several individual evaluations for the DFG.
- Expert in the evaluation of the international joint call *Solar-driven Chemistry* 2019/2020
- European Commission Expert for different types of Grants, in 2018, 2020 and 2022
- Member of the ERC Consolidator Grant PE4 Panel 2022

Reviewer of research projects (selection)

TU Wien, Austria, 2011; Università Italo-Francese (Vinci Projects, 2009, 2012, 2018); DFG, in 2011, 2015, 2016 (2), 2017, 2018, 2019, 2020, 2021; OTKA – Organization in Hungary for Channelling Funds, 2014; MAE – Israeli-Italian call for Proposals on Scientific & Technological Cooperation, in 2015; US Department of Energy, 2016; Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO, Belgium, 2016; FONDECYT, Chile, 2016, 2018 and 2020; Kuwait Foundation for Advancement of Science, 2017; Czech Academy of Sciences, member of the Chemical Science Panel, in 2020; Israel Science Foundation, in 2020 and 2021; Agence National de la Recherche, ANR, République Française, in 2022; VQR, in several years including 2021.

She has been member/president of many evaluation committees for academic positions (full professor, associate professor or RTDB, ssd CHIM/02) and for positions in the National Research Council (CNR).

Milano, July 5th, 2023