Prof. Dr. Ph.D. Habil. Claudio Fontanesi

Curriculum Vitae

Previous positions Academic Career

Assistant Professor of Physical Chemistry, SSD 81, UniMORE from the 01 May1987.

Associate Professor of Physical Chemistry, CHIM/02, UniMORE from the 01 Nov 2001.

Full Professor, habilitation, "Settore Concorsuale 03/A2 - I Fascia – Quarto Quadrimestre", Physical Chemistry, 12 July 2020

Prizes and awards

"Joseph Meyerhoff Visiting Professorships" 2019/2020, Weizmann Institute of Science.

Invited Lecture and short visit invitation:

Univ. of Warsaw, Dept. of Chemistry, c/o Prof. Zbigniew Koczorowski.

Univ. of Ulm, Dept. of Chemistry, c/o Prof. Dieter M. Kolb.

ENS, Dept. of Chemistry, Paris, c/o Prof Christian Amatore.

ENS, Dept. of Chemistry, Paris, c/o Prof Damien Laage and James T. Hynes.

Univ. of Oxford, Dept. of Chemistry, c/o Prof Richard Compton.

Univ. of Aarhus, Dept. of Chemistry, c/o Prof Kim Daasbjerg and Steen Uttrup Pedersen.

TUM, Munchen, Dept. of Physics, c/o Prof. Katharina Krischer.

Univ. of Delhi, Dept of Chemistry, c/o Prof. Gurmeet Singh (2010, 2011, 2015)

Univ. of Chandighar, Dept of Chemistry, c/o Prof. Gurmeet Singh and Lidia Szpyrkowicz

Univ. of Gothenburg, 1st KISS, c/o Prof. Aleksandar Matic and Prof. Bruno Scrosati.

Giornate dell'Elettrochimica Italiana (GEI 2015), Bertinoro 20 to 24 september2015.

Visiting academic positions

Weizmann Institute of Science, Dept. of Chemical Physics, c/o Prof. Ron Naaman (2013-2022) for a total of more than 24 months.

Invited Lecture and short visit invitation:

Univ. of Warsaw, Dept. of Chemistry, c/o Prof. Zbigniew Koczorowski.

Univ. of Ulm, Dept. of Chemistry, c/o Prof. Dieter M. Kolb.

ENS, Dept. of Chemistry, Paris, c/o Prof Christian Amatore.

ENS, Dept. of Chemistry, Paris, c/o Prof Damien Laage and James T. Hynes.

Univ. of Oxford, Dept. of Chemistry, c/o Prof Richard Compton.

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Univ. of Gothenburg, 1st KISS, c/o Prof. Aleksandar Matic and Prof. Bruno Scrosati.

Giornate dell'Elettrochimica Italiana (GEI 2015), Bertinoro 20 t...

Teaching activities and PhD supervision

At present in charge of the courses:
1) “Electrochemical Energy Conversion”, Faculty of Engineering, Univ. of Modena (D.M.270/04). Specialistic (2nd degree) Engineering Materials/Vehicle.
2) ”Caratterizzazione Strumentale dei Materiali”, compulsory for “Material Engineering Course”, Faculty of Engineering, Univ. of Modena (D.M.270/04).

Past tenure of the courses of:
1) “Lab. of Physical Chemistry 1 (for Chemistry), A.A. from 95/96 to 2006/07. 2) "Applied Phys. Chem.", (for Chemistry) 3) "Solid State Phys. Chem.”, (for Geology) 4) "Electric Measurements (A Chemistry Oriented Special Course)", for Chemistry. 5) "Molecular Electrochemistry", PhD in Chemistry
6) "Solid State Physical Chemistry", course in Geologia, A.A. 03/04, 04/05, 05/06. 7) "Rheology Laboratory", free course Science Faculty, A.A. from 2002/03 to 2006/07. 8) "Processi termodinamici in ambiente terrestre", earth science degree.

Administrative role and position responsibility

Vice-President of the Electrochemistry Division, of the Italian Chemistry Society (SCI): 2011-2013. Member of the “Direttivo” of the Electrochemistry Division, (SCI): 2013 – 2014

Scientific organisation/Coordination of academic activities

PI, UniMORE Local Unit of 4 MIUR PRIN/COFIN and 1 CNR national projects:
PRIN2008, COFIN2004, COFIN2002, COFIN2000, CNR Agenzia2000

Organizative Activities:

1) Local Secretary: Giornate dell’Elettrochimica Italiana, GEI 1991, Modena 16-19 sett. 1991.
2) Chairman: INCONTRI CON LE IMPRESE: Problematiche, tecnologiche e ambientali nei processi galvanici: ossidazione anodiche, elettrodeposizioni, corrosione, trattamenti superficiali. Dipartimento di Chimica, Modena 15 Giugno 2001.
3) Chairman: WORKSHOP: PERSPECTIVES IN ELECTROCHEMISTRY OF COMPLEX SYSTEMS. Dipartimento di Chimica, Centro SCS, Modena 29 Aprile 2004.
4) Chairman: Giornate dell'Elettrochimica Italiana, GEI 2010, Modena 5-10 settembre 2010.
5) Electrochemistry Delegate: XXIV Congresso Nazionale della Soc. Chim. Ital., Lecce, 11-16 Sett. 2011
6) Local Organizer Board: 8th ECHEMS 2012, Italy, (Bertinoro) june 2012.
7) ECHEMS 12th, Electrochemistry in… ingenious molecules, surfaces and devices. 6th - 9th June 2017 http://sites.unimi.it/echems2017
8) The 69th Annual Meeting of the International Society of Electrochemistry, Electrochemistry from Knowledge to Innovation 2 to 7 September 2018, Bologna, Italy. Symposium 18: Theory: from Understanding to Optimization and Prediction

EU projects: total partecipation 8, 5 as PI

Editorial activity

1) Advances in Physical Chemistry, Hindawi: http://www.hindawi.com/journals/apc/editors/

2) Guest editor: Journal of Electroanalytical Chemistry Volume 710, 1 December 2013

3) Editor of Molecules, electrochemistry section.

4) Guest Editor for the journal Magnetochemistry, MDPI, of the Special Issue "Applications of Magnetization and Polarization for Molecules and Materials".

Membership of scientific societies

The Electrochemical Society (ECS).

Significant career breaks

Full Professor, habilitation, “Settore Concorsuale 03/A2 - I Fascia – Quarto Quadrimestre”, Physical Chemistry, 12 July 2020

- H-Index (in Scopus): 29 - Total number of publications in peer-reviewed journals > 125

- Total IF > 781

Some selected publications

“Chirality enhances oxygen reduction”, PNAS 119 (30).

“Charge transfer modulation in charge transfer co-crystals driven by crystal structure morphology” PCCP 24 (31), 18816-18823

“Spin Multiplicity and Solid-State Electrochemical Behavior in Charge-Transfer Co-crystals of DBTTF/F4TCNQ” The Journal of Physical Chemistry C 125 (16), 8677-8683

“Spin control using chiral templated nickel”, Applied Physics Letters, 2021, 118(22), 224001

“Exchange Interactions Drive Supramolecular Chiral Induction in Polyaniline”, Small Methods, (2020), 4, Issue 10, 2000617 https://doi.org/10.1002/smtd.202000617

“The electron spin as a chiral reagent”, Angew. Chem. Int. Ed., (2020), V59, Issue 4, 1653-1658

“Injection of spin-polarized electrons into a AlGaN/GaN device “ ACS Nano, (2018), 12 (4), pp 3892

“Spin-Dependent Transport through Chiral Molecules Studied by Spin-Dependent Electrochemistry” Accounts of Chemical Research, (2016) 49 (11), pp. 2560-2568.

"2D phase transition of organic molecules adsorbed at the Hg electrode/aqueous solution interface. Part 2."J. Chem. Soc., Faraday Trans., 94 (1998) 2417.

Google scholar: https://scholar.google.it/citations?user=HR_DvsEAAAAJ&hl=it

Scopus: https://www.scopus.com/authid/detail.uri?authorId=55923159700

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