

Marcello Berto

Dipartimento di Scienze della Vita

EDUCATION and TRAINING

- Bachelor degree in Chemistry, University of Modena and Reggio Emilia, October 28, 2010.
“Spectroscopic study of the pH-dependent conformational equilibria on cytochrome c mutants from *Saccharomyces cerevisiae*”, supervisor prof. G. Battistuzzi.
- Master degree in Chemical Sciences, University of Modena and Reggio Emilia, December 20, 2012.
“Study of the physical-chemical properties of functionalized surfaces by means of self-assembled monolayers of aromatic oligomers”, supervisor prof. M. Borsari.
- PhD in Molecular and Regenerative Medicine, University of Modena and Reggio Emilia, March 10, 2017.
“Organic Electronic Biosensors for the detection of pathology-relevant biomarkers”, supervisor prof. F. Biscarini.

RESEARCH EXPERIENCE ABROAD

- Visiting student, Laboratory of Organic Electronics (LOE), Linköping University, Sweden, June 01-30, 2015 and November 14-24, 2016.
Project title: “Biosensors based on Electrolyte Gated Organic Field-Effect Transistors for the Detection of Inflammatory Biomarkers”, Host prof. Daniel T. Simon.
- Visiting researcher, BioSensor Technologies Group, Austrian Institute of Technology, Austria, February – March 2019.
Project title: “Coupling Optical and Electronic platform for biosensing” Host Prof. Wolfgang Knoll.

TALKS AT CONFERENCES

- 12th International Conference on Organic Electronics (ICOE2016), Bratislava (Slovak Republic), June 13-15, 2016.
(Title: “Electrolyte Gated Organic Field-Effect Transistor biosensor for detection of cytokines in bodily fluids”).
- Winterschool on Biophotonics and Bioelectronics, Darmstädter Haus Hirschegg (Austria), February 18-24, 2018.
(Title: “EGOFET biosensors for biomarkers and pathogens”).
- Invited speaker at Nanoinnovation 2018, Roma (Italy), September 11-14, 2018.
(Title: “Biosensing with organic electronic transistors”).
- 4th OrbItaly – Organic Bioelectronics Italy, Milano (Italy), October 17-19, 2018.

(Title: “Electrolyte Gated Organic Transistors for Biosensing Across Different Lengthscales”).

- 2nd Materials.it, Bologna (Italy), October 22-26, 2018
(Title: “Organic Transistor Biosensors for biomarkers and pathogens”).
- 2019 VBST Joint Seminar on Soft Materials, Darmstädter Haus Hirschegg (Austria), February 10-15, 2019.
(Title: “EGOFET biosensors based on protein/carbon Nanotubes hybrids”).
- Nano-DAY IV, Milano (Italy), December 11-14, 2019.
(Title: “Carbon nanotubes/proteins hybrid for Organic Electronics”).

OTHER ATTENDED CONFERENCES AND SCHOOLS

- International Workshop on Protein Electron Transfer: from Fundamentals to Applications for Health, University of Modena and Reggio Emilia, Modena (Italy), October 29-30, 2013.
(poster: “Intra-molecular electron transfer of Azurin immobilized on aromatic self-assembled monolayers”).
- 1st International Winter School on Bio-Electronics (Bio-EI2014), Kirchberg in Tirol (Austria), February 22 – March 01, 2014.
- 10th International Conference on Organic Electronics (ICOE2014), Modena (Italy), June 11-13, 2014.
- Workshop “From Cells to Biomaterials”, Modena (Italy), October 20, 2014.
- 14a Giornata della Chimica Emilia-Romagna, Parma (Italy), December 18, 2014.
(poster: “Tuning Surface Properties of Polycrystalline Au for Bio-Sensing in Liquid and Digital μ -Fluidics”).
- 1st OrbItaly – Organic Bioelectronics in Italy: from Biosensors to Neuronal Interfaces, Modena (Italy), September 10-11, 2015.
(poster: “Pentacene-based EGOFET Biosensor for Detection of TNFalpha”).
- 7th School on Organic Electronics - Lake Como School of Advanced Studies, Como (Italy), September 13-18, 2015.
(poster: “Polycrystalline-Gold/Liquid Interfaces: Functionalization Techniques for Bio-Sensing and Digital Microfluidics”).
- 15a Giornata della Chimica Emilia-Romagna, Modena (Italy), December 18, 2015.
(poster: “Pentacene-based EGOFET Biosensor for Detection of TNFalpha”).
- 12th International Conference on Organic Electronics (ICOE2016), Bratislava (Slovak Republic), June 13-15, 2016.

(poster: “High performance bench-processed Electrolyte-Gated Field-Effect Transistors (EGOFET) based on soluble C8-BTBT-C8”).

- 3rd Workshop on Surfaces, Interfaces and Functionalization Processes in Organic Compounds and Applications (SINFO III), Napoli (Italy), June 27-29, 2016. (poster: “High performance bench-processed Electrolyte-Gated Field-Effect Transistors (EGOFET) based on soluble C8-BTBT-C8”).
- 16a Giornata della Chimica Emilia-Romagna, Ferrara (Italy), December 19, 2016. (poster: “Biorecognition in Organic Field-Effect Transistors Biosensors”).
- 1st Workshop on Organic Neuromorphic Devices, Italian Institute of Technology, Ferrara (Italy), June 12-14, 2019.

REVIEWING AND SCIENTIFIC COMMITTEES ORGANIZING ACTIVITIES

Serving as a reviewer for MDPI (Multidisciplinary Digital Publishing Institute) journals (Sensors, Biosensors, Electronics, Micromachines, Materials, Crystals, Chemosensors).

Topic Editor for Electronics (MDPI) and Biosensors (MDPI).

Member of the Organizing Committee of 1st OrbItaly – Organic Bioelectronics in Italy: from Biosensors to Neuronal Interfaces, Modena (Italy), September 10-11, 2015

External referee for PhD school in Physics of Politecnico of Turin.

STUDENTS TUTORING

Supervision of 1 bachelor thesis (Biotechnology).

Co-supervision of 3 master thesis (Industrial Biotechnology) and 4 bachelor thesis (Biotechnology), Department of Life Sciences, Università degli Studi di Modena e Reggio Emilia.