

## CV *Ilaria Palchetti*

Associate Professor of Analytical Chemistry at the “Ugo Schiff” Chemistry Department of the Università degli Studi di Firenze, Italy.

- Graduated in Chemistry and Pharmaceutical Technology in 1994, from the University of Firenze (110/110), with a Diploma thesis on enzyme-modified electrodes for pesticide monitoring under the supervision of Prof Marco Mascini.
- PhD in Environmental Sciences in 1999 at the University of Firenze, under the supervision of Prof. Marco Mascini, studying different electrode materials for developing mercury free electroanalytical methods for the determination of heavy metals in environmental matrices. Erasmus FREEMOVER (1996) and European Science Foundation (Artificial Biosensing Interface program, 1998) scholarship as visiting scientist at Cranfield University under the supervision of Prof. A.P.F. Turner.
- Post-doc at the University of Firenze from 1999 to 2002 and researcher in Analytical Chemistry from 2002 to 2015. National scientific qualification to perform the duties of Full Professor in Analytical Chemistry obtained in 2014.

My research activity focuses on applications of analytical chemistry in the fields of sensing and biosensing. While most of the research activity employs electrochemical and photoelectrochemical techniques, my group always explores new technologies to addresses pressing bioanalytical issues. One major area of interest is the characterization of novel natural and synthetic biomolecular recognition systems for bioelectrochemistry. Nucleic acid-based electroanalytical platforms have been proposed for many bioanalytical applications, including clinical biomarker determination, food quality control and environmental pollution monitoring. Another major research focus is the characterization of innovative electrode materials, i.e. nanomaterials, nanocomposites, conducting or non-conducting polymers, for the development of innovative electroanalytical sensors. Furthermore, a recent area of interest has been the electroanalytical approach to nanotoxicology. In this research context, I have been and I currently am Principal Investigator or Research Group Leader of different research projects, granted by national or international organizations. I have been co-editor of different special issues for Trends in Analytical Chemistry, Electrochimica Acta (in progress), Sensors, Frontiers in Chemistry, and co-editor of the book Nucleic Acid Biosensors for Environmental Pollution Monitoring (Royal Society of Chemistry, 2011) and of a volume of the Comprehensive Analytical Series (Elsevier, 2017) on biosensors.

I have been supervising PhD, MSc and BSc students since 2002 and I am member of the Advisory Board of international PhD Programs.

### **Citations and Publication Record**

Scopus H-index = 38, citations > 4000

Author of > 140 papers among refereed journal papers and book chapters.

Patented device co-inventor.

*I believe that scientific societies play a crucial role in promoting a responsible scientific culture among scientists as well as among the public and in promoting activities that generate new ideas and scientific challenges, especially among young researchers. I am member of the International Society of Electrochemistry, of the Bioelectrochemical Society (BES) and of the Italian Chemistry Society (SCI). I am among the founders of the Sensor Group (Gruppo Interdivisionale Sensori) of the SCI and member of the scientific committee of the Bioanalysis Group (Gruppo Divisionale di Bioanalitica) of the SCI and co-organizer of several national and international conferences and symposium, including the 69th ISE Annual Meeting (2018), Giornata Scientifica di Bioanalitica (2015,2016, 2017, 2018, 2019), XXVI International Symposium on Bioelectrochemistry and Bioenergetics (2021).*