Dario Narducci's CV

Dario Narducci was born in Milan (Italy) in 1960.

Graduated in Chemistry at the University of Milan in 1984, from 1985 to 1988 he was a Ph.D. student in Chemistry at the University of Milan, where he worked in the area of solid state physical chemistry, also visiting the Physics Laboratory of the University of Amsterdam where he worked in the field of electron spin resonance of defects and impurities in silicon. From 1988 to 1990 he was Post-Doctoral Fellow at IBM Thomas J. Watson Research Center in Yorktown Heights, NY, studying the electrical properties of semiconducting diamond. In 1990 he re-joined the University of Milan, Department of Physical Chemistry and Electrochemistry, as an Assistant Professor, moving in 1997 to the Department of Materials Science, University of Milano Bicocca, where he became Associate Professor of Physical Chemistry in 2000.

Dario Narducci has an extensive record of projects he led or participated in, both at the National and at the European level. He was also the project leader of three privately-funded projects on gas detection systems and of several SME-funded research contracts.

Research interests of Dario Narducci have focused on the physical chemistry of solids and materials with a special emphasis on silicon. His activity has actually centred on transport properties of disordered materials that have been studied also in view of applications to energetics; and on surface science, where he has been active both on fundamental issues (physical chemistry of oxides and their surfaces, chemical reconstruction of single-crystal silicon surfaces, self-assembling of organic molecules onto silicon, and gas-surface supramolecular interactions) and on more applicative and technological issues (oxide and silicon-based chemical sensors and biosensors). Dario Narducci was a founding member of the Scientific Board of the Nanotechnology Interuniversity Centre of Como (L-NESS) and of the Babbage Project (SISSA, Trieste). He is also a member of the National Inter-University Consortium for Material Science (CNISM), of the European Materials Research Society and of the Materials Research Society.

Since 2008 Narducci has developed an intense research activity on thermoelectricity and on its applications to energy harvesting, mostly focused on top-down (nanowires and nanolayers) and bottom-up nanostructured silicon. In 2010 he was appointed Chief Technical Officer (CTO) and Board Member of a start-up co-financed by ERG SpA and LFoundry aimed at the development of silicon-based thermoelectric generators. As the start-up CTO he has promoted collaborations between industrial partners and research centres throughout Europe, encompassing institutions in Italy, Greece, Austria, and the UK. Narducci was also under contract with the EC (FP7) within the SiNERGY consortium, working at the development of all-silicon harvesters, wherein he led the thermoelectric work package. His interests have further extended to the thermoelectric properties of multiphase systems and nanocomposites, leading to explorative research endeavours jointly carried out with Stanford University and with the CNRS–Aix-Marseille University; and to applications of thermoelectricity to solar harvesting, also in collaboration with the Massachusetts Institute of Technology.

Narducci co-promoted the foundation of the Italian Thermoelectric Society, which was established in 2014. He is currently serving as its president. He is also the vice-president of the European Thermoelectric Society and seats in the Board of Directors of the International Thermoelectric Society.

Author of more than 130 scientific publications, Narducci is also the author of a book on Nanotechnology, a book on Hybrid Thermoelectric-Photovoltaic Solar Generators and of eighteen patents as well.