

**Antonella Macagnano** since 2001 is **Research Scientist at the National Research Council (CNR)** that is the biggest Government Research Institution in Italy and **Leader** of the Macro-Activity in her laboratories called “High-Performance Sensors and Sensing Systems for Monitoring Air Quality and Environment” at Institute of Atmospheric Pollutant Research (IIA) of CNR. She has been involved, within several projects (among them, eight as a leader), to set up and optimize artificial multisensory devices for environmental, agrifood and medical applications, acquiring a deep experience about sensing strategies mimicking natural sensing systems. Specifically, her research activities have concerned the study and the design of chemical (conductive polymers, hybrid and composite materials functionalised nanostructured polymers designed and developed by electrospinning technology, but also metallo-porphyrins, cavitands and metallo-oligomers), and biological membranes (oligopeptides, oligonucleotides, hybrid nanostructures) for selective interactions with both gases and volatile organic compounds. She has been MC member of the COST Action MP1206 (Horizon 2020) entitled “Electrospun Nano-fibers for Bio-inspired Composite Materials and Innovative Industrial Applications” (2013/2017), leader of the Working Group 4 devoted to Industrial/Technical applications and co-Editor of the book (Springer) entitled “Electrospinning for High Performance Sensors”. She is author of more than 170 papers focused on sensors and smart nanostructured materials for sensing application and book’s chapters, and more than 90 conference talks.