

Roberto BALBONI - CV

Roberto Balboni graduated in Physics at the University of Bologna and is researcher at the Bologna site of CNR-IMM Institute, in Italy. He was at the Department of Physics of the University of Modena until 1993, then he moved to the Bologna section of CNR-IMM (formerly LAMEL Institute). His research activity has been devoted to the characterization of materials mainly using electron microscopy methods; this includes diffraction imaging and analysis, characterization of extended defects in semiconductors, high resolution imaging, phase analysis and spectroscopy of materials at the nanoscale. At CNR-IMM he contributed to the development of convergent beam diffraction analysis to the measurements of strain fields at the nanoscale in crystalline semiconductors. His recent activity includes the generation and study of electron beam shaping by means of holographic methods and the development of in-situ investigations in the TEM. He was responsible for the Characterization Technological Section at CNR-IMM Institute from 2017 to 2019. He was the Director of five editions of the “Pier Giorgio Merli” Transmission Electron Microscopy School in Materials Science in Bologna from 2008 to 2016. He was co-Director of the “Aldo Armigliato” Scanning Electron Microscopy School in Materials Science in Bologna – 2023 Edition. He is the President of the Italian Society for Microscopical Sciences since January 2020.