Degree in Physics in at the University of Rome "La Sapienza" with an experimental thesis on high resolution and high contrast light scattering spectrum of water. Helped in design and implementation of a new class of grating spectrometers (DMDP2000) which have been employed in performing experiments on Raman and Brillouin spectroscopy of hydrogen bonded fluids. Internship at Rutherford Appleton Laboratory in Oxford working in the management and development of a high resolution inelastic neutron spectrometer (IRIS) dedicated to the study of translational and orientational molecular dynamics. Researcher at the Physics Department of the University of Trento where managed and deployed the instrumentation for Raman and Brillouin spectroscopy at high resolution. The physical systems studied were mainly: super-ionic glasses (AgI), strong glasses (SiO_2), super-lattice Si-Ge, elasto-optical constants of glass with a high index of refraction. Researcher at the Physics Department of University of L'Aquila carrying out the research in the field of spectroscopy of disordered systems, particularly on glass (hard and fragile), using the inelastic light scattering and x-rays and neutrons scattering. Design and implementation of an innovative class of spectrometers for high resolution and high contrast measurements in the range of visible and ultraviolet radiation (HIRESUV). The spectrometer allows one to measure light scattering spectra with unique features in a range of energies and wave vectors exchanged, otherwise inaccessible. The latter concern the study of relaxation mechanisms in hydrogen bonded liquids, propagation and attenuation of collective excitations in glass-formers and disordered solids as well as propagation and attenuation of longitudinal and transverse excitations in disordered solids, even in extreme conditions of pressure and temperature. More recently, by using a MicroRaman spectrometer, part of the research activity has been dedicated to the characterization of innovative nano-structured materials, materials of biological interest, ionic liquids of interest for green chemistry, and materials of interest for cultural heritage.