

CURRICULUM VITAE GIOVANNA LONGHI

Associate professor of Applied Physics since 2005, at the University of Brescia, Medical School, Department of Molecular and Translational Medicine

Laurea degree in Physics (1984) at the University of Milano, Italy, with a thesis in Prof. Zerbi group, Politecnico di Milano.

Researcher in Chemical Physics at University of Basilicata (1992-94).

Researcher in Physics at University of Brescia since 1995.

Giovanna Longhi is author of 140 scientific papers in peer-reviewed international journals and of 3 book chapters.

She has been responsible for local research unit in three national research projects "PRIN" and one Cariplo Foundation project. She is co-author of one patent.

-Associate Researcher of Istituto Nazionale di Ottica (INO), CNR, Research Unit of Brescia (Italy)

-Member of the organizing committee of the 6th International Conference on Vibrational Optical Activity VOA-6 in Brescia 9-13 September 2018.

She is reviewer for International Journals: PCCP, Chemical Communications, Chirality, Tetrahedron, Soft Matter, Materials Chemistry and Physics, Vibrational Spectroscopy, The Journal of Physical Chemistry, The Journal of Physical Chemistry Letters, Organic and Biomolecular Chemistry, Analytica Chimica Acta, Computational Materials Science, Chemical Science, Synthetic Metals, Nature.

She is mainly interested in chiroptical spectroscopies, in absorption (from IR to NIR to the UV region) and in emission, both luminescence and Raman. Systems studied: synthetic polymers, Peptides and Proteins, Organic molecules for applied science. Theory and Experiments.

Recent research interests:

-Development of spectroscopic instrumentation.

-Quantum mechanical calculation (Density Functional Theory and Time-Dependent-DFT), classical Molecular Dynamics simulations, development of theoretical analysis of the harmonic calculation vibrational circular dichroism spectra and of anharmonicity corrections necessary for assignment of overtones and combinations bands.

-Application of experimental and theoretical spectroscopic analyses to the study of organic molecules, absolute configuration assignment, complexes, polymers, considering also different environments (solvents, surfactant, fibrils...) and different chemical-physical conditions (temperature, pH, voltage).

Brescia

2nd July 2019

