

Maurizio Leone, Curriculum Vitae

Maurizio Leone, born on October 2, 1952, Palermo (Italy).

Full Professor of Applied Physics (2002-...).

- Pro-Rector to the research activities of the University of Palermo
- Member of Administrative CNISM Council.

Principal Investigator of the PRIN 2008 project "Development of a molecular strategy for the prevention of proteins aggregation and fibrillogenesis: a biophysical approach."

- Principal Investigator of the Technological Transfer Project of CNR-INFN "Regional Center for Oil Olive Quality Control" (P.O.R. Sicilia - Misura 3.15).
- Principal Investigator of the PRIN 2005 project "Role of the metal ions in the aggregation processes of proteins".

Scientific activity:

- Protein dynamics: dynamics-structure-function relationship (optical absorption spectroscopy at low temperature, relevance of the anharmonic contributions to the local dynamic properties of the active site, role of the central metal in hemo-proteins, FTIR spectroscopy);
 - Structural and dynamic properties of point-defects in silica (absorption and fluorescence spectroscopy at low temperature, conformational disorder in the vitreous matrix, structural properties of the point-defects induced by gamma rays).
 - Conformational changes and proteins aggregation processes (absorption, emission and FTIR spectroscopy, CD, light scattering).
 - Drug delivery systems based on biocompatible polymers: spectroscopic and structural characterization.
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- The liquid water structure;
 - Sol-gel phase transitions in biopolymers;