

TITOLO DEL PROGETTO:

Preparazione e studio di materiali fotoattivi

PROGETTO DI RICERCA:

The research project for this position concerns the synthesis and investigation of new materials based on interfacing, with covalent and noncovalent interactions, photoactive moieties with hybrid materials.

The research fellow will investigate the redox-triggered AIE of organized (bio)polymeric structures, for example in application in mechanoluminescent sensing materials and in super-resolution methods.

In general, biopolymeric structures will be based on the functionalization of biopolymers with organic fluorophores and or metal complexes capable of yielding luminogenic interactions.

The research fellow will investigate the complex chemistry of biopolymers from colloidal and photophysical point of view, and with a focus on the responsiveness of these systems. The fellow will also implement bulk and microscopy techniques based on luminescence. Dynamic measurements based on FCS, particle tracking, spectral kinetics will be a core of the proposed project.