MULTIDIMENSIONAL COHERENT TECHNIQUES FOR THE CHARACTERIZATION OF NANOMATERIALS

Introduce:

STEFANIA PAGLIARA, Associate professor Università Cattolica del Sacro Cuore

Interviene:

ELISABETTA COLLINI Associate professor - Department of Chemical Science, University of Padova, Italy

Abstract

Multidimensional coherent techniques in the visible range, 2D electronic spectroscopy (2DES) in particular, have been developed starting from the beginning of 2000, and historically they have been mainly exploited for the investigation of subtle dynamic mechanisms of energy and charge transport in biological complexes. Only later these techniques have been recognized to be particularly valuable also for the investigation of transport processes in artificial nanomaterials and nanodevices.

Recent results obtained applying 2DES (including 'action-based techniques') to the study of nanomaterials will be overviewed. The attention will be focused in particular on semiconductor nanocrystals ('quantum dots') in solid-state devices, and metal-organic hybrid systems.

Webinar

Venerdì 18 dicembre 2020, ore 11.00

Click to join the Microsoft Teams meeting



