

Doctoral School on *Humanoid Technologies*

DIST - University of Genova
Viale Francesco Causa, 13
16145 Genova - Italy



Science and Technology of π -electron systems

Natural chromophores, as carotenoids or chlorophylls, organic semiconductors, as molecules and polymers, or carbon nanostructures, such as fullerenes and nanotubes, all have in common delocalized π -electrons. These are responsible for the optical and electrical properties, which defines their functions in living systems or devices.

The main features of the electronic structure and the consequent photophysics of π -electron in low dimensional systems will be introduced, to be discussed later on potential and market applications.



University of Genoa – Italian Institute of Technology
Doctoral School on *Humanoid Technologies*