

Tematiche proposte per il XXX Ciclo di Dottorato in Scienze Chimiche.

Le prime 6 tematiche e le 2 con finanziamento esterno sono preposte con borsa, ed assegnate per scorrimento della graduatoria di merito del concorso di accesso al dottorato. Per ulteriore scorrimento della graduatoria di merito verranno assegnate la borsa "Fondo Giovani" e le altre tre posizioni senza borsa le cui tematiche saranno scelte tra quelle rimanenti nell'elenco.

Proposte di tematiche con Borsa di ateneo

- Molecular olefin polymerization catalysts: applications of molecular design for properties modulation. Proposta Gruppo LSP (Prof. Busico)
- Novel strategies for the synthetic manipulation of saccharide functional groups and application thereof to targets of application interest. Proposta Gruppo Proff. Parrilli/Lanzetta
- Chemocatalic conversion of biomass for sustainable production of biochemicals and biofuel. Gruppo Proff. Vitagliano/Ruffo/Cucciolito.
- Effect of poly-unsaturated fatty acids on the structure and dynamics of lipid bilayers and on their interaction with peptides and proteins. Proposta Gruppo Proff. D'Errico/Paduano.
- New bio-inspired devices: synthetic metalloenzymes for diagnostic and catalytic application. Proponenti Proff. Pavone/Lombardi/Nastri
- Isolation and characterization of metabolites produced by pathogenic microorganisms of agrarian and forest plants. Proposta Proff. Evidente/Andolfi

Tematiche di ricerca borse finanziate da enti esterni

- Development of methodologies and new formulations aimed at stabilizing additives for detergents: Proponenti Gruppo Proff. Paduano/D'Errico.
- Heterogeneous Ziegler–Natta catalysts: experimental and computational study by means of resonance–based techniques: Proponente Gruppi DPI (Prof. Busico).

Una delle seguenti tematiche sarà finanziata attraverso “Fondo Giovani”.

- Hierarchical self–assembly and crystallization across length scales of block–copolymers from metallorganic catalysis. Proposta Proff. De Rosa/Auriemma.
- Novel Eumelanin based organic/inorganic hybrid materials for biodegradable/biocompatible electronics. Proponente Dr. Alessandro Pezzella
- Structural characterization and semi–synthetic modifications of bacterial glycolipids. Proponente Prof. Ssa Corsaro
- Functionalization of gold surfaces with biomolecules for biosensor development. Proponenti proff. Pavone/Lombardi/Nastri
- Novel polyolefin based elastomers with tailored stiffness from metallorganic catalysis (CRYSTALLINE ELASTOMERS). Proponenti Proff. De Rosa/Auriemma
- Design, Synthesis and Processing of Bio–Inspired Soft Materials: Toward New Optoelectronic Devices. Proponente Prof.ssa Manini.

- Synthesis and study of molecular recognition properties of biomolecules and their unnatural analogues. Proponente Prof. ssa Guaragna

- Models to understand and rationalize ultrafast kinetics in photochemistry and photobiology. Proponente Prof. Rega