



POLYMERS AND SUPRAMOLECULES

Code 718

POLSUP

ÁREAS DE APLICACIÓN

Experimental Sciences

COORDINATOR

Francisco Mendicuti Madrid

KEYWORDS

Polymers, Colloids,
Tensioactives,
Supramolecules,
Cyclodextrins,
Photophysics, Rheology,
Light Scattering, GPC,
Molecular Modelling

AIM

- Research groups from the UAH and other universities
- Research centers and companies in chemical and pharmaceutical sectors

CONTACT



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ABOUT US

Theoretical-experimental study of polymers and supramolecular structures (macrocycles, micelles, vesicles/liposomes, liquid crystals, gels, etc.) by using different techniques and physicochemical methods.

RESEARCH LINES

- Synthesis, characterization and the study of conformational properties of polymers (polyesters, polyphosphazenes, polyelectrolytes, photoconductive polymers, etc.)
- Micro- and nano-transporters of drugs and genic material (polymers, macrocycles, micelles, vesicles/liposomes, liquid crystals, microgels, etc.)
- Modulation of non-linear optical properties of molecules using the supramolecular chemistry
- Phasic and rheological characterization of micelles, vesicles/liposomes, crystals liquids, microgels, etc.
- Polymeric gels and microgels: design, characterization and applications mainly in the field of biotechnology
- Development of colored surfaces based on synthetic melanins
- Thermodynamics of the transport properties in biological systems

OFFERED SERVICES

 Characterization of a wide variety of systems using techniques in which group members are experts (GPC, DLS, Rheology, UV-Vis, steady-state and time resolved Fluorescence and circular dichroism spectroscopies, molecular modelling, etc.)

MARKETABLE RESULTS

