

POLYMER CONDUCTORS AND BIOPOLYMERS



INTRODUCTION

The research activity that has been carried out by the staff of this Research Group concentrates on the study, by means of theoretical chemistry methods and experimental spectroscopic techniques, of synthetic organic polymers and of natural polymers. The final objective of all these studies is that of determining the relations between the molecular structures of these materials and their macroscopic properties.

RESEARCH TOPICS

- Optical spectroscopies and reticular dynamics of conductor organic materials.
- Study of the interactions between nucleic acids and natural and synthetic polyamines.
- Structural and vibrational properties of biological molecules in watery surroundings.
- Chemical-quantum characterisation of optoelectronically active polyconjugated organic materials.

SCIENTIFIC-TECHNICAL SERVICES

- Structural identification and characterization of all types of compounds and chemical processes by vibrational spectroscopy.
- Obtaining electrochemical biosensors for the purposes of recognising and measuring nucleic acid sequences (RNA and DNA).
- Use of molecular modelling programmes and quantum chemistry.

RESEARCH GROUP LEADER: JUAN TEODOMIRO LÓPEZ NAVARRETE
PAI CODE: FQM159

CONTACT

PHONE: 952 132 018 | FAX: 952 132 000

E-MAIL: teodomiro@uma.es | WEB: <http://www.uma.es/departamento-quimica-fisica/info/105407/grupo-fqm159/>

ADDRESS: Dpto. Química Física. Facultad de Ciencias. Teatinos. 29071. Málaga