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Nanoformas de carbono moleculares quirales

The research interest at the Prof. Martín's group span a range of targets mainly focused to the study of *Carbon Nanostructures* (fullerenes, endohedral fullerenes, carbon Nanotubes and graphenes) as materials for the preparation of Photo- and Electroactive Organic Molecular Systems. In particular, our group is currently engaged in the covalent and *supramolecular chemistry* of carbon nanoforms in the context of new chemical reactivity and asymmetric catalysis of fullerenes, design of new supramolecular wrapping receptors for fullerenes, electron transfer processes, photovoltaic applications (Bulk Heterojunction and Dye Sensitized Solar Cells) and nanoscience. Research in our group is also related with the design and synthesis of molecular nanowires for the so-called molecular electronics, the study of the interaction of organic molecules with solid surfaces and the organization of organic molecules on metal surfaces by STM studies, as well as the study of properties on single molecules in the context of nanoscience. The construction of organized supramolecular functional assemblies at the nanometer scale is another aspect investigated in our group which is a key issue for the development of the bottom-up approach in nanoscience. The different scientific topics developed in our research group are at the forefront of science and could have a strong technological and socioeconomical impact for our Society

Presidente RSEQ

(2006-2013)