

## SMS Spring 2022 Seminar Series

Friday April 22 | 11am | Biodesign Auditorium\*

### NEW TRICKS FOR OLD DOGS: FROM ARTIFICIAL ENZYMES TO CHIRAL NANOCOILS

In this talk we will present the main research lines we carry out in the departments of Organic and Physical Chemistry of the University of Granada. We will comment the ability of some small organic molecules to promote biomimetic processes, thus acting as artificial enzymes and how water may promote electron transfer reactions at long distances. Fluorescent sensors for bioimaging have been also a goal of our research, mainly focused on the intracellular detection and quantification of phosphate anions, biothiols and also with preferential accumulation in concrete organelles. This interest in the photophysical properties of molecules embrace with other of our main topics molecular electronics. In this field we have developed different kind of skeletons, going from linear achiral systems (molecular fuses and potentiometers) to chiral optically active helical scaffolds, that can also be applied to explore the chiral induced spin selectivity (CISS) effect.

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