

Titre de la

CONFÉRENCE

Disk-shaped organic semiconductors: From flexible electronics to photocatalytic applications



Jeudi

03 | 11 | 2022

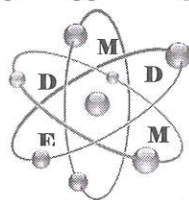
14h:00m

Salle des thèses



Pr. Berta Gomez-Lor

A circular portrait of a woman with dark hair, smiling. She is wearing a dark jacket over a light-colored shirt. The portrait is partially overlaid by a grey speech bubble containing her name.



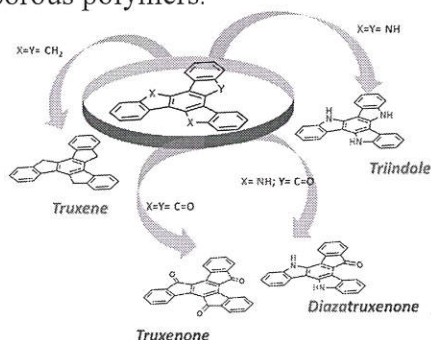
CONFÉRENCE

Madame **Berta Gomez-Lor**, Directrice de Recherche et Responsable du groupe d'électronique organique à l'Institut des Sciences des Matériaux de Madrid, donnera une conférence intitulée:

"Disk-shaped organic semiconductors: From flexible electronics to photocatalytic applications"
Jeudi le 03 Novembre 2022 à 14H00 à la salle des thèses

Abstract :

Truxene is a semiconducting molecule that can be considered as a 1,3,5-triphenylbenzene planarized through three bridging methylene groups, giving rise to a disk-shaped π -conjugated heptacyclic system. By varying the nature of the bridging units, different molecules can be obtained that share the geometry of truxene but show a completely different redox and semiconducting behavior. Thus, the structurally related truxenone, triindole or diazatruxenone behave as n-, p- type and ambipolar semiconductors respectively. Due to their planar trigonal topology, these molecules are of great interest not only in the development of self-assembling materials for applications in flexible electronics but also as building blocks in the construction of semiconductor COFs and porous polymers.



In this talk I will present our achievements in the development of high mobility self-assembling molecular materials based on different truxene-related platforms for their incorporation into electronic devices. We will also present our efforts in the synthesis of new high-surface porous polymers based on truxene monomers as well as the tuning of their electronic properties (energy levels, π -conjugation or exciton/ charge transport...) and porous character towards their potential use in applications ranging from photocatalysis, solar-to-chemical energy conversion or sensing .

Les Doctorant(e)s sont invité(e)s à assister à la conférence.

Le Directeur de l'Ecole Doctorale
Pr. Abdelaziz Bouazizi

