RICARDO NAVARRO AMADOR

will present his Ph.D. dissertation

Synthesis and characterization of Metal Organic Frameworks for energy and environmental applications

The defense will take place on **Wednesday, November 15, 2017** at **10.00 am**

in the ICSM Auditorium

The pollution of the environment, its remediation and to obtain a cleaner and more efficient energy sources are some of the most challenging topics that humans are now facing. Among the several materials that scientists have developed, Metal Organic Frameworks (MOFs) are gaining a lot of attention on several fields due to the easiness and the versatility in which these materials can be designed, synthesized and used. Even when research on these materials is still young, the possibilities that they offer are enormous.

It is on this frame that our work group has worked on the design and the synthesis of different MOFs for the recovery, the recycling and/or the degradation of some pollutants of interest. By using different synthesis approaches we have tested the versatility in the synthesis and the possible applications of these materials. We believe that MOFs hold the potential to solve some crucial issues in the recovery of the environment.

Keywords: Metal organic framework; Light-harvesting materials; Adsorption of pollutants; Photodegradation of pollutants; Recycling of metals