

# Furukawa Group

# SEMINAR

## Green processes for the synthesis and activation of MOFs



Dr. Arnau Carné Sánchez

Catalan Institute of Nanoscience and Nanotechnology (ICN2)  
CSIC The Barcelona Institute of Science

Friday January 26<sup>th</sup>, 2018 17:00~18:30  
**Kyoto University KUIAS (iCeMS Main Building)**  
2F Seminar Room (#A207)

### Abstract:

Metal-organic frameworks (MOFs) are crystalline hybrid porous materials, which display an exceptionally high and tunable porosity. These features make them promising candidates in multiple applications such as gas storage, catalysis, sensing and biomedicine. However, among the challenges currently precluding the industrial exploitation of MOFs is the lack of green methods for their preparation and activation. In this context, the use of continuous flow methods coupled with the spray drying technique, water-based synthesis and a novel activation process based on the photo thermal effect will be introduced as alternative strategies towards a greener and safer production and activation of MOFs.

Contact: KUIAS iCeMS Furukawa Group (furukawa-g@icems.kyoto-u.ac.jp)

