IN²UB INTERNATIONAL RESEARCH SEMINARS

Nanoscale reticular materials: from metal-organic frameworks to metal-organic polyhedra

Reticular materials are among the most attractive porous materials today. Their miniaturization to the nanoscale is expected to expand their scope to myriad applications, from drug-delivery to membranes, open up novel avenues to enable creation of sophisticated ordered superstructures. In this talk, I will explain our last advances in miniaturizing these porous materials at the nanoscale for the synthesis of colloidal particles with controlled sizes, shapes and compositions and their combination with other materials (*e.g.* inorganic nanoparticles and polymers) to make composites. Moreover, I will show how this miniaturization allows the creation of MOF-based three-dimensional photonic crystals, programmable self-assembling 3D architectures and CO₂ sensors, among other applications.

The IN²UB invites you to the seminar by



Dr. Daniel Maspoch

Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and The Barcelona Institute of Science and Technology, Campus UAB, Bellaterra, 08193 Barcelona, Spain; ICREA, Pg. Lluís Companys 23, 08010 Barcelona, Spain

SAVE THE DATE November 26th, 2021 at 12.00h.

Webinar (<u>Link</u> / Passcode: 620795)



Institut de Nanociència i Nanotecnologia



Sponsored by PhD program on Nanoscience UB

For further information: in2ub@ub.edu