Metal Phosphonate MOFs: Attractive properties for exploitation

Dr. Konstantinos Demadis, University of Crete, (Grece)

The field of phosphonate-based MOFs has known a significant renaissance during the last decade. Apart from academic curiosity, such materials are sought for their superior properties, stability (towards high Ts and hydrolysis) and functionality. Their amazing structural variability notwithstanding, these properties make them suitable candidates for a variety of applications. In this presentation a variety of such attractive properties will be shown that are geared towards specific potential applications. These include gas absorption, proton conductivity, corrosion control, photoluminescence, metal ion absorption, etc.