

The nano-interface between material science and organometallic chemistry

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The crossroad of organometallic chemistry with material science has allowed the rational development of catalysts that incorporate the basic elements found in homogeneous catalysts combined with the robustness of heterogeneous catalysts. This area of research has been coined as “surface organometallic” chemistry. A major challenge is the characterization of the complex catalysts produced.

The goal of this project is to understand the effect of adding a bulky oxide surface as a ligand on an organometallic complex, including the nature of their electronic and chemical interaction, by investigating the organometallic functionalization of well defined oxide model surfaces.

