Expanding and Understanding the MOF-Polymer Interface

The integration of polymers and MOFs has the potential to generate hybrid materials with the best qualities of both. Polymer-MOF hybrids have been prepared and investigated for a wide range of applications from mixed-matrix membranes (MMMs) for separations and catalysis, to more complex structural composites, such as self-assembled materials. Our group has taken an increasing interest in the science at the polymer-MOF interface and the results of our investigations will be presented. Polymer-MOF composites demonstrate unique properties and features, and efforts to develop these materials as a class of processible MOFs will be presented.