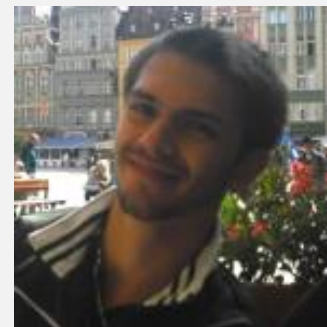


Moments in Materials Presentation: ***Metal-organic Frameworks***

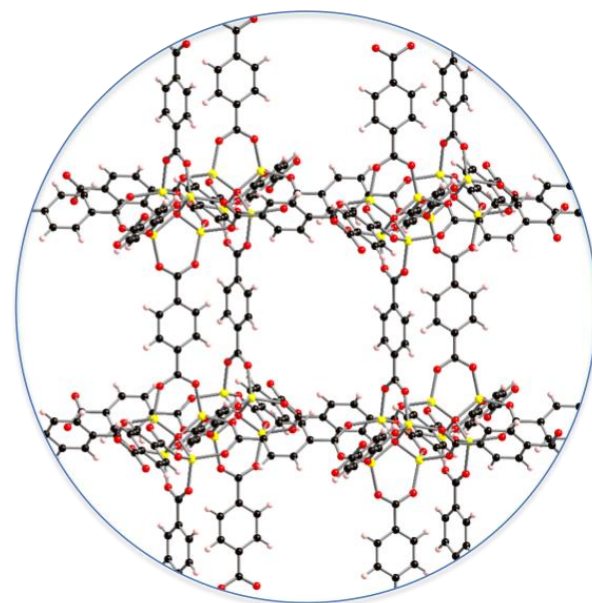
Speaker: Serge Ruccolo (Parkin lab)

When: Thursday, July 16th 2015, 4:30 p.m.

Where: NWC, 7th floor meeting room, RM 703



Since the first report of their world-record porosity, metal-organic frameworks (MOFs) have become some of the most fashionable compounds in the materials field. They consist of extended 3D crystalline networks of metal ions and multidirectional organic ligands. They represent one of the best examples of interdisciplinary research, as they bring together inorganic, organic, polymer chemistry and crystallography. Even though MOFs are only a little bit more than a decade old, researchers believe in a bright future for these unique crystalline materials. Although there is no doubt that MOFs have great potential for diverse applications such as gas storage, gas/liquid separation, energy storage, catalysis or crystallography, it seems that the research is often going all over the place, sometimes at the expense of rigorous characterization and reasonable thinking. In this talk, I will attempt to describe a realistic picture of the field, the areas that still require deeper understanding, as well as some of the more mature applications of MOFs.



Selected reference: Li, H.; Eddaoudi, M.; O'Keeffe, M.; Yaghi, O. M., *Nature* 1999, 402, 276-279