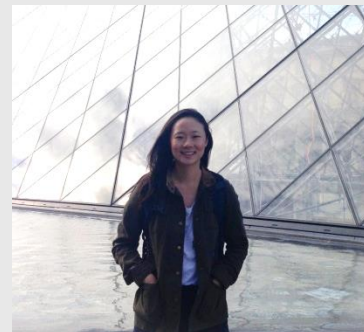


Moments in Materials Presentation: *Single-molecule magnets*

Speaker: Bonnie Choi (Roy lab)

When: Thursday, August 6th 2015, 4:30 p.m.

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



Since the first report in early 1990s, single-molecule magnets (SMMs) have attracted considerable interest from scientists in the fields of chemistry, physics, and materials science. SMMs are individual molecules that can function as magnetic particles, and their ability to retain magnetization for long periods of time in the absence of an applied magnetic field makes them one of the most active area of research in nanomagnetism. In addition to interest in the fundamental science of SMMs, a driving force behind the rapid development of this field has been their potential applications in high density data storage, molecular spintronics, and quantum computing devices. In this talk, I will explore several classes of SMMs that span from 3d transition metal to 4f lanthanide coordination compounds and discuss how the design of coordinating ligands can affect SMM behavior. In addition, I will touch on recent developments in the deposition of SMMs onto surfaces, which has ramifications for potential applications.

