Moments in Materials Presentation:

**Acenes and Azacenes: Decoupling of Molecular and Electronic Properties from Bulk Morphology**

**Speaker:** Florian Geyer, Columbia University  
**When:** Thursday, July 6th 2017, 4:30 pm  
**Where:** 209 Havemeyer Hall

In organic electronics, large efforts have been undertaken to create molecules with optimal electroactive properties. Yet an organic semiconductor’s performance in an actual device is often determined by its bulk-morphology that outweighs its single molecule properties. Consequently, electronically similar materials may function very differently from each other in the same type of devices. A system in which the bulk morphology is strictly decoupled from the single molecule’s electronic properties could be used to establish clear structure-function relationships that are otherwise hard or even impossible to obtain. As explored in this presentation, such a system can be constructed from acenes, and strategies to independently mutate either their electronic or morphological properties will be discussed herein.