Research in the Morris group seeks to address environmental challenges including **solar energy conversion and storage**. A combination of electrochemical and spectroscopic techniques are used to characterize the materials we develop. Metal organic frameworks (MOFs) are at the center of many research projects. The tunability, porosity, and stability of these materials renders them useful in a variety of applications, ranging from gas storage to catalysis.

**Current research projects include…**

**Artificial Photosynthetic Arrays for Energy Storage**

**Metal Redox Mediators for Next Generation Solar Cells**

**Ru-doped MOFs for Electrochemical Water Oxidation**

**Additives for Reverse Osmosis Membranes**

**MOFs for Chemical Warfare Agent Degradation**

**Photo-responsive MOFs for Drug Delivery**

**Electron Transfer in UiO MOFs**

**Polymer-MOF Composites for Mechanical Reinforcement**

![Image of Amanda J. Morris](image1)

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