



**Workshop: Chemistry & Catalysis**  
**Early experiments and unique opportunities with the APS MBA Upgrade**  
**Monday and Tuesday May 18-19<sup>th</sup> 2015**  
**APS Building 401, Conference Room E1100**

**Agenda**

Chairs: Angus Wilkinson, Georgia Institute of Technology  
David Tiede, Chemical Sciences and Engineering Division, Argonne National Laboratory  
Karena Chapman, X-ray Science Division, Argonne National Laboratory

- 9:05-9:10 AM     **Workshop Chairs**  
*Welcome and Workshop Charge*
- 9:10-9:40 AM     **Stephen Streiffer**                     APS Director, Argonne National Laboratory  
*Introduction to APS-U.*  
With 10 min discussion
- 9:50-10:20 AM     **Ross Harder**                     X-ray Science Division, Argonne National Laboratory  
*Opportunities in Coherent Diffraction X-ray Imaging*  
With 10 min discussion
- 10:30-10:50 AM     **Coffee Break**
- 10:50-11:20 AM     **Eric Dufresne**                     X-ray Science Division, Argonne National Laboratory  
*Opportunities in X-ray Photon Correlation Spectroscopy*  
With 10 min discussion
- 11:30-12:00 PM     **Mark Newton**                     University of Warwick  
*Heterogeneous catalysis*  
With 10 min discussion
- 12:10-1:40 PM     **Working Lunch**  
*Discussion lead: Karena Chapman.*
- 1:40-2:10 PM     **Mike Toney**                     Stanford Synchrotron Lightsource  
*In situ and operando X-ray Probes Applied to Sustainable Energy Materials*  
With 10 min discussion

- 2:20-2:50 PM     **Michael Tsapatsis**     University of Minnesota  
*Two-dimensional Zeolites for Catalysis and Separations: Synthesis, Applications and Characterization Challenges*  
With 10 min discussion
- 3:00-3:30 PM     **Joseph Hupp**     Northwestern University  
*Metal-organic frameworks: Metal-directed assembly and novel catalysts*  
With 10 min discussion
- 3:40-4:00 PM     **Coffee Break**
- 4:00-6:00 PM     **Open Discussion**  
*1-2 slide contributions from the floor are welcomed*
- **Dinner**     Self organized
- 9:00-9:30 AM     **Richard Reeder**     University of Stony Brook  
*Amorphous Materials and Biomineralization*  
With 10 min discussion
- 9:40-10:10 AM     **Younan Xia**     Georgia Institute of Technology  
*Nanoparticle formation*  
With 10 min discussion
- 10:20-10:40 AM     **Coffee Break**
- 10:40-11:10 AM     **Mike Wasielewski**     Northwestern University  
*Molecular assembly*  
With 10 min discussion
- 11:20-11:50 AM     **Lin Chen**     Argonne National Laboratory & Northwestern University  
*Molecular processes and reactions*  
With 10 min discussion
- 12:00-12:40 PM     **Open Discussion**