

# **APS Workshop 4: Materials Discovery with Grazing-incidence X-ray Photon Correlation Spectroscopy: Opportunities and Challenges**

**Monday, May 1, Morning**

## **Session 1: Introduction**

9:45 – 10:00 Jin Wang (Argonne National Laboratory)  
*Welcome*

10:00 – 10:30 Sunil K. Sinha (University of California, San Diego)  
*Past and Future Problems and Opportunities with XPCS at Grazing Incidence*

10:30 – 11:00 Joseph Strzalka (Argonne National Laboratory)  
*APS-U Feature Beamline 9-ID: The Expanded Program in Nanoscale Structure, Kinetics – and Dynamics – at Surfaces and Interfaces*

11:00 – 11:15 Zhang Jiang (Argonne National Laboratory)  
*Discussion*

11:15 – 11:45 Break

## **Session 2: *In Situ* and *Operando* Studies**

11:45 – 12:15 Karl Ludwig (Boston University)  
*Coherent X-ray Scattering as a New Tool for Study of Surface Growth and Patterning Dynamics*

12:15 – 12:45 Christopher J. Takacs (SLAC National Accelerator Laboratory)  
*Understanding Dynamics, Strain, and Reversibility of an Organic Mixed Ionic-electronic Conductor Using Operando GIXPCS*

12:45 – 1:00 Joseph Strzalka (Argonne National Laboratory)  
*Discussion*

1:00 Adjourn Monday Session

**Tuesday, May 2, Morning**

## **Session 3: Advanced Materials and Manufacturing**

9:45 – 10:00 Joseph Strzalka (Argonne National Laboratory)  
*Welcome Day Two*

10:00 – 10:30 Alamgir Karim (University of Houston)  
*Structure and Dynamics of Block Copolymer and Brush Polymeric Thin Films*

10:30 – 11:00 Ting Xu (University of California, Berkeley)  
*Toward Functional Nanocomposites: Kinetic Pathway Rules*

11:00 – 11:30 Michael F. Toney (University of Colorado, Boulder)  
*Some Thoughts on XPCS from the Surface Perspective*

11:30 – 11:45 Zhang Jiang (Argonne National Laboratory)  
*Discussion*

11:45 – 12:15 Break

#### **Session 4: Energy Materials**

12:15 – 12:45 Eva M. Herzig (University of Bayreuth)  
*GI-XPCS on Thin Films*

12:45 – 1:15 Aditya D. Mohite (Rice University)  
*Light-induced Structural Dynamics in 2D Halide Perovskites*

1:15 – 1:30 Joseph Strzalka (Argonne National Laboratory)  
*Discussion*

1:30 Adjourn Workshop