

Workshop on Coherent High Energy X-ray (CHEX) Sector for In Situ Studies

The goal of the workshop is to discuss and develop the preliminary design for the CHEX sector of the APS Upgrade.

Presentations and discussions will include:

- 1) Current status and plans for the APS Upgrade;
- 2) Overall science case for the CHEX sector and the technical requirements for experiments;
- 3) Specific examples of various aspects of the beamline's program and related design requirements;
- 4) Description of current preliminary design and open questions;
- 5) Discussion of how the design meets the needs of the scientific case, and input from the participants for improving the beamline design.

Preliminary Agenda:

Monday April 24

- 9:00 APS-U Overview (Dean Haeffner, ANL)
- 9:45 Overview of CHEX Science Case (Brian Stephenson, ANL)
- 10:45 Break
- 11:00 In Situ Studies of Pulsed Laser Deposition (Gyula Eres, ORNL)
- 11:30 In Situ Studies of Sputtering and Chemical Vapor Deposition (Matthew Highland, ANL)
- 12:00 Lunch and discussion
- 1:30 Oxides for Catalysis (Jonathan Hwang, MIT)
- 2:00 Electrochemical Systems (Tim Fister, ANL)
- 2:30 Other contributions (Participants)
- 3:00 Break
- 3:15 Current Preliminary Design and options (Brian Stephenson, ANL)
- 3:45 Discussion — moderated by Dean Haeffner