

'Exploring New Science Opportunities with the National Synchrotron Light Source II'

Agenda

Organizer: Faisal Alamgir

Opening

9:00 a.m. — Opportunities for the GT community to engage with the NSLS II, a leading synchrotron facility in the world, *Faisal Alamgir*

T1 - Chemically Speciated 3-D Tomography of hard and soft materials

9:30 — Imaging major, minor and ultra-trace elements in environmental and cultured microorganisms at the single-cell level using the Bionanoprobe (Advanced Photon Source), Jennifer Glass

10:00 — Chemical and structural heterogeneity visualized by high-resolution X-ray spectromicroscopy, Yuanzhi Tang

10:30 — Break

T2 - Time and Spatially Resolved Operando Studies of Reaction mechanisms

- **10:45** Real-world Catalysis studies using Synchrotron Methods, *Carsten Sievers*
- **11:15** Nanoscale Design of Electrocatalysts for Fuel Cell and Electrolyzer Applications, Seung Woo Lee
- **11:45** Understanding the reactions of solid state materials by using sychrotron based high time resolution X-ray scattering techniques, *Hailong Chen*

12:15 p.m. — Lunch

T3 - Surface/near-surface phenomena with Nanoscale Depth Discrimination

- **1:15** Surface-to-bulk chemical and electronic structure mapping using unique synchrotron capabilities, *Faisal Alamgir*
- **1:45** Spectroscopic study of patterned graphene using synchrotron methods, *Ed Conrad*

2:15 — Breakout discussion sessions **2:45** — Closing discussion