

Application of advanced x-ray spectroscopy on materials research



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WIDT 330

4-5 PM

REFRESHMENTS WILL BE

SERVED AT 3:45 PM

Advanced X-ray spectroscopy techniques including X-ray absorption and X-ray emission spectra are important methods for studying the local atomic environment and electronic structure of materials. With increases in brightness, flux and sub-micro focusing by Advanced Photon Source Upgrade (APS_U), it will become easier to apply these methods to a wider variety of experiments, such as the in-situ/operando measurements. In this talk, I will discuss the advanced X-ray spectroscopy techniques at Sector 20 APS, and their applications for investigating the materials research. I will present our recent results of in-situ/operando characterization on advanced battery materials, and other ex-situ characterization on various materials; In addition, the new opportunities with APS_U and some future challenges are also discussed.

CHEMISTRY & BIOCHEMISTRY DEPARTMENT SEMINAR