

X-ray absorption spectroscopy as a structural probe of dynamics in fuel cell and battery systems

THURSDAY

OCTOBER 29

4:00 P.M.

RM 184 NSH

Prof. Carlo Segre
Illinois Institute of Technology

X-ray absorption spectroscopy using synchrotron radiation has become an essential tool for operando studies of catalysts and batteries where nanoparticles and amorphous materials preclude the use of x-ray diffraction to study structural changes. I will discuss the fundamentals of synchrotron radiation and x-ray absorption spectroscopy along with examples of how it is applied to the study of polymer electrolyte fuel cell catalysts and lithium ion battery materials.