

Using tender X-rays in environmental science: from bulk solution structure to airborne aerosols

Wednesday 13 November 2024 14:40 (20 minutes)

The talk will exemplify the unique research opportunities for environmental science using X-ray micro-spectroscopy, scattering and imaging using tender X-ray (2-8 keV). A key challenge for atmospheric research is the sample injection under atmospherically relevant thermodynamic and chemical conditions. The talk will briefly discuss different techniques, their challenges and applicability for atmospheric research. Finally, a method is presented to take XAS spectra directly from a 'cloud' of airborne aerosols at tender X-rays to determine the phase state in situ.

Significance

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Session Classification: Aerosol