

X-ray absorption spectroscopy in geochemistry and environmental chemistry: present status and future prospect

TAKAHASHI, Yoshio^{1*}

¹Hiroshima University

In this session, we include a series of presentations related to X-ray absorption spectroscopy (XAS), or X-ray absorption fine structure (XAFS). The presentations in this session focus on the applications of XAS technique to relatively new fields in geochemistry and environmental chemistry including (i) application of scanning transmission X-ray microscopy (STXM) to carbons in geochemical samples, (ii) understanding of mechanism of isotopic fractionation based on the speciation analysis by XAS, (iii) interpretation of XAS results by molecular simulation, and (iv) coupling of micro-XAFS with fluorescence in-situ hybridization (FISH) method.