

物理学セミナー

日時 平成22年12月7日(火) 16:15～17:45

場所 A13-323 (講義室B)

講師 Prof. Hsu I-Jui

(Department of Molecular Science and Engineering,
National Taipei University of Technology, Taiwan)

Title

“Structure Characterization by X-ray Absorption Spectroscopy and Small Angle X-ray Scattering”

Abstract

X-ray absorption spectroscopy (XAS) has become a powerful technique to investigate the local geometric structure of metal site by its extended region, called extended x-ray absorption fine structure (EXAFS), and the electronic structure of metal site by its near edge region, called x-ray absorption near edge spectroscopy (XANES).

In this talk, the applications of XANES to inorganic metal complexes and the combination of density functional theory calculation will be given to discuss the electronic structures of iron-nitrosyl complexes and $[\text{Co}(\text{bpy})_3][\text{LiCr}(\text{ox})_3]$ (bpy = 2,2'-bipyridine; ox = $\text{C}_2\text{O}_4^{2-}$) in solid state. Finally, a combination with small angle x-ray scattering (SAXS), anomalous small angle x-ray scattering (ASAXS), and XAS will be used to characterize global and local structures of the Cu modified metallothionein protein in solution state.

* このセミナーは、大学院サイエンスコミュニケーション1, 2 (物理学) の授業を兼ねています。

問い合わせ 物理学専攻 久保田 佳基 (内線 4050)