

Time-resolved XAS beamline at SLRI

P. Chirawatkul¹, Y. Poo-arporn¹, S. Klinkhieo¹, J. Holmes² and P. Songsiriritthigul^{1,3*}

¹ *Synchrotron Light Research Institute, Nakhon Ratchasima, 30000, Thailand*

² *Canadian Light Source, University of Saskatchewan, 101 Perimeter Road, Saskatoon, SK S7N 0X4 Canada*

³ *School of physics, Suranaree University of Technology, Nakhon Ratchasima, 30000, Thailand*

**Corresponding author. E-mail: prayoon@slri.or.th*

Abstract

This report presents the optical layout and the commissioning results of the energy dispersive X-ray absorption spectroscopy beamline at the Synchrotron Light Research Institute in Thailand. The beamline employs a bent Si(111) crystal as an energy dispersive monochromator (EDM). The beamline utilizes radiation from a bending magnet of 1.2 GeV storage ring. The EDM covers X-rays with photon energy from 3 to 8 keV. A linear image NMOS sensor consisting of 1024-element photodiode allows detection in transmission mode with a detector readout time of less than 100 ms, and thus time-resolved may be carried out at this beamline.

Keywords: synchrotron light, XAS beamline, energy dispersive