

Development of Control Software for Protein Crystallography Beamline at Pohang Accelerator Laboratory

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We developed an auto-control program for 4A MAX beamline at PAL which has variety of functions including automatic alignment of X-ray beam at the sample position, automatic energy scanning and recording for MAD experiment, automatic attenuator control, and so on. The beamline control system (BCS) recognizes most of devices for automation and beamline optimizing systems by TCP/IP based communication. For data collection using ADSC Quantum210 on BCS, we develop new control program with Visual C++. This program and freeware software (EXODUS or Hummingbird) for LINUX X-terminal emulation tool is used for experiment. We will introduce our auto-control scheme and test results in this paper.