

BL05XU R&D-ID

1. Introduction

BL05XU is used for the small-angle/wide-angle scattering measurements at the experimental hutch. Various R&D projects are conducted to upgrade the SPring-8 beamlines at the optical hutch.

2. Recent activities

In FY2019, the environments of the experimental hutch and the preparation room were improved to meet the demands of a wide range of experiments. For example, the measurement targets were expanded from polymer samples to other materials such as biological materials, which are sensitive to the experimental environment. An air conditioner was installed in the experimental hutch, which can control the temperature inside the hutch down to 20 °C. Additionally, the sample preparation environment was also improved. A biohazard safety cabinet to handle biomaterials, and a deep freezer, which can be cooled down to −60 °C, and a CO₂ incubator to store delicate samples were installed in the preparation room (Fig. 1). Utilizing these

features, various experiments, including those supporting the JST MIRAI Project “Innovative Adhesion Technology Based on 4-Dimensional Multi-Scale Analysis of Interface,” were conducted.



Fig. 1. Installed instruments in the preparation room of BL05XU.

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