

Recent Progress of X-Ray Microscopy in Ritsumeikan SR Center

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Since 1996, we have been operating a transmission X-ray microscope at BL12 of Ritsumeikan SR center ([575MeV, 300mA], Kusatsu, Japan) [1]. The achieved resolution upto now is 45nm, judged from the edge analysis [2]. The SR center is supported by research projects on nanotechnology and materials of Ministry of Education, Culture, Sports, Science and Technology in Japan from 2002 to 2006. The X-ray microscope beam line is open to researchers from universities, government research centers and companies with this support. In this conference, we will report some recent results after XRM2002. Most interesting topic is an application of vanadium probe for bio-specimens. Dictyostelium discoideum were cultured and labeled by VOSO₄ solution. All cell imaging was done with BL12 transmission X-ray microscope. At the conference, we are going to show the details of an effect of the vanadium labelling.

References

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