X-Ray Microscope Images at Water Window Regions


Abstract

A high resolution imaging X-ray microscope station has been operating at Ritsumeikan SR Center since 1996. Its optical configuration allows a continuous wavelength change throughout water window region, 2.2 – 4.3nm. The present paper describes results observed with the high-performance X-ray microscope, and compared the images taken at two different wavelengths, 2.4nm and 3.2nm. Its achieved resolution with each wavelength was below 50nm. Latex spheres of 0.23μm diameter and 0.1μm inner fine structures of diatom could be clearly resolved.

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