

Introduction to the infrared microspectroscopy at BL43IR of SPring8

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An infrared microspectroscopy station was constructed at BL43IR of SPring8 to perform microanalysis of various specimens as small as 10 micron diameter with the use of an infrared synchrotron radiation which is highly collimated and highly brighter than the conventional IR light source. The advantages of the IR microscope are (1) wide wavenumber region (500 cm^{-1} ~ 20000 cm^{-1}), (2) long working distance (100 mm) between Cassegrainian mirrors (x8, NA=0.5), (3) in-situ measurement of ruby fluorescence for DAC study. With the advantage of long working distance, four instruments (X-Y mapping stage, Flow-type cryostat, High temperature DAC, Low temperature DAC) can be installed with microscope.

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