

Infrared spectromicroscopy of biomaterials at the CLS 01B1.1 beamline

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Infrared spectromicroscopy is a powerful tool in modern materials research, particularly for biomaterial research. Using synchrotron radiation source offers diffraction limited spatial resolution, with an excellent signal-to-noise ratio in a reasonable time frame. Diffraction limited spatial resolution is required to probe samples which are on the order of the wavelengths of the infrared radiation. Such samples include single cells, natural and synthetic fibres, as well as samples which are traditionally difficult to do in infrared spectroscopy such as water inside tissues. Examples of applications will be presented from the commissioning phase of the 01B1.1 beamline at the CLS.