SAXS WITH MICROMETER-SIZED SR-BEAMS

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The talk will introduce small- and wide-angle X-ray scattering (SAXS/WAXS) techniques using micron- and submicron-sized synchrotron radiation beams. I will show selected scanning SAXS/WAXS experiments for synthetic polymers and biopolymers, which allow the generation of “diffraction images” based on the extraction of specific parameters such as long period, local orientation, or crystallinity from a series of diffraction patterns. Microbeams are also very convenient for in-vivo studies of biological processes like silk extrusion, for studying protein aggregation in microfluidic environments or for grazing-incidence scattering (GISAXS) studies on small sample areas.

Meeting: SAX special interest group meeting at ILL
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