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Practical Aspects of GISAXS. Byeongdu Lee,¹ X-Ray Science Div., Advanced Photon Source, Argonne National Laboratory, 9700 S. Cass Ave., Argonne, IL 60439, USA.

The grazing-incidence small-angle X-ray scattering (GISAXS) technique is attracting much attention in the study of nanostructures such as a thin film on a substrate as well as particles on a substrate. In addition to the information derived from conventional transmission SAXS, GISAXS can deliver three-dimensional information about the thin film. In many cases, a substrate induces orientation of the particles. Compared to the powder pattern, the oriented GISAXS pattern enables an easier structure solution with better confidence in the results. However, evaluation of GISAXS data is still challenging. In this presentation, characteristic features and new measuring methods for GISAXS will be presented for several sample systems such as block copolymers, metallic catalyst clusters and bio-particles.

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