

I22 – Small Angle Scattering & Diffraction

I22 – Small Angle Scattering & Diffraction. Technical documentation migrated from Magnolia (/Instruments/Soft-Condensed-Matter/I22.html).

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Overview

I22 combines small-angle (SAXS) and wide-angle (WAXS) X-ray scattering to study structure across length scales from nanometres to hundreds of nanometres, including polymers, colloids and biological tissue.



I22 small-angle scattering camera (demo image)

The scattering vector

Scattering data are reported as a function of $q = \frac{4\pi \sin \theta}{\lambda}$, which relates directly to real-space length scales via $d = 2\pi / q$.

Before your visit

Safety induction for visiting users

All visiting users must complete the online safety induction before arriving at Diamond. The induction covers radiation safety, the experimental hall rules and what to do in an emergency.

- Complete the induction in the User Administration System (UAS) at least 48 hours before your visit.
- Bring photo ID; your site pass is issued at reception.
- Read the [experimental hall safety rules](#) and your beamline's local rules.

Accessing your data after your visit

Data collected at Diamond is stored centrally and can be accessed remotely after your visit using your FedID. Raw data is retained in line with the [Scientific Data Policy](#).

Automated processing pipelines run during your experiment; results appear alongside raw data within minutes.