

## **Diamond B23 beamline for SRCD applied to Material Science**

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Diamond B23 beamline for synchrotron radiation circular dichroism (SRCD) consisting of two end stations, modules A and B, operates in the vacuum UV-visible region (140-650nm) with a unique highly collimated light beam (about 0.5mm in diameter) and higher photon flux than commercial circular dichroism (CD) instruments.

The vertical chamber of module A has been recently used for CD imaging to characterise the chirality (handedness or helicity) of solid thin films providing direction and guidelines in the development of plasmonic metamaterials, photo-induced optical activity in phase-change memory materials and new organic chiral LED materials. These studies could not be achieved using bench-top CD instruments or other worldwide SRCD beamlines.

B23 is constantly upgraded in terms of improved sample chamber and in house software for data processing and analysis to enhance user-friendly experience.