

STOE IPDS 2T



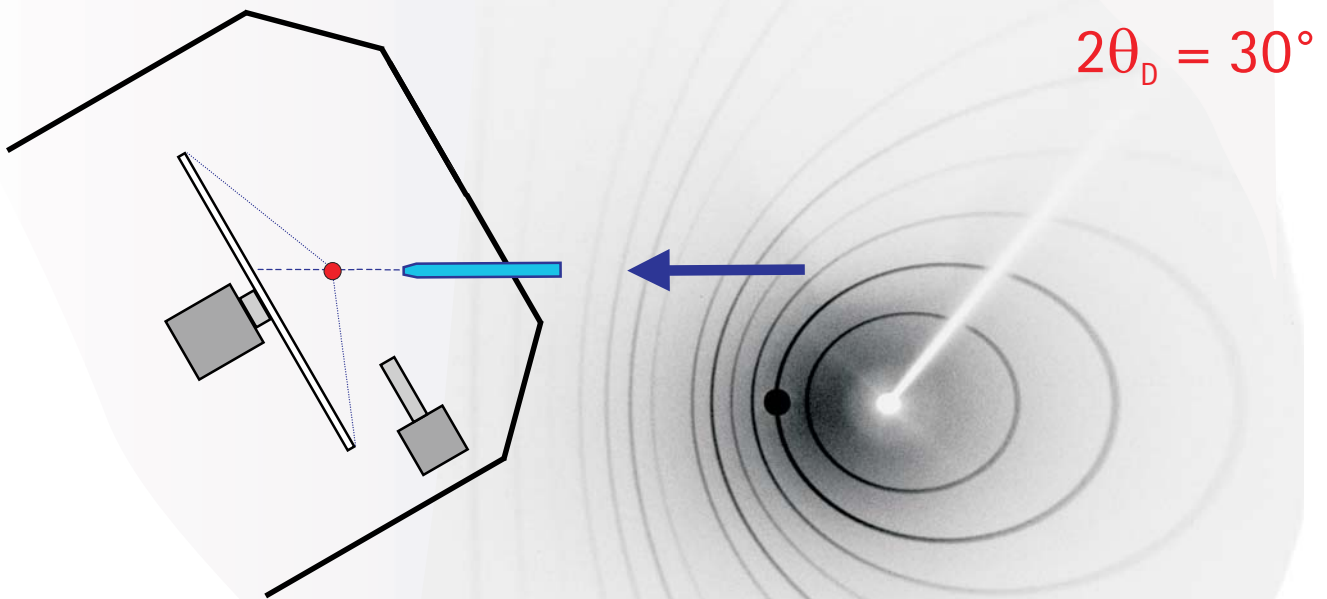
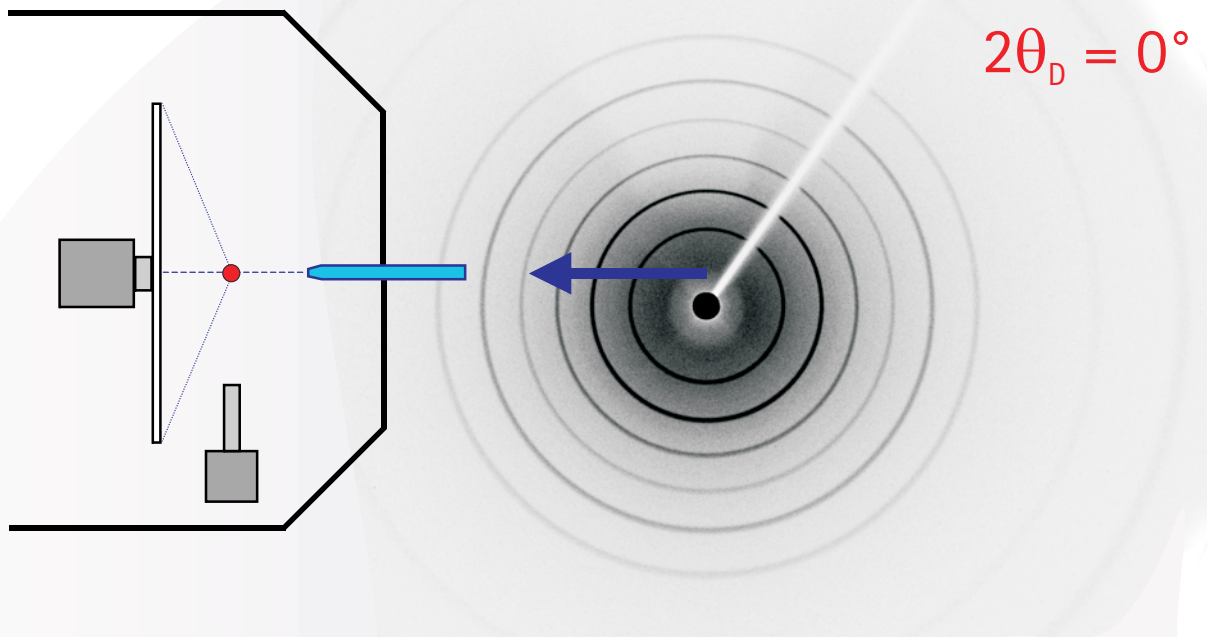
The IPDS II pivoting to higher angles

With the IPDS 2T STOE combines all the achievements of the IPDS II with the possibility to turn the whole goniometer around the θ axis to five defined positions, 0° , 15° , 30° , 45° and 60° . This additional axis makes the IPDS 2T a diffractometer of unique versatility. The large Imaging Plate with an active scan range of 340 mm diameter located at the 60° position yields a $2\theta_{\max}$ of 137° ! Small molecules, electron density determination or powder investigations are no challenge for the IPDS 2T.

The dynamic range $> 1 : 10^5$ and the high speed read-out with a scan time of appr. 90s makes the IPDS 2T a more than sufficient stage for non-ambient experiments. High- and low-temperature attachments as well as pressure cells can be easily adapted to the 2-circle goniometer.

Whether sealed tube or rotating anode, like the IPDS II the IPDS 2T fits any kind of X-ray source providing Cu, Mo or Ag radiation.

Working principle of the IPDS 2T



The IPDS II has gained an additional axis. It can be turned to 5 defined positions, 0° , 15° , 30° , 45° and 60° around the 2θ axis (marked red in the sketches above).

The shown Scherrer rings are presenting the turn from 0° 2θ to 30° 2θ using LaB_6 powder as the sample material instead of a single crystal.