Small Molecule X-Ray Diffraction *Diffraction Methods*	Model: Unit and Room: Responsible: Further information:	*Rigaku R-AXIS Spider Large-Area Image Plate Diffractometer* *Inorg. Chemistry, basement, R..-137* *Dr. Nils Trapp, 203 6156* *nothing yet*

Short Description:

Image plate diffractometer equipped with molybdenum sealed-tube source and focussing monochromator. Allows collection of low- and high-angle data in a single setting. Very high contrast. Allows very fast routine structure determination. Ideally suited for electron density studies.

Picture of the Equipment

Available Experiments/Techniques:

Single crystal X-Ray diffraction (routine)
Single crystal X-Ray diffraction (high angle&charge density)

Special Equipment:

Equipped with an Oxford Cryostream 700 crystal cooling device (90 - 400K).
Custom apparatus for low-temperature (-120°C to RT) crystal mounting under inert conditions is available.
Binocular polarizing microscope with digital camera is available for crystal mounting/evaluation.

Measurements on the equipment are currently done by:	☐ Students ☐ Students after Introduction ☒ Students after extensive training ☒ Trained scientific service personal
Recent Publications, where this instrument was important (optional): Give citation	Angew. Chem. 2009,48, 1133-1137. Chem. Eur. J. 2009, 15, 1966-1976.
Typical problems that may be solved with this instrument:	*- Structure determination in the solid state* *- Bonding information* *- Charge density distribution*