# X-ray Generator and Diffractometer *Protein Crystallography*	Model: Unit and Room: Responsible: Further information:	*Rigaku 007HF X-ray generator with Osmic VHF Optics, Oxford Cryostream and Rigaku Saturn 944+ CCD detector.* *Biochemistry, 9th floor, R.910* *Dr. Stefan Gerhardt, 203 5970* *http://portal.uni-freiburg.de/xray/equipment*

Short Description:

Micromax 007HF is a microfocus rotating anode X-ray generator producing Cu-Ka radiation (1.5418 Å). The system is equipped with VariMax UHF focusing mirrors, cryosystems for routine data collection at 100K and two detectors, a high-sensitivity CCD detector (Saturn 944+) and an imaging plate systems (mar345dtb).

Picture of the Equipment

Available Experiments/Techniques:

Single crystal diffractometry; data collection from singel crystals; collection of anomalous data for phsae determination for suitable elements.

Special Equipment:

Single-crystal UV/vis spectrophotometer (4DX) with Andor spectrograph.

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	
Typical problems that may be solved with this instrument:	*- Diffraction measurements of protein crystals (long unit cell axes)* *- Solution of the phase problem using suitable anomalous scatterers (e.g. Fe, Xe, I).*