


Methods IAAC, Hillebrecht

Fourier Transform IR Spectroscopy	Model:	<i>Bruker IFS66V IR-Spectrometer</i>
	Unit and Room:	<i>Inorg. Chemistry, Basement, R. -134</i>
	Responsible:	<i>Anita Becherer</i>
<i>Vibrational Spectroscopy</i>	Further information:	
Short Description:	Picture of the Equipment	
FT-IR spectrometer with self adjusting Michaelson interferometer.		
Available Experiments/Techniques:		
IR in Transmission, Reflexion and Diffuse Reflexion (50 to 8000 cm^{-1}) with DTGS in vacuum FIR in Transmission (200 - 10 cm^{-1}) with Bolometer in vacuum		
Special Equipment:	<p>Low temperature units for MIR/FIR (80K to 350K) IR unit for high pressure cells</p>	
Measurements on the equipment are currently done by:	Trained scientific service personal	
Recent Publications, where this instrument was important (citation):	<p>J. Am. Chem. Soc. 2009, 131, 12172; 9; Chem. Eur. J. 2008, 14, 7331; Angew. Chem. 2005, 118, 172.</p>	
Typical problems that may be solved with this instrument:	<p><i>structural investigations of solid state compounds and liquids/solutions</i> <i>investigation of lattice dynamics and local symmetry in disordered crystals</i> <i>temperature dependent (10K-350K) and pressure dependent phase transitions</i> <i>space-resolved investigations on inhomogenous samples</i></p>	