


Methods, IAAC, Hillebrecht

<h2 style="text-align: center;">High Temperature Synthesis</h2>	Model: Unit and Room: Responsible: Further information:	<i>Different models Inorg. Chem., -142 (Chem. II) Dr. M. Ade, Dr. T. Ludwig http://portal.uni-freiburg.de/fkchemie/Ausstattung</i>
Short Description: Two high temperature furnaces with graphite heating (Thermal Technologies 1000-3560-FP2, Gero). 2 High temperature furnaces with Kanthal heating (Linn HT-1800-Vac, Nabertherm).	Picture of the Equipment 	
Available Experiments/Techniques: Synthesis at high temperatures (up to 2300 °C). Synthesis under different atmospheres (Argon, nitrogen, helium) and vacuum.		
Special Equipment: Refractory crucible and tube materials (graphite, boron nitride, corundum). Arc welding of tantalum ampoules for volatile metals.		
Measurements on the equipment are currently done by:	<input type="checkbox"/> Students <input type="checkbox"/> Students after Introduction <input checked="" type="checkbox"/> Students after extensive training <input checked="" type="checkbox"/> Trained scientific service personal	
Recent Publications, where this instrument was important (optional): Give citation	J. Am. Chem. Soc. 131 (2009) 12172-12179, Z. Anorg. Allg. Chem. 635 (2009) 653-659	
Typical problems that may be solved with this instrument:	<i>High temperature synthesis, synthesis in liquid metals, single crystal growth</i>	