Methods, IAAC, Hillebrecht

Impedance Spectroscopy

Model: Zahner Elektrik IM6e Electrochemical

Workstation

Unit and Room: Responsible: Further

information:

Inorg. Chem., R. 142, (Chem. I)

Dr. Thilo Ludwig http://portal.uni-

freiburg.de/fkchemie/Ausstattung

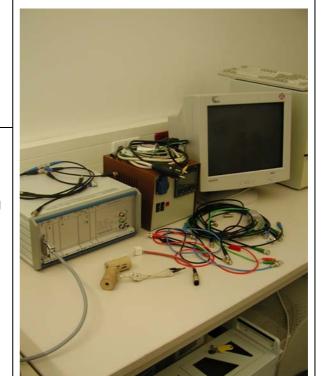
Picture of the Equipment

Short Description:

Electrochemical workstation with frequency generator and analyzer (DC - 1MHz), internal potentiostat (max. 12V, max. 1A), interface and Thales software for measurement, evaluation and simulation

Available Experiments/Techniques:

- 2-, 3- and 4-Pole measurements
- Impedance measurement, current/potential curves, cyclic voltammetry, capacity recording



Special Equipment:

High temperature device (293 - 673K): Quartz sample holder, Eurotherm 2404 controller Low temperature device (10 - 300K): Brass sample holder, Leybold cryostat

Measurements on the equipment are currently	Students
done by:	Students after Introduction
	Students after extensive training
	personal
Recent Publications, where this instrument	
was	
important (optional): Give citation	
Typical problems that may be solved with this	Materials characterisation: conductivity
instrument:	measurements, determination of band gaps,
	phase transitions