


Methods, IAAC, Krossing

<h1 style="margin: 0;">Rheometry</h1> <p style="margin: 0;"><i>Viscosity-measurements</i></p>	<p>Model: <i>Brookfield (RVDV-III UCP) - Programmable Rotation Viscosimeter</i></p> <p>Unit and Room: <i>Inorg. Chemistry, cellar, R.-144</i></p> <p>Responsible: <i>Petra Klose, 203 6151</i></p> <p>Further information:</p>
<p>Short Description:</p> <p>Programmable Rotation Viscosimeter having a temperature-measurement unit connected directly with the sample-chamber. Determination of the viscosity (necessary amount of a sample: 0.6 ml) by measuring of the force which is to perform to rotate the spindle at given speed.</p>	<p style="text-align: center;">Picture of the Equipment</p> 
<p>Available Experiments/Techniques:</p> <p>Temperature-dependent viscosity measurements in an atmosphere of dry air. Measuring of the viscosity in dependence on the speed/torque (realization of several experiments via programming is possible).</p>	
<p>Special Equipment:</p> <p>Viscosity measurements in an atmosphere of dry air in a specifically home-built glove box (relative moisture content in air below 0.1%) Temperature-dependent measurements - connection with a cryostat for the tempering of the samples (accuracy about $\pm 0.1^\circ\text{C}$) Determination of the temperature in the samples using a temperature-measurement unit which is connected with the sample-chamber.</p>	
<p>Measurements on the equipment are currently done by:</p>	<p><input type="checkbox"/> Students</p> <p><input type="checkbox"/> Students after Introduction</p> <p><input type="checkbox"/> Students after extensive training</p> <p><input checked="" type="checkbox"/> Trained scientific service personal</p>
<p>Recent Publications, where this instrument was important (optional): Give citation</p>	<p>Krossing et al., 2010, to be submitted to Chem. Eur. J.</p>
<p>Typical problems that may be solved with this instrument:</p>	<p><i>Viscosity measurements of the samples which are oxygen and/or water sensitive.</i></p>