


Methods, IMC, Mülhaupt

<p>Modular Advanced Rheometry System for Soft Matter</p> <p><i>Mechanical Spectroscopy, Rheometry</i></p>	<p>Model: <i>MARS, Thermo Scientific</i> Unit and Room: <i>FMF, second floor, R02015</i> Responsible: <i>Dr. Yasmin Korth, 203 4783</i></p> <p>Further information: <i>http://www.fmf.uni-freiburg.de/service/servicegruppen/sg_rheol/service/index_html</i></p>	
<p>Short Description:</p> <p>Universal Mechanical Spectrometer for linear and nonlinear viscoelastic properties of soft matter in wide Temperature (-100 °C to 200 °C) and frequency (0.001 to 100 Hz) ranges</p>	<p>Picture of the Equipment</p> 	
<p>Available Experiments/Techniques:</p> <p>Dynamic moduli in oscillatory shear flow, viscosities in shear flow, all types of strain controlled experiments including relaxation modulus determination</p>		
<p>Special Equipment:</p> <p>add on for microscopical observation during flow</p>		
<p>Measurements on the equipment are currently done by:</p>	<p><input type="checkbox"/> Students <input checked="" type="checkbox"/> Students after Introduction <input checked="" type="checkbox"/> Students after extensive training <input checked="" type="checkbox"/> Trained scientific service personal</p>	
<p>Recent Publications, where this instrument was important (optional): Give citation</p>	<p>S. Patachia, C. Florea, Chr. Friedrich, Y. Thomann Tailoring of poly(vinyl alcohol) cryogels properties by salts addition, Express Polym. Lett. 3 (2009), 320-331</p>	
<p>Typical problems that may be solved with this instrument:</p>	<p><i>-Structure-rheological properties relationships for soft matter, including colloids.</i> <i>-Determination of characteristic viscosities and moduli of matter, relaxation time spectra</i> <i>-visualization of flow induced structures</i></p>	