


Methods, IOCBC, Einsle

<p style="text-align: center;">Differential Scanning Calorimetry</p> <p style="text-align: center;"><i>Calorimetry</i></p>	<p>Model:</p> <p>Unit and Room:</p> <p>Responsible:</p> <p>Further information:</p>	<p><i>GE Healthcare / Microcal VP-DSC capillary scanning calorimeter</i></p> <p><i>Biochemistry, 9th floor, R.910</i></p> <p><i>Dr. Stefan Gerhardt, 203 5970</i></p> <p><i>http://portal.uni-freiburg.de/xray/equipment</i></p>
<p>Short Description:</p> <p>The VP-Cap DSC is an autosampling differential scanning microcalorimeter. The reference and sample cells are fixed in place capillary shaped vessels with effective volumes of approximately 130 μL. The cells are constructed from a tantalum alloy and protrude out of the adiabatic chamber via their two 1.5 mm (inner diameter) access tubes. The approximate volume of each pair of cell stems is 120 μL. </p>	<p style="text-align: center;">Picture of the Equipment</p> 	
<p>Available Experiments/Techniques:</p> <p>The VP-Cap DSC operates in the temperature range of -10° to 130° C and is capable of scanning with no external heating/cooling source. Scanrates are user selectable and fall in the range of 0°/hr to +250°/hr. . For scanning solutions above their boiling point, the VP-Cap DSC has a self-contained pressurizing system allowing positive pressures from 0 - 2 bar.</p>		
<p>Special Equipment:</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 checked="" 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>Typical problems that may be solved with this instrument:</p>	<p>- <i>Thermal stability of a sample, in particular folding and unfolding events in proteins.</i></p> <p>- <i>Screening for protein variants with increased or decreased thermal stability in a mutant screen.</i></p>	