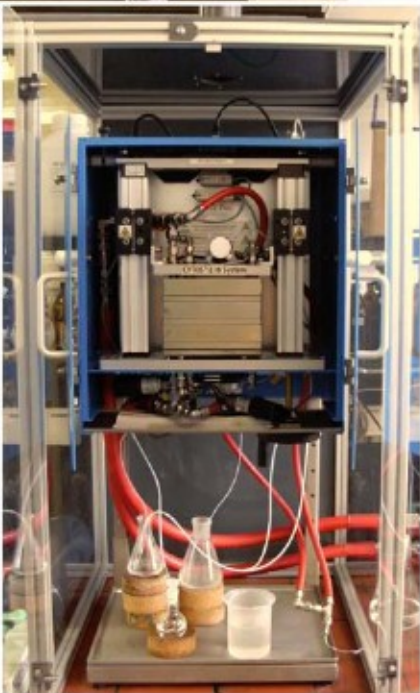


Methods, IOCBC, Bannwarth

<p><b>CPC Microreactor</b></p> <p><i>-Automated Microreactor System-</i></p>	<p>Model: Unit and Room:  Responsible: Further information:</p>	<p><i>CPC CYTOS Lab System Org./Bioorg. Chemistry, 2nd floor, R.323F Prof. W. Bannwarth, M. Sterk</i></p>
<p>Short Description:</p> <p>Cellular Process Chemistry (CPC) Microreactor system based of an internal and external modularity for the high flexibility by running different chemical reactions. Flow rates from 0.1 up to 20.0 ml/min. Production of chemicals from gram to higher kilo gram.</p> <p>Available Experiments/Techniques:</p> <p>Reaction optimization, lab scale, automated system, large scale syntheses, variable reactor sizes, chemically inert. Reaction time up to 90 min (depending on flow rate). Individual connecting principle minimizes the dead volume in the system and provides the reaction isothermal condition through the whole system.</p>	<p>Picture of the Equipment</p> 	
<p>Special Equipment:</p> <p>The external modularity provides a system configuration for a multi step synthesis.</p>		
<p>Measurements on the equipment are currently done by:</p>	<p><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</p>	
<p>Recent Publications, where this instrument was important (optional): Give citation</p>	<p>R. A. Kramer, L. Rumi, W. Bannwarth, <i>Helv. Chim. Acta</i>, 2009, 92, 267-272 L. Rumi, C. Pflieger, P. Spurr, U. Klinkhammer, W. Bannwarth; <i>Org. Process Res. Dev.</i>, 2009, 13 (4), 747–750</p>	
<p>Typical problems that may be solved with this instrument:</p>	<p>Small dimensions of microreactors allow for the use of minimal amounts of reagent under precisely controlled conditions. Reaction conditions are screened rapidly which allows a precise control of reaction variables.</p>	