


Methods, IOCBC, Bannwarth

<p>DNA-Synthesizer</p>	<p>Model: Expedite™ Nucleic Acid Synthesis System 8909</p> <p>Unit and Room: Org./Bioorg. Chemistry, 1st floor, R.221F</p> <p>Responsible: Prof. W. Bannwarth, A. Kienzler</p> <p>Further information:</p>	
<p>Short Description:</p> <p>The Expedite™ 8909 Nucleic Acid Synthesis System is an economical, versatile platform that synthesizes DNA and RNA oligonucleotides with fast cycle times and a low cost-per-base ratio. The system is ideal for synthesizing short primers and probes as well as sequences up to 100-mers in scales ranging from 50 nmol to 15 µmol. The basic Expedite 8909 system features independently controlled, simultaneous dual-column synthesis.</p>	<p>Picture of the Equipment</p> 	
<p>Available Experiments/Techniques:</p> <p>The DNA synthesis is performed using β-cyanoethyl phosphoramidite chemistry. Since the synthesizer has 9 positions for the insertion of phosphoramidites it is possible to synthesize DNA/RNA hybrids. Furthermore modified nucleotides can be inserted and directly coupled during the automated synthesis.</p>		
<p>Special Equipment:</p>	<p>Measurements on the equipment are currently done by:</p> <ul style="list-style-type: none"> <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>Recent Publications, where this instrument was important (optional): Give citation</p>	<p>D. Altevogt, A. Hrenn, C. Kern, L. Clima, W. Bannwarth, I. Merfort, Org. Biomol. Chem. , 2009, 7, 3934 - 3939</p> <p>L. Clima, W. Bannwarth, Helv. Chim. Acta, 2008, 91, 165-175</p>	
<p>Typical problems that may be solved with this instrument:</p>	<p>Synthesis of modified and non modified DNA-strands. Synthesis of DNA/RNA hybrids.</p>	