Methods, IPC, Weber

<table>
<tr><td rowspan="2">EPR-Spectroscopy

Electron Paramagnetic Resonance</td><td>Model:
Unit and Room:
Responsible:

Further information:</td><td>Bruker EMX 1/6
Physical Chemistry, 3rd floor, R. 311
Dr. Peter Jakes (203-6212), Dr. Sylwia Kacprzak (203-6207)
http://www.physchem.uni-freiburg.de/akweber/forschung/eprfolder/index.html</td></tr>
<tr><td colspan="2">Short Description:

Continous-wave EPR-Spectrometer operating at X-band (9–10 GHz) microwave frequency

Available Experiments/Techniques:

continuous-wave EPR</td><td>Picture of the Equipment</td></tr>
<tr><td colspan="3">Special Equipment:

Low temperature unit (cryostat/resonator) for temperature range from 5 to 300 K.
Optical sample excitation (various continous-wave lasers with specific emission wavelengths)</td></tr>
<tr><td colspan="2">Measurements on the equipment are currently done by:</td><td>☐Students
☒Students after Introduction
☒Students after extensive training
☒Trained scientific service personal</td></tr>
<tr><td colspan="2">Recent Publications, where this instrument was important (optional): Give citation</td><td>Biochemistry 46 (2007) 10694–10702</td></tr>
<tr><td colspan="2">Typical problems that may be solved with this instrument:</td><td>– identification of radicals
– electronic structure determination of paramagnetic centers (organic radicals, transition metal ions, defect centers)</td></tr>
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