Biology Laboratory

Equipment for Sample Preparation and Characterization

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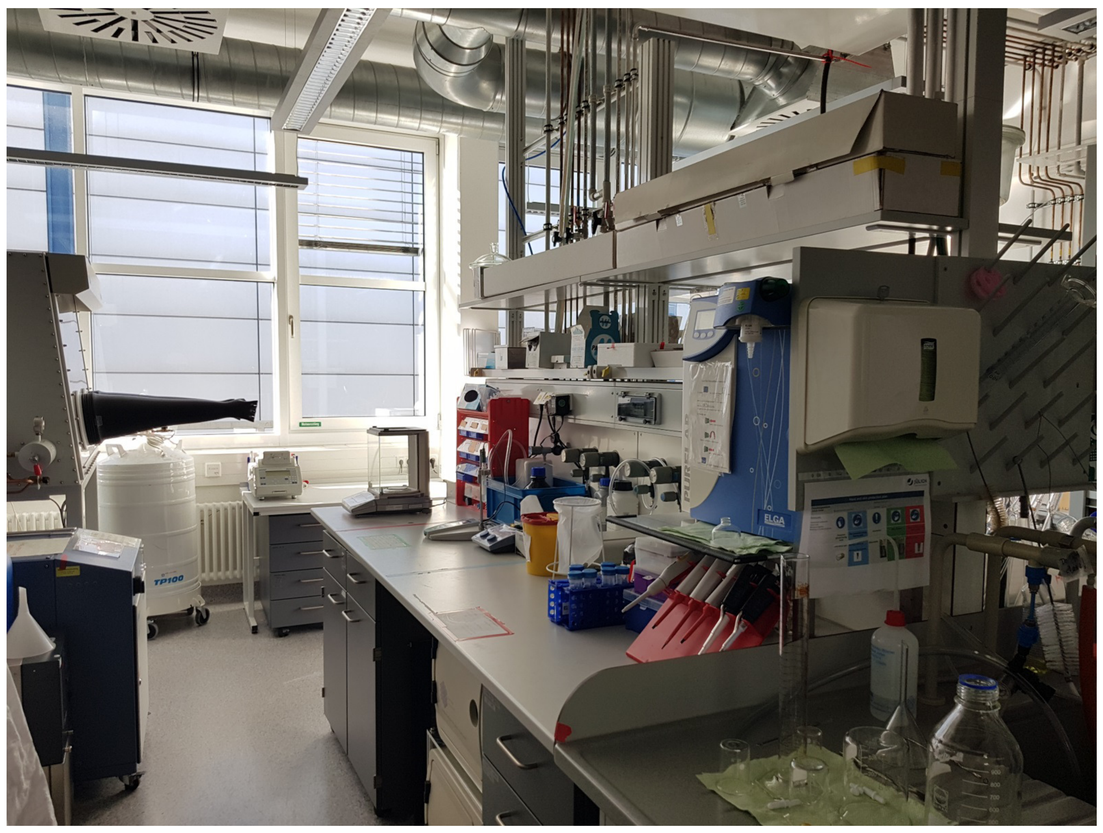
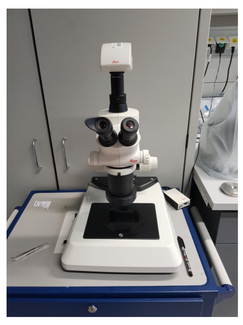
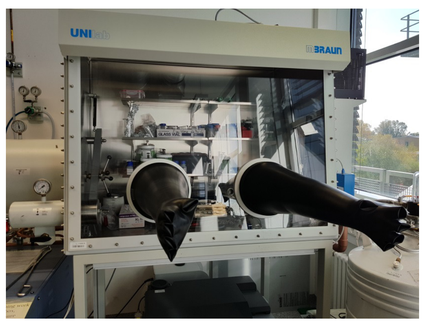


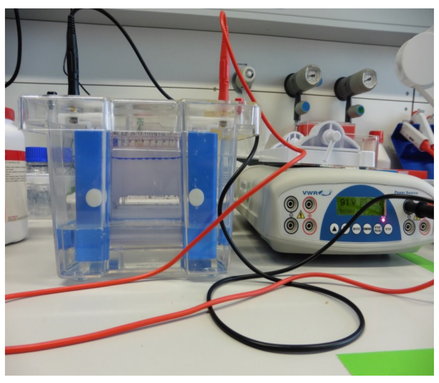
Equipment for Sample Preparation





- Incubator
- Microscope
- pH – Meters
- Glove box
- Centrifuge
- Heating plates
- Mastercycler
- Ultrasonic bath
- analytical balance

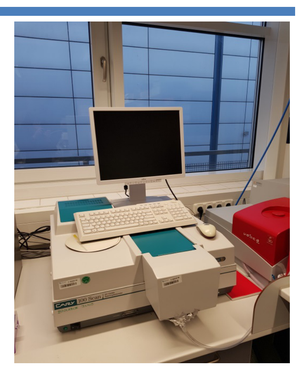
- MQ Water
- Dialysis equipment
- SDS Page equipment
- FPLC
- -80 °C and -20 °C Freezer
- +8 °C Fridge

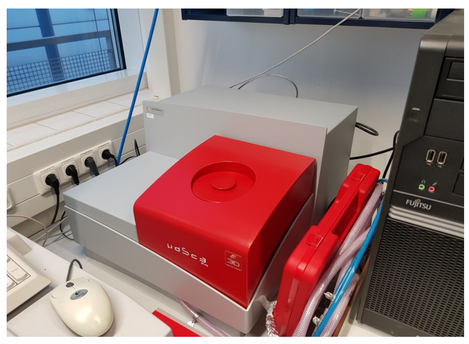


Equipment for Sample Characterization

UV-Vis Cary 100 (Varian)

Measurement of a protein spectrum for the determination of the its concentration. With this instrument temperature control for the sample is provided facilitating temperature dependent spectra.





Highly sensitive Differential Scanning Calorimeter (Setaram)

Used to measure enthalpy and heat capacity changes that arise when chemical reactions or phase transitions occur.

CD Spectrometer J-1100 (Jasco)

Chiroptical spectroscopy is a technique for the characterization of biomolecules, determination of absolute configuration and stereochemical analysis.

ÄKTA FPLC (GE Healthcare Life Science)

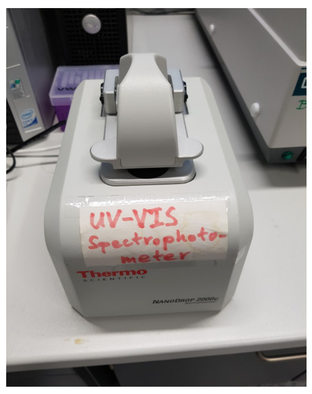
Protein purification with size exclusion chromatography

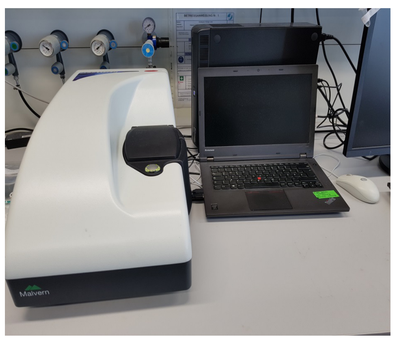
- Conductivity range: 1 µS/cm to 999.9 mS/cm
- Max. pressure (conductivity flow cell): 5 MPa
- Wavelength of filter for Hg lamp: 280 nm

Nano Drop (Thermo Scientific)

Quick UV-Vis Spectrum of a protein solution for the determination of the protein concentration

- min. Sample volume 0,5 µl
- Wavelength Range: 190 – 840 nm
- without calibrating the instrument





Zetasizer Nano S (Malvern Instruments)

Dynamic Light Scattering is used to measure particle size (e. g. aggregation state) of the sample in solution.

- min. Sample volume 12 µl