

INDUSTRY SERVICES

Sample Preparation and Characterisation Core Facility at EMBL Hamburg



Our services





Experimental design, measurements, and data analysis

We can recommend the most suitable biophysical techniques to answer the specific biological questions being investigated.

Experiments are custom designed to meet the needs of individual users, with all measurements performed by our highly skilled staff. Users will receive a final report with the analysed data.

Each step is performed in consultation with the user, who can choose between individual blocks or the full package.

Optional access to our equipment

We provide access to equipment for experienced biophysics users who wish to carry out their experiments themselves. Of course, an experienced member of our team will be there to provide the necessary technical support during experiments.

Initial protein quality control

- Determination of purity
- Protein identification and intact mass determination
- Analysis of monodispersity
- Sample optimization and screening of suitable conditions followed by nanoDSF and DLS



Protein secondary structure determination and temperature stability by infrared and circular dichroism spectroscopy

- FT-IR spectrometer: for soluble proteins and coated nanoparticles
- Far- and near-UV CD analysis

Molecular modelling

Molecular dynamics simulations and analysis of trajectories to investigate structural dynamics of proteins.



Available biophysical techniques

- Isothermal Titration Calorimetry
- Mass spectroscopy
- Circular dichroism
- Differential scanning fluorimetry using fluorescence
- Microscale thermophoresis using label and label free technology
- Dynamic / static light scattering
- Infrared spectroscopy
- Surface plasmon resonance
- Biolayer interferometry
- Time-resolved experiments



In partnership with:





Contact us and we will help you find a solution specifically tailored to your needs!

Phone +49-8998-87566

Email spc@embl-hamburg.de

Address

EMBL Hamburg (c/o DESY) Centre for Structural Systems Biology (CSSB) Sample Preparation and Characterisation (SPC) Core Facility Notkestrasse 85, 22607 Hamburg, Germany

Website www.embl-hamburg.de/services/spc

Industrial Services in Sample Preparation and Characterisation Integrated Core Facility in Structural Biology

Image credits: Kinga Lubowiecka/EMBL and Jörg Müller