Biomolecular NMR

Florian Wieberneit Katharina Jockers Biochemie II AG Biomolekulare NMR florian.wieberneit@rub.de / katharina.jockers@rub.de

Date: November/December 2012 Duration: 2-3 Days

Beside X-ray crystallography, NMR is the second prominent method to determine three dimensional structures of biomolecules. While X-ray has its advantages for the investigation of large molecules (what especially is true for membrane proteins) NMR has the advantage that the conditions during the experiments are very close to the *in vivo* situation. A very new approach is the in-cell NMR, where you actually perform your measurements inside of living cells.

In this labrotation the participants will learn the initial steps of "Biomolecular NMR". This implies sample preparation of isotopically enriched protein samples, some theoretical input concerning NMR techniques, processing of the raw output data form the NMR spectrometer and finally evaluating the processed NMR spectra. The duration of this practical course will be **2-3 days**, depending on the individual interest of the participants. The date should be in **November** or **December 2012**. Exact date on arrangement. The size of the group should not excess **2 persons**.

If you have further questions feel free to contact us via Email (<u>katharina.jockers@rub.de;</u> (<u>florian.weiberneit@rub.de</u>)) or just visit us at NC 5 room 170.