

Sunday, September 6th, 2026

15.00 – 17.00 Check-In (In case you arrive later than 5pm, please let me know per email in advance !)

18.00 - 19.00 Dinner

19:30-19:35 Opening remarks

19.35 – 20.35 **Norbert Müller**: “NMR-what else”

Monday, September 7th, 2026

9.00 - 10.15 **Klaus Zangger**: Introduction to 1D NMR Spectroscopy, including FT, vector model, Bloch equations

10.40 - 11.55 **Lothar Brecker**: Basics of Structure Elucidation by 1D NMR-Spectroscopy

13.00 - 14.00 **Lothar Brecker**: Tutorial: Basics of NMR-Spectroscopy – Theory

The list of exercises and tutorials will be changed according to the needs of the participants – the titles given below should give you a flavor of what is planned !

14.15 - 16.00 **Exercises**:

Group 1: **Harald Maid**: 1D NMR Interpretation

Group 2: **Wolfgang Schöfberger**: From Spectra to Structures (using only 1D NMR)

Group 3: **Klaus Zangger**: Interpretation of 1D NMR Spectra

Maybe having one group with 2D for advanced participants

19.30 - ? Informal get-together with drinks

Tuesday, September 8th, 2026

9.00 - 10.15 **Reinhard Wimmer**: Two- and multidimensional NMR, dynamic NMR, decoupling

10.40 - 11.55 **Lothar Brecker**: Relaxation and Nuclear Overhauser Effect

14:00-15:30: **Norbert Müller**: Description of NMR-Experiments using Product Operator Formalism

16.30 - 17.55 **Norbert Müller**: Phase Cycles and Gradients

19.00 – open end **Exercises**:

Group 1: **Lothar Brecker**: Interpretation of 1D- and 2D-NMR Spectra (Part 1)

Group 2: **Norbert Müller**: Product Operator Formalism

Group 3: **Wolfgang Schöfberger**: From Spectra to Structure

Wednesday, September 9th, 2026

9.00 - 10.15 **Frans Mulder**: NMR Data Processing

10.40 - 11.55 **Julien Orts**: Drug design and protein-ligand interactions

14.00 - 16.00 **Exercises**:

Group 1: **Lothar Brecker**: Interpretation of 1D- and 2D-NMR Spectra (Part 2)

Group 2: **Julien Orts**: Protein-ligand structure determination with NMR

Group 2: **Norbert Müller**: Product Operator Formalism and Phase Cycles

16.15 – 17.45: **Frans Mulder**: Paramagnetic relaxation enhancements

19.00 - 20.00 Meeting of the Working Party "NMR-Spectroscopy" within the Austrian Chemical Society

Thursday, September 10th, 2026

Bio-NMR:

9.00 - 10.15 **Daniel Mathieu**: Assignment Strategies for Peptides and Proteins

10.40 - 11.55 **Mario Schubert**: Assignment Strategies for Oligosaccharides

Small molecules:

9.00 - 10.45 **Wolfgang Robien**: Tutorial: Spectrum Prediction, Structure Verification and fully Automatic Structure Revisions (own laptop strongly recommended)

11.15 - 11.55 **Reinhard Wimmer**: quantitative NMR

13.00 - 14.30 **Exercises**:

Group 1: **Daniel Mathieu**: Exercises to "Assignment Strategies for Peptides and Proteins" on paper

Group 2: **Reinhard Wimmer**: CARA - A Program for Assigning Protein Spectra (own laptop strongly recommended)

Group 3: **Mario Schubert**: Assigning spectra of oligosaccharides (own laptop strongly recommended)

15.00 – 16:30 **Daniel Mathieu**: Tutorial "Fast Data Acquisition in NMR-Spectroscopy"

Friday, September 11th, 2026

Please check out BEFORE 9am! The luggage can be stored in a dedicated place.

Bio-NMR:

9.00 – 10.15: **Reinhard Wimmer**: Metabolomics by NMR - a Rapidly Emerging Field

10.40- 11.55: **Tobias Madl**: Quantitative analysis of (complex) NMR spectra with chemometrics

Small molecules:

9.00 – 10.15: **N.N.**: Solid-state NMR

10.40- 11.55: **N.N.**: Diffusion measurements and chemical reaction monitoring by NMR

12.00 Closing Remarks