

Nuclear magnetic resonance (NMR) spectroscopic analysis

- ^{13}C metabolic flux analysis (MFA) for determination of the flux distribution
- NMR metabolomics with either the traditional binning approach or quantum mechanical spectral analysis (QMSA)
- Monitoring enzymatic (or other) reactions and their kinetics
- NMR analysis of intact living microbial cells, also with high resolution magic angle spinning (HR-MAS) NMR
- In vivo NMR for determination of intra cellular pH
- Identification of novel metabolites and metabolic pathways
- Structural and conformational analysis of oligo and polysaccharides
- Protein–ligand interactions ligand-based NMR methods, like saturation transfer difference (STD) NMR or transferred NOEs
- Structural analysis of polymers, including lignin