

*The following is a list of selected NMR experiments available on our spectrometers. Most of those experiments can be run by trained users (with Facility Manager's or NMR TA's assistance, if necessary) on the **ECS-400 JEOL** spectrometers or in automation mode on the **Bruker 700 MHz AVANCE NEO**. If requested, the experiments can also be run by the NMR Facility personnel.*

Available NMR experiments:

Standard 1D

High-band observed: ^1H , ^{19}F

Low band observed: all NMR-active nuclei from ^{31}P to ^{15}N

Solvent suppression: (H) PRESAT, (H) WET

Relaxation measurements: T1-Measure, T2-Measure

Carbon multiplicity: APT, DEPT

Homonuclear decoupling

Selective 1D: NOESY1D, ROESY1D, TOCSY1D – provide NOE or coupling info from a specific frequency

Homonuclear 2D

COSY – two dimensional J-correlation

gCOSY - two dimensional J-correlation with gradient coherence selection

DQCOSY – two dimensional double-quantum filtered J-correlation

gDQCOSY – two dimensional double-quantum filtered J-correlation with gradient coherence selection

TOCSY – two dimensional total J-correlation spectroscopy for scalar-coupled spin system

zTOCSY - – two dimensional total J-correlation spectroscopy for scalar-coupled spin system with a zero-quantum filter for artifacts suppression

NOESY – two dimensional through-space correlation

ROESY – two dimensional through-space correlation in the rotating frame

Heteronuclear 2D

HETCOR – two dimensional heteronuclear 1-bond correlation with carbon observe

HSQC – two dimensional heteronuclear single-quantum 1-bond J-correlation (with proton observe)

gHSQC - two dimensional heteronuclear single-quantum 1-bond J-correlation with gradient coherence selection

HMQC – two dimensional heteronuclear multiple-quantum 1-bond J-correlation

gHMQC - two dimensional heteronuclear multiple-quantum 1-bond J-correlation correlation with gradient coherence selection

gHMBC – two dimensional heteronuclear multiple-bond J-correlation with gradient coherence selection

CIGAR – two dimensional heteronuclear multiple-bond long-range J-correlation

Diffusion experiments

DOSY – diffusion-ordered spectroscopy