

AVANCE NEO 700 MHz (16.4 T) NMR Spectrometer

AVANCE NEO 700 MHz NMR spectrometer has five RF channels and is equipped with one 5 mm z-gradient quadruple resonance QCI H/C/N/F cryoprobe, 24 position SampleCase for automatic sample loading, and the Bruker Smart Nitrogen Liquefier (BSNL).

The probe includes cooled reamplifiers for ^1H , ^{19}F , ^{13}C and ^2H for superior sensitivities.



Example Applications

- High-throughput drug-based screening by 1D NMR including cryogenically enhanced ^{19}F -NMR, and protein-based screening by 2D HSQC.
- High-resolution, high-sensitivity structural determination and dynamics of proteins, nucleic acids, peptides, and their complexes at atomic resolution under near-physiological conditions.
- Relaxation and diffusion measurements
- Intermolecular interactions, binding interfaces, and binding affinities at atomic level
- Studies of fluorinated agrochemicals and biomolecules
- Exceptional ^{13}C sensitivity for nature products and mass-limited samples

AVANCE II 600 MHz (14.1 T) NMR Spectrometer

AVANCE II 600 MHz NMR spectrometer has four RF channels and is equipped with one 5mm z-gradient TCI cryoprobe, one 5mm z-gradient TXI probe and the BSNL.



Example Applications

- High-sensitivity structural determination and dynamics of biological samples
- Relaxation and diffusion measurements
- Intermolecular interactions, binding interfaces, and binding affinities at atomic level

AVANCE NEO 400 MHz (9.4 T) Spectrometer

AVANCE NEO 400 MHz NMR spectrometer has two RF channels and is equipped with one 5mm z-gradient BBFO SmartProbe, one 5mm z-gradient BBO probe, one 60 position SampleXpress automatic sample changer and the Bruker Nitrogen Liquefier (BNL).



Example Applications

- Qualitative and quantitative analysis
- Chemical reaction monitoring and structure elucidation
- Polymer and material characterisation
- Metabolomics profiling and fingerprinting
- Sample screening