

Present & Future of High-Field NMR

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Recent development in NMR technology now allow NMR researchers to study much larger molecules, and at much lower concentrations than would have been thought possible even a few years ago.

In particular, the development of high field NMR magnets, e.g. 900 MHz, coupled with a variety of new techniques that exploit the new information available at these high magnetic field strengths, are allowing researchers new insights into the structure of large biopolymers.

Other advances include the use of cryogenically cooled probes that give a factor of 3 to 4 increase in sensitivity and now allow an order of magnitude reduction in experimental time, or the use of much more dilute solutions. Currently these cryogenically cooled probes are capable of performing the full range of triple resonance experiments, with high quality water suppression, etc. thus making them the probe of choice for many demanding applications.