The large window of NMR

Magnetic resonance as a whole is a magnificent area of science that combines physics, chemistry, mathematics, informatics and electronics on its bases and a whole lot of different areas on its applications. This is true for all areas of magnetic resonance but mainly for NMR. Having a basic knowledge on NMR is necessary for most scientists today. For example, I would risk saying that modern chemists that do not know NMR have a serious deficiency in their formation.

The most attractive aspects of NMR are the fact that its theoretical basis can be very nicely understood using quantum mechanics and that it can be applied to almost any field in science. Because of those characteristics NMR has given already four Nobel Prizes since its discovery: Felix Bloch and Edward Mills Purcell, in 1952, for their development of new methods for nuclear magnetic precision measurements and discoveries in connection therewith. Richard Ernst, in 1991, for his contributions to the development of the methodology of high resolution nuclear magnetic resonance spectroscopy. Kurt Wüthrich, in 2002, for his development of nuclear magnetic resonance spectroscopy for determining the three-dimensional structure of biological macromolecules in solution. Paul Lauterbur and Sir Peter Mansfield, in 2003, for their discoveries concerning magnetic resonance imaging. I believe that in the near future there will be a fifth Nobel Prize on NMR of solids or on the use of NMR imaging to study the functioning of the brain, or many other possibilities. The scope of NMR is still growing, and I expect that its scientific and technological pertinence will constantly grow for the next centuries.

With all this happening, *Annals of Magnetic Resonance* is also growing, with the actual number being a nice example of the great variety of NMR applications, as it presents articles dealing with polymers science, food science, molecular films, biochemistry of proteins, oil chemistry, inorganic and bioinorganic chemistry.

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