



ANASAZI APPLICATION SERIES

MULTINUCLEAR NMR PHOSPHORUS-31

³¹P PROPERTIES

- 100% natural abundance
- Spin 1/2
- 4700 ppm range of chemical shifts

DID YOU KNOW?

The nuclear properties of ^{31}P make it ideal for NMR spectroscopy.

Workers in the field have been publishing data since the 1950's, so there are extensive literature resources to help solve your research problems.

What can you do with ^{31}P NMR? ^{31}P NMR aids in determining or confirming the structure of phosphorus containing compounds. Try using ^{31}P to study enzyme kinetics, biomolecules, and reaction rates or to determine the purity of phosphorus containing materials. It reveals structural and dynamical information of diverse biological and non-biological systems.

Check out *^{31}P NMR of Adenosine Phosphates* on aainmr.com to see ^{31}P NMR in chemical education.

^{31}P PROPERTIES

SPIN:	$1/2$	FREQ EFT-90:	36.437 MHz
RECEPTIVITY:	377	FREQ EFT-60:	24.292 MHz
GYROMAGNETIC RATIO γ :	17.235 MHzT⁻¹	REFERENCE STANDARD:	H_3PO_4

R.K. Harris et.al. *Pure Appl. Chem.*, Vol. 73, No. 11, 2001

RECOMMENDED LITERATURE

D. M. Grant, R. K. Harris (eds.), *Encyclopedia of Nuclear Magnetic Resonance*, John Wiley & Sons, Inc., New York, 1996

J. Mason (ed.), *Multinuclear NMR*, Plenum Press, New York, 1987

D. G. Gorenstein (ed.), *Phosphorus-31 NMR: Principles and Applications*, American Press, Orlando, Florida, 1984

C. T. Burt (ed.), *Phosphorus NMR in Biology*, CRC Press, Boca Raton, FL, 1987

D. G. Gorenstein, *Prog. NMR Spectrosc.*, 1983, 16, 1

J. C. Tebby (ed.), *Handbook of Phosphorus-31 Nuclear Magnetic Resonance Data*, CRC Press, Boca Raton, FL, 1991