This Week in Science

Editorial
9 Analytical Instrumentation and Measurements

Letters
10 Economic Forecasting: B. LIEBERMAN; M. E. CLARK ■ Indirect Costs: P. E. GRAY ■ Correction: E. P. Reddy

News & Comment
19 AIDS Drug Trials Enter New Age ■ A New Antiviral Drug: Promising or Problematic?
21 AZT Reverses AIDS Dementia in Children ■ AIDS Drugs Remain Unavailable for Kids
23 Hope for AIDS Vaccines
24 DOE Calls in the Labs for Defense Waste Cleanup
26 Decision Time on African Ivory Trade
27 NRC Unveils Agriculture R&D Plan
Abortion: Litmus Test for NIH Director

Research News
28 European Prehistory Gets Even Older ■ When Is a Rock an Artifact?
30 Rifkin Tries to Stop Galileo Launch
31 Japanese Researchers Push Electron Holography
32 Protein Chemists Gain a New Analytical Tool ■ Mass Specs Move in on Protein Sequencers
34 Briefings: Biomedical Dollars and Body Counts ■ Shroud Resurrected ■ A View That Can Take Your Breath Away ■ Harvard Synthesizes Palytoxin Molecule ■ Federal Academic R&D Support Lags

Articles
51 Recent Developments in Analytical Chromatography: M. V. NOVOTNY
64 Electrospray Ionization for Mass Spectrometry of Large Biomolecules: J. B. FENN, M. MANN, C. K. MENG, S. F. WONG, C. M. WHITEHOUSE
71 Some Developments in Nuclear Magnetic Resonance of Solids: B. F. CHMELKA, AND A. PINES

Reports
Motions involved in double rotation, a means to obtain sharp nuclear magnetic resonance (NMR) spectra for quadrupolar nuclei in solid materials. The sample is contained in the inner (orange) cylinder, which rotates ~7000 times per second around an axis inclined at 30.6° to the axis of the outer (blue) cylinder. The outer cylinder, which has a diameter of ~1 centimeter, rotates ~1000 times per second around an axis inclined at 54.7° to the magnetic field. See page 71.

[Computer-generated image courtesy of Lawrence Berkeley Laboratory]