This Week in Science

Editorial

Analytical Instrumentation and Measurements

Letters

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

News & Comment

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

Research News

European Prehistory Gets Even Older ■ When Is a Rock an Artifact?
Rifkin Tries to Stop Galileo Launch
Japanese Researchers Push Electron Holography
Protein Chemists Gain a New Analytical Tool ■ Mass Specs Move in on Protein Sequencers
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

Analytical Instrumentation

Recent Developments in Analytical Chromatography: M. V. NOVOTNY
Microcolumn Separations and the Analysis of Single Cells: R. T. KENNEDY,
M. D. OATES, B. R. COOPER, B. NICKERSON, J. W. JORGENSEN
Electrospray Ionization for Mass Spectrometry of Large Biomolecules: J. B. FENN,
M. MANN, C. K. MENG, S. F. WONG, C. M. WHITEHOUSE
Some Developments in Nuclear Magnetic Resonance of Solids:
B. F. CHMELKA, AND A. PINES

Reports

Scanning Tunneling Microscopy and Nanolithography on Conducting Oxide,
Rb₂MoO₄: E. GARFUNKEL, G. RUDD, D. NOVAK, S. WANG, G. EBERT,
M. GREENBLATT, T. GUSTAFSSON, S. H. GAROFALINI

SCIENCE is published weekly on Friday, except the last week in December, and with an extra issue in March by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and at an additional entry. New combined with The Scientific Monthly® Copyright © 1989 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): $75. Domestic institutional subscription (51 issues): $120. Foreign postage extra: Canada $45, other (surface mail) $45, air mail via Amsterdam $85, First class, airmail, school-year, and student rates on request. Single copy sales: Current issue, $3.50; back issues, $6.00; Biotechnology issue, $6.00 (for postage and handling, add per-copy $0.50 U.S., $1.00 all foreign); Guide to Biotechnology Products and Instruments, $18 (for postage and handling add per copy $1.00 U.S., $1.50 Canada, $2.00 other foreign). Bulk rates on request. Authorization to photocopy material for internal and personal use under circumstances not falling within the fair use provisions of the Copyright Act is granted by AAAS to libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of $1 per copy plus $0.10 per page is paid directly to CCC, 222 Rosewood Drive, Salem, Massachusetts 01970. The identification code for Science is 0036-8075/83 $1 + .10. Change of address: allow 6 weeks, giving old and new addresses and 11-digit account number. Postmaster: Send Form 3579 to Science, P.O. Box 1722, Riverton, NJ 08077. Science is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

SCIENCE, VOL. 246
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]