Editorial

This Week in Science

Letters

Issues in Atmospheric Science: J. I. Brauman


News & Comment

Baltimore Cleared of All Fraud Charges
Soviet Academy Attacked for Being Undemocratic
U.S. Students Flunk Math, Science
Koop Finds Abortion Evidence “Inconclusive”
Reilly Vows Environmental Activism
Africa Is Becoming an Elephant Graveyard
AIDS Paper Raises Red Flag at PNAS
Leakey Reinstated as Museum’s Head
Ames Named Director of N.Y. Academy
Somalia Pledges Human Rights Reforms
NIH: Calling All Alumni
Rifkin Battles Gene Transfer Experiment

Research News

How Fast Can Trees Migrate?
Detecting Mutations in Human Genes
The Ocean Above and the One Below: Is Our View of the Core Obscured by “Clouds”? ■ The Big Picture of the Pacific’s Undulations ■ Did the Ocean Once Run Backward?
New Superconductor Uses Electrons
Superconductivity in a Nickel Oxide

Articles

Issues in Atmospheric Science

Urban Air Pollution: State of the Science: J. H. Seinfeld
Acid Deposition: Unraveling a Regional Phenomenon: S. E. Schwartz
Changing Composition of the Global Stratosphere: M. B. McElroy and R. J. Salawitch
The Greenhouse Effect: Science and Policy: S. H. Schneider

Research Articles

Mechanism of Interleukin-2 Signaling: Mediation of Different Outcomes by a Single Receptor and Transduction Pathway: M. A. Tigges, L. S. Casey, M. E. Koshland

Reports

Elasticity of MgSiO3 in the Perovskite Structure: A. Yeganeh-Haeri, D. J. Weidner, E. Ito
A cross section through Earth's atmosphere over the Pacific Ocean, from the Space Shuttle Challenger. Stratosphere is in blue, troposphere in white and pink. This low sun angle photograph was taken by Bob Crippen, STS-17 Mission Commander, on 10 October 1984 from an altitude of 123 nautical miles. See page 745. [NASA Earth photographs are available from EROS Data Center, Sioux Falls, SD 57198; provided by M. R. Helfert, Code SN15, NASA-Johnson Space Center, Houston, TX 77058]

The Manganese Site of the Photosynthetic Water-Splitting Enzyme: G. N. GEORGE, R. C. PRINCE, S. P. CRAMER

Control of Enzyme Activity by an Engineered Disulfide Bond: M. MATSUMURA and B. W. MATTHEWS

Physiological Constraint on Feeding Behavior: Intestinal Membrane Disaccharidases of the Starling: C. MARTINEZ DEL RIO and B. R. STEVENS


Stretch-Inactivated Ion Channels Coexist with Stretch-Activated Ion Channels: C. E. MORRIS and W. J. SIGURDSON


Purification of Growth Hormone-Specific Transcription Factor GHF-1 Containing Homebox: J.-L. CASTRILLO, M. BÖDMER, M. KARIN

**AAAS Meetings**

818 Fourteenth Annual AAAS Colloquium on Science & Technology Policy ■ Advance Registration and Housing Form

**Book Reviews**

823 The Woman Question in Classical Sociological Theory, reviewed by R. A. NYE ■ A Stranger in Her Native Land, N. O. LURIE ■ Continental Shelves, L. S. INCZE ■ Concepts of Ecosystem Ecology, P. M. VITOUSEK ■ Some Other Books of Interest ■ Books Received

**Products & Materials**
