This Week in Science

Scientists' Roles in AIDS Control: D. Jenness


Proposal to Ban Mobile Missiles Favors Targeting Over Arms Control

U. S.—Soviet Exchanges—Redefining Coexistence

Nuclear Waste Program Faces Political Burial

Briefing: Illinois Wipes Out State Budget for Psychiatric Research ■ Forest Death Showing Up in the United States ■ Chernobyl-Type Accident Deemed Unlikely at Hanford Plant ■ Senate Amendment Seeks Curb on Pork Barrel Funding ■ Biotech Field Test Halted by State Court

Youth Suicide: New Research Focuses on a Growing Social Problem

Briefing: Astronomers Find Their First Embryonic Star

Spotting the Atoms in Grain Boundaries

Neuronal Circuits: An Evolutionary Perspective: J. P. C. Dumont and R. M. Robertson

The Complete Primary Structure of Protein Kinase C—the Major Phorbol Ester Receptor: P. J. Parker, L. Coussens, N. Totty, L. Rhee, S. Young, E. Chen, S. Stabel, M. D. Waterfield, A. Ullrich

Multiple, Distinct Forms of Bovine and Human Protein Kinase C Suggest Diversity in Cellular Signaling Pathways: L. Coussens, P. J. Parker, L. Rhee, T. L. Yang-Feng, E. Chen, M. D. Waterfield, U. Francke, A. Ullrich
COVER Experimental watershed no. 5 in the Hubbard Brook Experimental Forest, in central New Hampshire. This watershed was commercially whole-tree harvested in 1983. Experimental watershed no. 6, the location of a continuous 25-year record of precipitation and stream water chemistry, is to the immediate left of watershed no 5. Massive disturbances, such as whole-tree harvesting, set in motion a series of biogeochemical responses that shape both the long- and short-term behavior of the recovering landscape. See page 867. [Ashton Hallett]

Reports

867 Transport and Loss of Nitrous Oxide in Soil Water After Forest Clear-Cutting: W. B. Bowden and F. H. Bormann


875 Observations of Pentagonally Twinned Precipitate Needles of Germanium in Aluminum: U. Dahlen and K. H. Westmacott

876 A Fossil Grass (Gramineae: Chloridoideae) from the Miocene with Kranz Anatomy: J. R. Thomasson, M. E. Nelson, R. J. Zakrzewski

879 Structure and Diversity of the Human T-Cell Receptor B-Chain Variable Region Genes: J. P. Tillinghast, M. A. Behlke, D. Y. Loh

883 Replication of the B19 Parvovirus in Human Bone Marrow Cell Cultures: K. Ozawa, G. Kurtzman, N. Young

886 Calcium Rises Abruptly and Briefly Throughout the Cell at the Onset of Anaphase: M. Poenie, J. Alderton, R. Steinhardt, R. Tsen

889 Upstream Operators Enhance Repression of the lac Promoter: M. C. Mossing and M. T. Record, Jr.

Products & Materials

893 Incubation Hood ■ Cell and Tissue Adhesive ■ Research Project Database ■ Supercritical Fluid Chromatography ■ Custom DNA and Peptide Synthesis ■ Automated Pipetor ■ Literature

Book Reviews

896 The Dilemmas of an Upright Man, reviewed by D. C. Cassidy ■ The Photochemistry of Atmospheres, R. J. Cicerone ■ Hope for a New Neurology, J. B. Martin ■ Transport and Diffusion across Cell Membranes, C. Tanford ■ Books Received