LETTERS
The Electricity Industry: A. B. Lovins; M. Crawford; C. Whipple

EDITORIAL
Memorandum to Universal Science Foundation

ARTICLES
Seismology of the Sun: J. Christensen-Dalsgaard, D. Gough, J. Toomre
Intrinsic and Extrinsic Factors in Protein Antigenic Structure: J. A. Berzofsky
Sequence and Structure of a Human Glucose Transporter: M. Mueckler et al.

NEWS AND COMMENT
Reagan Announces New ASAT Test
NIH to Award 2200 New Grants
Bomb Scandal Highlights French Testing
U.S., Mexico Pledge Smelter Controls

Briefing; Biotechnology's Movie Debut Worries Industry; Academy's Fusion Study Causes a Stir; British Scientists Urge Supercomputer Program; Ohio State's Telescope Granted 10-Year Reprieve

"Spy Dust" Irritates Diplomats

RESEARCH NEWS
Continental Drift Nearing Certain Detection
An Agenda for Space Physics
WIMP's, Cosmions, and Solar Neutrinos

Nitrogen Fixation Briefing: Fixing Nitrogen Without Molybdenum?; Gene Rearrangements in a Prokaryote
AAAS NEWS

Professional Ethics Group Reports on Spring Meeting; J. B. Silk; The Neurobiology of Motivation and Reward, F. Toates; Geomorphology, P. C. Patton; The Creation of Quantum Mechanics and the Bohr-Pauli Dialogue, L. Wessels; Books Received ................................................................. 958

BOOK REVIEWS

Reproductive Decisions, reviewed by J. B. Silk; The Neurobiology of Motivation and Reward, F. Toates; Geomorphology, P. C. Patton; The Creation of Quantum Mechanics and the Bohr-Pauli Dialogue, L. Wessels; Books Received ................................................................. 961

REPORTS

Rare Earths: Atmospheric Signatures for Oil-Fired Power Plants and Refineries: I. Olmez and G. E. Gordon ................................................................. 966


A 1500-Year Record of Tropical Precipitation in Ice Cores from the Quelccaya Ice Cap, Peru: L. G. Thompson, E. Mosley-Thompson, J. F. Bolzan, B. R. Koci ................................................................. 971

Amplification of a Novel v-erbB-Related Gene in a Human Mammary Carcinoma: C. R. King, M. H. Kraus, S. A. Aaronson ................................................................. 974

The neu Gene: An erbB-Homologous Gene Distinct from and Unlinked to the Gene Encoding the EGF Receptor: A. L. Schechter et al. ................................................................. 977

Isolation and Propagation of a Human Enteric Coronavirus: S. Resta, J. P. Luby, C. R. Rosenfeld, J. D. Siegel ................................................................. 978

Recombinant Vaccinia Virus: Immunization Against Multiple Pathogens: M. E. Perkus, A. Piccini, B. R. Lipinskas, E. Paolotti ................................................................. 981

Growth Regulation of Human Melanocytes: Mitogenic Factors in Extracts of Melanoma, Astrocytoma, and Fibroblast Cell Lines: M. Eisinger, O. Marko, S.-I. Ogata, L. J. Old ................................................................. 984


Tissue Factor Gene Localized to Human Chromosome 1 (1pter→1p21): S. D. Carson, W. M. Henry, T. B. Shows ................................................................. 991

COVER

Power as observed in solar 5-minute oscillations with frequency ν (from about 1.3 mHz at bottom to 5.7 mHz at top and degree l (from about 7 on left to 170 on right). The narrow ridges of concentrated power (shown by the lighter tones) corresponds to theoretically predicted acoustic resonances in the sun. Analysis of observed frequencies permits study of the structure and dynamics of the solar interior. See page 923. [T. L. Duvall, Jr., and J. W. Harvey, National Solar Observatory, P.O. Box 26732, Tucson, Arizona 85726]