LETTERS

EPA Review of Lead Study: H. L. Needleman; P. J. Landrigan and V. N. Houk; C. B. Ernhart

EDITORIAL

Progress Toward Energy Security

ARTICLES

Paleoceanographic Model of Neogene Phosphorite Deposition, U.S. Atlantic Continental Margin: S. R. Riggs

Elemental Tracers of Distant Regional Pollution Aerosols: K. A. Rahn and D. H. Lowenthal

Childhood Leukemia and Fallout from the Nevada Nuclear Tests: C. E. Land, F. W. McKay, S. G. Machado

NEWS AND COMMENT

Polish Science Struggles On

U.S. Exchange with Poland

Seeds of Dissension Sprout at FAO

NIH Starts Review of Training Programs

Briefing: Administration Announces Intent to Leave UNESCO; Richter to Head SLAC; Massachusetts Forbids Use of Impounded Pets in Labs; Regulators Agree on Grain Dust Standards

RESEARCH NEWS

First Parvovirus Linked to Human Disease

The Fine Points of Cloud Seeding

Semisynthetic Enzymes Are New Catalysts

A Step Toward Wholly Synthetic Enzymes

AAAS NEWS

New Project Explores Disability Research; 1983 Election Results; SWARM to Meet at Texas Tech; Dues Changes Scheduled for 1984; Proposals and Resolutions Invited for 1984 Council Meeting; Volunteers Invited for Museum Project; AAAS Travelers

BOARD OF DIRECTORS

E. MARGARET BURIDGE
Retiring President, Chairman

JEAN COWEN
President, Publisher

C. T. HUTCHINSON
Executive Director

STEVEN S. GOLDBERG
Publisher

ROBERT W. BERLINER
President-Elect

LAWRENCE BOGDAD
Vice President

NANCY L. GONZALEZ
Vice President

WALTER E. MAISSEY
Secretary

CHAIRMEN AND SECRETARIES OF AAAS SECTIONS

MATHEMATICS (A)
R. J. B. Barks
Lynn Arthur Steen

PHYSICS (B)
James A. Krumhansl
Rolf M. Sinclair

CHEMISTRY (C)
Murray Goodman
William L. Jolly

ASTRONOMY (D)
Paul W. Hodge
Donat G. Wenzel

PHYSICAL SCIENCES (E)
Kenneth J. Arrow
David L. Sils

HISTORY AND PHILOSOPHY OF SCIENCE (F)
Daniel J. Kevles
David L. Hull

ENGINEERING (M)
Eric A. Walker
W. Edward Lear

SOCIAL, ECONOMIC, AND POLITICAL SCIENCES (K)
Lee G. Cronn
David S. Kaiser

INFORMATION, COMPUTING, AND COMMUNICATION (T)
Robert Lee Charland
Madeline M. Henderson

EDUCATION (Q)
Hans O. Andersen
Roger G. Oltjer

DENTISTRY (R)
Irving G. Finkel
Herold M. Fulmer

PHARMACEUTICAL SCIENCES (S)
Stanley A. Kaplan
David A. Krapo

AAAS NEWS

New Project Explores Disability Research; 1983 Election Results; SWARM to Meet at Texas Tech; Dues Changes Scheduled for 1984; Proposals and Resolutions Invited for 1984 Council Meeting; Volunteers Invited for Museum Project; AAAS Travelers

First Parvovirus Linked to Human Disease

The Fine Points of Cloud Seeding

Semisynthetic Enzymes Are New Catalysts

A Step Toward Wholly Synthetic Enzymes

SCIENCE is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Second-class postage (publication No. 404460) paid at Washington, D.C., and at an additional entry. New combined with The Scientific Monthly: Copyright © 1984 by the American Association for the Advancement of Science. Domestic individual membership and subscription (51 issues): $53. Domestic institutional subscription (51 issues): $65. Foreign postage extra: Canada $24; other (surface mail) $27, air-surface via Amsterdam $65. First-class, airmail, school-year, and student rates on request. Single copies $2.50 ($3 by mail); back issues $3 ($3.50 by mail). Biological Science issues: $5 ($5.50 by mail). Classroom rates on request. Change of address: allow 6 weeks, giving old and new addresses and seven-digit account number. Authorization to photocopy material for internal or 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, 27 Congress Street, Salem, Massachusetts 01970. The identification code for Science is 0036-8075/84 $11.00. Postmaster: Send Form 3579 to Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Science is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.
BOOK REVIEWS

The Great Tolbachik Fissure Eruption, reviewed by D. A. Swanson; Structure and Dynamics, T. L. James; Reckoners, T. M. Smith; Inheritance of Susceptibility to Cancer in Man, J. J. Mulvihill; Advances in Herpetology and Evolutionary Biology, W. R. Heyer

REPORTS

A Search for Iridium Abundance Anomalies at Two Late Cambrian Biomere Boundaries in Western Utah: C. J. Orth et al.

Seismic Detection of the Summit Magma Complex of Kilauea Volcano, Hawaii: C. H. Thurber

Calcium-Promoted Protein Phosphorylation in Plants: K. Veluthambi and B. W. Poovaiah

Nicotine Is Chemotactic for Neutrophils and Enhances Neutrophil Responsiveness to Chemotactic Peptides: N. Totti III et al.

Heterogeneity of Normal Human Diploid Fibroblasts: Isolation and Characterization of One Phenotype: S. Bordin, R. C. Page, A. S. Narayanan

Mapping of the Human Blym-1 Transforming Gene Activated in Burkitt Lymphomas to Chromosome 1: C. C. Morton et al.


Endogenous Regulation of Macrophage Proliferative Expansion by Colony-Stimulating Factor–Induced Interferon: R. N. Moore et al.

Spectrographic Representation of Globular Protein Breathing Motions: C. A. Pickover

Microbial Transformation of Sulfate in Forest Soils: W. T. Swank, J. W. Fitzgerald, J. T. Ash

Light-Induced Phosphorylation of Retina-Specific Polypeptides of Drosophila in vivo: H. Matsumoto and W. L. Pak

Task-Relevant Late Positive Component of the Auditory Event–Related Potential in Monkeys Resembles P300 in Humans: D. L. Arthur and A. Starr

Opioid Peptides Mediate the Suppressive Effect of Stress on Natural Killer Cell Cytotoxicity: Y. Shavit et al.


COVER

Idealized cycle of Neogene sedimentation on the U.S. Atlantic continental margin; deposition is a direct response to fluctuations in (top left) sea levels, (top right) climates, and (bottom left) continental shelf water masses. The first three stages reflect warming climates through a sea-level transgression associated with deglaciation and increased interaction of the Gulf Stream with the configuration of the continental margin, the accentuated nutrient-rich waters, and phosphate deposition. Stage four (bottom right) reflects cold climates and sea-level low-stands of glacial maximums. Phosphate deposition = P, dark blue dots; carbonate deposition = C, white dots; and terrigenous deposition = T, brown dots. See page 123. [Painting by Whiting M. Toler, Washington, North Carolina]