LETTERS
A Poet's "Education": C. A. Lave; Occupational Cancer Risk: D. P. Rall; Hypothesis Testing: L. G. Humphreys; M. Susser and Z. A. Stein; Women and Science Editorials: R. S. Albin; Alaska Lands Bill: E. Cook; S. Luttich; Collector's Issue?: T. Ng 224

EDITORIAL
Counseling the Young: L. W. Sells 231

ARTICLES
Contemporary Frontiers in Physics: V. F. Weisskopf 240

NEWS AND COMMENT
With Shorter Stays for Legislators, Bigger Staffs, Who'll Run Congress? 245
Battelle Forecasts Healthy Growth for R & D in 1979 246
An Industry Study of TSACA: How to Achieve Credibility? 247
Heroin Study at Georgetown 249
Hughes Medical "Institute" Breaks Quarter Century of Silence 250
Briefing: Medical Students at Record High; Carter Orders Environmental Review of U.S. Projects Abroad; Physicians Sued for Failing to Give Genetic Counseling 251
Policy Review Boosts Solar as a Near-Term Energy Option 252

RESEARCH NEWS
Crown Gall Disease: Nature as Genetic Engineer 254
East Coast Mystery Booms: Mystery Gone But Booms Linger On 256

BOARD OF DIRECTORS
EDWARD E. DAVID, JR. President, Chairman
KENNETH E. BOULDING President
FREDERICK MOSTELLER President-Elect
ELOISE E. CLARK President-Elect
MARTIN M. CUMMINGS E. CLARK
RENEE C. FOX

ASTRONOMY (D)
PETER S. COLE
DONALD G. WENTZEL

CHAIRMEN AND SECRETARIES OF AAAS SECTIONS
MATHEMATICS (A)
GARRETT BARKHOF
RONALD GRAHAM

PHYSICS (B)
ARTHUR L. SCHAWLOW
ROLF M. SINCLAIR

CHEMISTRY (C)
FRED BASATO
WILLIAM L. JOLLY

ASTRONOMY (D)
PETER S. COLE
DONALD G. WENTZEL

PSYCHOLOGY (L)
FRANCES K. GRAHAM
MEREDITH P. CRAWFORD

SOCIAL AND ECONOMIC SCIENCES (K)
DAVID L. SILLS
GILLIAN LINDT

HISTORY AND PHILOSOPHY OF SCIENCE (L)
MEVIN-KRANTZBERG
DIANA L. HALL

ENGINEERING (M)
DANIEL C. DRUCKER
DONALD E. MARLOWE

EDUCATION (Q)
FLETCHER G. WATSON
JAMES T. ROBINSON

DENTISTRY (R)
CARL J. WILKOP, JR.
HAROLD M. FULLER

PHARMACEUTICAL SCIENCES (S)
SAMUEL EKIN
ROBERT A. WISE

INFORMATION, COMPUTING, AND COMMUNICATION (T)
MARY E. CORNING
MADELINE M. HENDERSON

DIVISIONS
D. B. HAWKINS
PRESIDENT

KEITH B. MOTHER
EXECUTIVE SECRETARY

ALASKA DIVISION
GRANT L. LEWIS
PRESIDENT

PACIFIC DIVISION
ALAN A. LEVINTON
SECRETARY-TRUSTEE

SOUTHWESTERN AND ROCKY MOUNTAIN
JAMES W. O'LEARY
PRESIDENT
BOOK REVIEWS
Cancer in China, reviewed by G. N. Stemmerman; Explorations in Ethnoarchaeology, B. Hayden; Cognitive Processes in Comprehension, J. M. Mandler; Estuarine Transport Processes, R. T. Cheng;
Books Received ................................................. 257

REPORTS
Activation Volume for Creep in the Upper Mantle: J. V. Ross, H. G. Ave’Lallemant, N. L. Carter .................................................. 261
Neutron Scattering of Solution-Grown Polymer Crystals: Molecular Dimensions Are Insensitive to Molecular Weight: D. M. Sadler and A. Keller ............................................. 263
In vitro Model for Stretch-Induced Hypertrophy of Skeletal Muscle: H. Vandenburgh and S. Kaufman ................................................. 265
Phycomycetes: Modification of Spiral Growth after Mechanical Conditioning of the Cell Wall: R. I. Gamow and B. Bottger .................................................. 268
Harmonic-Sensitive Neurons in the Auditory Cortex of the Mustache Bat: N. Suga, W. E. O’Nell, T. Manabe .............................................. 270
Evidence Against a Role of Acetaldehyde in Electroencephalographic Signs of Ethanol-Induced Intoxication: J. A. Mikeska and W. R. Klemm .............................................. 276
Stimulation of Human Periaqueductal Gray for Pain Relief Increases Immunoreactive β-Endorphin in Ventricular Fluid: Y. Hosobuchi et al. .............................................. 279
Intracerebral Adrenocorticotropin Hormone Mediates Novelty-Induced Grooming in the Rat: A. J. Dunn, E. J. Green, R. L. Isaacson .............................................. 281
Accumulation of a Tetrahydroisoquinoline in Phenylketonuria: J. M. Lasala and C. J. Coscia .............................................. 283

PRODUCTS AND MATERIALS
Programmable Sequencer; Gas Chromatograph; Microscope Photometer; pH Meter; Sendai Vaccine; Carboxylic Acid Analyzer; Microanalytic Balance; Literature .............................................. 285

COVER
Artist’s concept of distribution problems brought about by decreasing availability of petroleum. Petroleum resources are finite, and this will eventually place restrictions on end uses. See page 233. [Stephen Shepherd, Silver Spring, Maryland]