LETTERS
Equivalent Megatons: C. E. Thomas; R. J. Smith; Reactor Decommissioning: C. C. Burwell and A. M. Weinberg; Nonrandom Bubbles: C. F. Bohren; Animals in the Laboratory: D. M. Bowden; Cost of New Journals: J. E. Heath

ARTICLES
Probing the Structure of the Deep Continental Crust: J. Oliver

EDITORIAL
Scientific Instrumentation: W. A. Fowler and D. C. Shapero

NEWS AND COMMENT
The Senate's Plan for Nuclear Waste
National Academy of Sciences Elects New Members
NIH Developing Policy on Misconduct
France Readies New Research Law
Slave Labor on Campus: The Unpaid Postdoc
Briefing: NAS Calls for Arms Talks; USDA Retreats on Gypsy Moth Front; Edwards Defends Budget Cuts at DOE; Peace Academy Gaining Momentum; GAO Points Up Military Use of Shuttle

BOOK REVIEWS
Conceptions of Ether, reviewed by K. L. Caneva; The Ammonites, P. D. Ward; Foundations of Northeast Archaeology, B. J. Bourque; Comparative Color Vision, G. S. Wasserman; Books Received

REPORTS
Microscale Patchiness of Nutrients in Plankton Communities: J. T. Lehman and D. Scavia

REVIEWS
Conceptions of Ether, reviewed by K. L. Caneva; The Ammonites, P. D. Ward; Foundations of Northeast Archaeology, B. J. Bourque; Comparative Color Vision, G. S. Wasserman; Books Received

RESEARCH NEWS
Biology Is Not Postage Stamp Collecting
Gene Family Controls a Snail's Egg Laying
Exploring Plant Resistance to Insects
Cancer Cell Genes Linked to Viral onc Cells

BOARD OF DIRECTORS
D. ALLAN BROMLEY Retiring President, Chairman
E. MARGARET BURIDGE President
ANNA J. HARRISON President-Elect
LAWRENCE BORGORAD EDWARD E. DAVID, JR.
NANCIE L. GONZALEZ DAVID A. HAMBURG

CHAIRMEN AND SECRETARIES OF AAAS SECTIONS
MATHEMATICS (A)
Felix E. Browder
Lynn Arthur Stein

PHYSICS (B)
Donald G. Langenberg
Rolf M. Sinclair

SOCIAL, ECONOMIC, AND POLITICAL SCIENCES (K)
Thomas C. Schelling
David L. Sils

DENTISTRY (R)
Paul Goldhaber
Harold M. Fullmer

PHARMACEUTICAL SCIENCES (S)
Louis A. Luzzi
Robert A. Wiley

EDUCATION (Q)
Elaine W. Leibveter
Roger G. Oelad

HISTORY AND PHILOSOPHY OF SCIENCE (LI ENGINEERING (M)
Erwin N. Hiebert
Don E. Tull

INFORMATION, COMPUTING, AND COMMUNICATION (T)
Marilyn C. Braiken
Madeline M. Henderson

DIVISIONS
ALASKA DIVISION

PACIFIC DIVISION

SOUTHWESTERN AND ROCKY MOUNTAIN DIVISION

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. 484460) paid at Washington, D.C., and at an additional entry. Copyright © 1982 by the American Association for the Advancement of Science. Domestic individual membership and subscription ($1 issues): $48. Domestic institutional subscription ($1 issues): $85. Foreign postage extra: Canada $24, other (surface mail) $37, air-surface via Amsterdam $55. First class, airmail, school-year, and student rates on request. Single copies $2.50 ($3 by mail); back issues $3 ($3.50 by mail); classroom rates on request. Change of address: allow 6 weeks, giving old and new addresses and seven-digit account number. 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.
Residual Calcium Ions Depress Activation of Calcium-Dependent Current:
R. Eckert and D. Ewald ........................................ 730
Aircraft Monitoring of Surface Carbon Dioxide Exchange: R. L. Desjardins et al. 733
Autoradiographic Evidence for a Calcitonin Receptor on Testicular Leydig Cells:
A. B. Chausmer, M. D. Stevens, C. Severn .................................. 735
Secretion of Newly Taken-Up Ascorbic Acid by Adrenomedullary Chromaffin
Cells: A. J. Daniels et al. ........................................ 737
The Human Genes for S-Adenosylhomocysteine Hydrolase and Adenosine
Deaminase Are Syntenic on Chromosome 20: M. S. Hershfield and
U. Francke ......................................................... 739
Adenosine Triphosphate Synthesis Coupled to K+ Influx in Mitochondria:
K. W. Kinnally and H. Tedeschi ......................................... 742
Cellular Mechanism of Neuronal Synchronization in Epilepsy: R. D. Traub and
R. K. S. Wong ................................................... 745
New Dopaminergic and Indoleamine-Accumulating Cells in the Growth Zone
of Goldfish Retinas After Neurotoxic Destruction: K. Negishi, T. Teranishi,
S. Kato ............................................................ 748
Identification of the Constant Chromosome Regions Involved in Human
Hematologic Malignant Disease: J. D. Rowley .................................... 749
Suppression of Reflex Postural Tonus: A Role of Peripheral Inhibition in Insects:
S. N. Zill and D. T. Moran ........................................ 751
Is Sperm Cheap? Limited Male Fertility and Female Choice in the Lemon Tetra
(Pisces, Characidae): K. Nakatsuru and D. L. Kramer ...................... 753
Interdigitation of Contralateral and Ipsilateral Columnar Projections to Frontal
Association Cortex in Primates: P. S. Goldman-Rakic and M. L. Schwartz ... 755
Lipofuscin: Resolution of Discrepant Fluorescence Data: G. E. Eldred et al. ..... 757
Early Chronic Low-Level Methylmercury Poisoning in Monkeys Impairs Spatial
Vision: D. C. Rice and S. G. Gilbert .................................... 759
Technical Comments: Global Carbon Monoxide Fluxes: Inappropriate
Measurement Procedures: W. Seiler and R. Conrad; G. W. Bartholomew and
M. Alexander ...................................................... 761

Calorimeter; Hybridoma Screening Kits; Cell-Specific Lymphokine; Sample
Processor for Liquid Scintillation Counting; Aquatic Environment Monitor;
Microcomputer and Pulsed Nuclear Magnetic Resonance Analyzer; Protein
Sequencing Solvents; Plotter; Literature ........................................ 766

American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects
are the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility,
the effectiveness of science in the promotion of human welfare, and to increase public understanding and
of the importance and promise of the methods of science in human progress.

Flying at 50 meters per second, low-flying aircraft are equipped with recently
developed analytical sensors which make possible an accurate and rapid
estimate of crop growth, health, and
ultimate yield over large areas. Calcula-
tions are based on the measurement of
carbon dioxide and vertical wind
speed at 10 to 30 meters above the
growing crop. See page 733. [Research
Program Service, Research Branch,
Agriculture Canada, Ottawa, Ontario,
Canada]