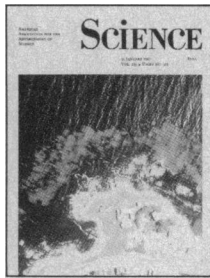


	403	This Week in <i>Science</i>
Editorial	405	Techniques and Strategies of Verification
Policy Forum	406	Verification and Arms Control: M. EIMER AND S. DRELL
Letters	415	Earth's Early Atmosphere: K. M. TOWE; J. F. KASTING AND T. P. ACKERMAN ■ Novelty of "Supply-Side Ecology"; C. M. YOUNG ■ U.S. Management and Productivity: T. P. VOGL; F. BLOCK; M. N. BAILY
News & Comment	422	Integrity of Research Papers Questioned
	423	EPA Finds Western Lakes Free of Acid Pollution, But Vulnerable
	424	Academy Panel Blasts U.S. Export Controls
	425	Shuttle Plan Faulted
	426	A Crisis in Space Research
	429	Science Sections in U.S. Newspapers Increase Dramatically in Past 2 Years
Research News	430	Biological Issues in Schizophrenia
	431	A Top Priority at NIMH
	433	A Geophysics Potpourri in San Francisco: Getting a Full View of the Earth's Innards ■ U.S.-Soviet Seismic Monitoring Advances ■ Ocean Hot Springs Similar Around Globe ■ How Much Drying from a Greenhouse Warming?
	436	Dietary Fat-Breast Cancer Link Questioned
Articles	437	Weather Regimes: The Challenge in Extended-Range Forecasting: B. REINHOLD
	442	Angiogenic Factors: J. FOLKMAN AND M. KLAGSBRUN
Research Articles	448	Atomic Structure of Thymidylate Synthase: Target for Rational Drug Design: L. W. HARDY, J. S. FINER-MOORE, W. R. MONTFORT, M. O. JONES, D. V. SANTI, R. M. STROUD
Reports	456	In Situ Detection of β -Galactosidase in Lenses of Transgenic Mice with a γ -Crystallin/ <i>lacZ</i> Gene: D. R. GORING, J. ROSSANT, S. CLAPOFF, M. L. BREITMAN, L.-C. TSUI
	458	Crystallographic R Factor Refinement by Molecular Dynamics: A. T. BRÜNGER, J. KURIYAN, M. KARPLUS

- SCIENCE is published weekly on Friday, except the last week in December, and with an extra issue in February by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and at an additional entry. Now combined with *The Scientific Monthly* © Copyright © 1987 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): \$65. Domestic institutional subscription (51 issues): \$98. Foreign postage extra: Canada \$32, 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 \$4 (\$4.50 by mail); Biotechnology issue, \$5.50 (\$6 by mail); classroom rates on request; Guide to Biotechnology Products and Instruments \$16 (\$17 by mail). **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, 21 Congress Street, Salem, Massachusetts 01970. The identification code for *Science* is 0036-8075/83 \$1 + .10. **Postmaster:** Send Form 3579 to *Science*, 1333 H Street, NW, Washington, DC 20005. *Science* is indexed in the *Reader's Guide to Periodical Literature* and in several specialized indexes.
- The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.



COVER Aerial photograph of the kelp forest fringing the rocky intertidal zone at Hopkins Marine Station on Monterey Bay, California. Infrared film renders the kelps red. Fish, living in this kelp forest, affect recruitment to the adjacent intertidal barnacle population showing that the dynamics of the two communities are coupled. See page 479. [Slide courtesy of the California Department of Fish and Game; print by R. Gilbert]

- 460 Thunderstorms: An Important Mechanism in the Transport of Air Pollutants: R. R. DICKERSON, G. J. HUFFMAN, W. T. LUKE, L. J. NUNNERMACKER, K. E. PICKERING, A. C. D. LESLIE, C. G. LINDSEY, W. G. N. SLINN *et al.*
- 465 Validity Tests of the Mixing-Length Theory of Deep Convection: K. L. CHAN AND S. SOFIA
- 467 The Glucocorticoid Receptor Protein Binds to Transfer RNA: M. ALI AND W. V. VEDECKIS
- 470 Brain Barrier Tissues: End Organs for Atriopeptins: L. STEARDO AND J. A. NATHANSON
- 473 Macrophage Cytotoxicity: Role for L-Arginine Deiminase and Imino Nitrogen Oxidation to Nitrite: J. B. HIBBS, JR., R. R. TAINTOR, Z. VAVRIN
- 476 The Cytoskeletal Protein Vinculin Contains Transformation-Sensitive, Covalently Bound Lipid: P. BURN AND M. M. BURGER
- 479 Fish in Offshore Kelp Forests Affect Recruitment to Intertidal Barnacle Populations: S. D. GAINES AND J. ROUGHGARDEN
- 481 Mapping Human Brain Monoamine Oxidase A and B with ¹¹C-Labeled Suicide Inactivators and PET: J. S. FOWLER, R. R. MACGREGOR, A. P. WOLF, C. D. ARNETT, S. L. DEWEY, D. SCHLYER, D. CHRISTMAN, J. LOGAN, *et al.*

AAAS Meetings

- 486 Call for Symposium Proposals, 1988 AAAS Annual Meeting

Book Reviews

- 490 Controversy in Victorian Geology, *reviewed by* W. MONTGOMERY ■ Misunderstanding Media, G. WISE ■ Blueschists and Eclogites, W. G. ERNST ■ Synapses, Circuits, and the Beginnings of Memory, T. J. TEYLER ■ Ecology and Natural History of Desert Lizards, J. TRAVIS ■ Reprints of Books Previously Reviewed ■ Books Received

Products & Materials

- 495 Sample Preparation Systems ■ Analog-to-Digital Converter ■ Electrochemical Detector ■ Bench-Scale Fermenter ■ Automated 2-D Gel Analysis System ■ Laptop Computer ■ Literature

Board of Directors

Gerard Piel
*Retiring President,
Chairman*

Lawrence Bogorad
President

Sheila E. Widnall
President-elect

Robert McC. Adams
Robert W. Berliner
Floyd E. Bloom
Mary E. Clutter
Mildred S. Dresselhaus
Donald N. Langenberg
Dorothy Nelkin
Linda S. Wilson

William T. Golden
Treasurer

William D. Carey
Executive Officer

Editorial Board

Elizabeth E. Bailey
David Baltimore
William F. Brinkman
Philip E. Converse
Joseph L. Goldstein
James D. Idol, Jr.
Leon Knopoff
Seymour Lipset
Walter Massey
Oliver E. Nelson
David V. Ragone
David M. Raup
Vera C. Rubin
Larry L. Smarr
Solomon H. Snyder
Robert M. Solow
James D. Watson

Board of Reviewing Editors

John Abelson
Qais Al-Awqati
James P. Allison
Don L. Anderson
Elizabeth H. Blackburn
Floyd E. Bloom
Charles R. Cantor
James H. Clark
Bruce F. Eldridge
Stanley Falkow
Theodore H. Geballe
Roger I. M. Glass
Stephen P. Goff
Robert B. Goldberg

Corey S. Goodman
Richard M. Held
Gloria Heppner
Eric F. Johnson
Konrad B. Krauskopf
I. Robert Lehman
Karl L. Magleby
Joseph B. Martin
John C. McGiff
Alton Meister
Mortimer Mishkin
Peter Olson
Gordon H. Orians
John S. Pearce

Yeshayau Pocker
Jean Paul Revel
James E. Rothman
Thomas C. Schelling
Ronald H. Schwartz
Stephen M. Schwartz
Otto T. Solbrig
Robert T. N. Tjian
Virginia Trimble
Geerat J. Vermeij
Martin G. Weigert
Harold Weintraub
Irving L. Weissman
George M. Whitesides
Owen N. Witte
William B. Wood

Science

235 (4787)

Science **235** (4787), 416a-495.

ARTICLE TOOLS

<http://science.sciencemag.org/content/235/4787>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 1987 The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works.