This Week in Science

Plant Gene Expression Center


NIH casts its gaze northward; the White House nixes a NASA budget plan; etc.

The Disputed Birth of Buckyballs

France Set to Reopen AIDS Pact?

New Journal Will Publish Without Paper

Why Bigger Isn't Better in Earth Observation

Allocating the Pain in Energy Science

Healy Uses Wit to Woo NIHers

Another Sex Survey Bites the Dust

Briefings: Shuttle Souvenirs ■ Ocean-Slick Yardstick ■ AIDS Parley Site Set ■ California v. Genetic Discrimination ■ Lasker Awards Return ■ Indirect Directions ■ Tists in the Hood ■ New Awards ■ Rating University R&D ■ Money for Brains

Grand Gamble on Fruit Fly Learning

Signs of Wet Weather in the Polar Mesosphere?

Will "DNA Chip" Speed Genome Initiative?

Report Nixes "Geritol" Fix for Global Warming

Space May Be Bad for Your Health

Lightning Found on Venus at Last?

Functional Subunit Structure of Voltage-Gated Calcium Channels: W. A. Caterall


The Galileo Venus Encounter: T. V. Johnson, C. M. Yeates, R. Young, J. Dunne


SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, 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 additional mailing offices. Copyright © 1991 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): $82 ($47 allocated to subscription). Domestic institutional subscription (51 issues): $150. Foreign postage extra: Mexico, Caribbean (surface mail) $50; Other countries (air assist delivery) $96. First class, airmail, student and emeritus rates on request. Canadian rates with GST available upon request. GST #1254 88122. Change of address: allow 6 weeks, giving old and new addresses and 11-digit account number. Postmaster: Send change of address to Science, P.O. Box 2353, Marion, OH 43305-2353. Single copy sales: $6.00 per issue prepaid includes surface postage; Guide to Biotechnology Products and Instruments, $20. Bulk rates on request. Authorization to photocopy material for internal or personal use under circumstances not falling within the fair use provisions of the Copyright Act is granted 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 0036-8075/91 $1.00. 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 objectives 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, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.
Cover  Galileo images of Venus showing the global structure of cloud patterns at two different depths in the upper cloud layers. Cloud patterns at the top of the main sulfurous acid haze layer of Venus and downwind of the subsolar region are seen in the violet region of the spectrum (top). The atmospheric flow is from right to left. An infrared image (bottom) shows cloud patterns at lower altitude. Pseudocolor has been used to enhance contrast. See page 1531. Other Galileo reports pages 1516 to 1550. [Photographs courtesy of the National Aeronautics and Space Administration and the National Optical Astronomy Observatories]


1550  Transcriptional Repression Mediated by the WTI Wilms Tumor Gene Product: S. L. Madden, D. M. Cook, J. F. Morris, A. Gashler, V. S. Sukhatme, F. J. Rauscher III

1553  The Roles of the Subunits in the Function of the Calcium Channel: D. Singer, M. Bie, I. Lotan, V. Flockerzi, F. Hofmann, N. Dascal

1557  Resistance to ddI and Sensitivity to AZT Induced by a Mutation in HIV-1 Reverse Transcriptase: M. H. St. Clair, J. L. Martin, G. Tudor-Williams, M. C. Bach, C. L. Vavro, D. M. King, P. Kellam, S. D. Kemp, B. A. Larder

Inside AAAS


Book Reviews

1564  Man and Beast Revisited, reviewed by M. Konner • Science, Ideology, and the Media, R. E. Fancher • Books Received

Products & Materials

1575  Cross-Linker • Nonglass Culture Vessel • Protein Homology Software • Statistical Software • Monoclonal Antibodies • Diode Array HPLC Detector • Plasmic Map Software • Literature

Author Index for Volume 253 is on pages 1601-1610

Board of Directors
Donald N. Langenberg
Retiring President, Chairman
Leon M. Lederman
President
F. Sherwood Rowland
President-elect
Mary Ellen Avery
Francesco J. Ayala
Eugene H. Cola-Robles
Robert A. Frosch
Joseph G. Gavin, Jr.
Florence P. Haseltine
Jeanne M. Shreve
Warren M. Washington
William T. Golden
Treasurer
Richard S. Nicholson
Executive Officer

Editorial Board
Charles J. Amten
Elizabeth E. Bailey
David Baltimore
William F. Brinkman
E. Margaret Burbidge
Pierre-Gilles de Gennes
Joseph Goldstein
Mary L. Good
Harry B. Gray
John J. Hopfield
F. Clark Howel
Paul A. Marks
Yasutomi Nishizuka
Helen M. Ranney
Robert M. Schol
Edward C. Stone
James D. Watson

Board of Reviewing Editors
John Abelesen
Frederick W. Alt
Don L. Anderson
Stephen J. Benkovic
David E. Bloom
Floyd E. Bloom
Henry R. Bourne
James J. Bull
Kathryn Calame
Charles R. Cantor
C. Thomas Caskey
Dennis W. Choi
Ralph J. Cicerone
John M. Coffin
Bruce F. Eldridge
Paul T. Englund
Fredric S. Fay

Board of Reviewing Editors
Douglas T. Fearon
Harry A. Fozard
Victor R. Fuchs
Theodore H. Geabale
Margaret J. Geller
Roger I. M. Glass
Stephen P. Goff
Corey S. Goodman
Stephen J. Gould
Ira Herskowitz
Eric F. Johnson
Stephen M. Kosslyn
Korad B. Krauskopf
Charles S. Leavings III
Harvey F. Lodish
Richard Losick
Anthony R. Means
Norten Menkin
Roger A. Nicoll
William H. Orme-Johnson III

Stuart L. Pinn
Yeshayau Pocker
Dennis A. Powers
Ralph C. Quastico
Erik Russi
Thomas W. Schenone
Ronald H. Schwartz
Terrance J. Seijnowski
Thomas A. Steltz
Robert T. N. Tijan
Emil R. Urnusue
Gerael J. Vermeij
Bert Vogelstein
Harold Weintraub
Zena Werb
George M. Whitesides
Owen N. Witte
William B. Wood
Keith Yamamoto

27 SEPTEMBER 1991