1551  This Week in Science

Editorial

1553  WILLIAM D. CAREY

Perspective

1555  Why Recycle Plutonium?: D. ALBRIGHT AND H. FEIVESON

Letters

1561  NIH Fraud Guidelines: M. R. ROSEN AND B. F. HOFFMAN; G. J. GALASSO ■

News & Comment

1563  How Safe Savannah River Reactors?
1564  OTA: Property Right, Donor Consent Factors Cloud “Gifts” of Human Tissue
1565  Shake-up Announced for Soviet Academy
1566  NIMH Finds a Case of “Serious Misconduct”
1567  CERN Panel Backs New Accelerator
   A $2.5-Billion Acid Rain Plan
1568  Company Offers to Buy NASA a Rocket
   U.S., Soviets Renew an Exchange
   Tax Relief Sought for Oil Industry
1569  NAE Elects New Members
1570  Briefing: Frank Press Re-elected President of NAS ■ FDA Approves AZT ■
Technology Study Gets Under Way ■ Chapter 11 for USA, Inc. ■
Science Wins Olive Branch ■ Soviet Patents

Research News

1571  A Superconductivity Happening
1572  Progress on Fermat’s Famous Math Problem
1574  Brain Damage by AIDS Under Active Study ■ Candidate AIDS Vaccine

Articles

1600  Uncertainties in Building a Strategic Defense: C. A. ZRAKET
1607  Water-Quality Trends in the Nation’s Rivers: R. A. SMITH, R. B. ALEXANDER,
M. G. WOLMAN
1616  Variable Number of Tandem Repeat (VNTR) Markers for Human Gene Mapping: Y. NAKAMURA, M. LEIPPERT, P. O’CONNELL, R. WOLFE, T. HOLM,
M. CULVER, C. MARTIN, E. FUJIMOTO, M. HOFF, E. KUMLIN, R. WHITE

Research Articles

1622  Oncogenesis of the Lens in Transgenic Mice: K. A. MAHAN,
A. B. CHEPELINSKY, J. S. KHIPLAN, P. A. OVERBEEK, J. PIATIGORSKY,
H. WESTPHAL

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): $96. 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 $.10 per page is paid directly to CCC, 21 Congress Street, Salem, Massachusetts 01970. The identification code for Science is 0036-8075/87 $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: Phreatic explosion occurred on 29 December 1982 at Yugama Crater Lake, Kusatsu-Shirane volcano, Japan. The variation of polythionates in the lake water is a good indicator for predicting impending eruption of the volcano. See page 1633. [Masayuki Shimoya, Tsumakoi High School, Gunma, Japan]

Reports
1631 Solar Irradiance Change and Special Longitudes Due to r-Modes: C. L. Wolff and J. R. Hickey
1633 Correlation of Volcanic Activity with Sulfur Oxygenian Speciation in a Crater Lake: B. Takano
1638 Human Lipoprotein Lipase Complementary DNA Sequence: K. L. Wion, T. G. Kirchgessner, A. J. Lusis, M. C. Schotz, R. M. Lawn
1641 Ubiquitin Is a Component of Paired Helical Filaments in Alzheimer’s Disease: H. Mori, J. Kondo, Y. Ihara
1644 Regional Changes in Calcium Underlying Contraction of Single Smooth Muscle Cells: D. A. Williams, P. L. Becker, F. S. Fay
1651 Polypeptide Sequences Essential for RNA Recognition by an Enzyme: L. Regan, J. Bowie, P. Schimmel
1654 Electrical Responses of Eggs to Acrosomal Protein Similar to Those Induced by Sperm: M. Gould and J. L. Stephano

Book Reviews
1681 Cosmic Debris, reviewed by U. B. Marvin — The Hippocampus, L. Nadel — Fire Ants and Leaf-Cutting Ants, N. F. Carlin — Prehistory in the Pacific Islands, R. L. Kirk — Books Received

Products & Materials

Author Index for Volume 235 is found on pages i–x
Information for Contributors is found on pages xi–xii

27 MARCH 1987
TABLE OF CONTENTS 1549
Editor's Summary

This copy is for your personal, non-commercial use only.

Article Tools
Visit the online version of this article to access the personalization and article tools:
http://science.sciencemag.org/content/235/4796

Permissions
Obtain information about reproducing this article:
http://www.sciencemag.org/about/permissions.dtl