



SCIENCE NEWS®

The Weekly Newsmagazine of Science

Science Service Publication
Volume 152, Nos. 25 & 26, December 20 & 27, 1997

Thomas Peter Bennett	Publisher
Julie Ann Miller	Editor
Blair Burns Potter	Managing Editor
Dan Skripkar	Production/Design Director
David Lindley	Associate Editor
Janet Raloff	Senior Editor Environment/Policy
Ivares Peterson	Online Editor Mathematics/Physics
Bruce Bower	Behavioral Sciences
Richard Monastersky	Internship Coordinator Earth Science
Kathleen Fackelmann, Nathan Seppa	Biomedicine
Ron Cowen	Astronomy
Christine Mlot, Susan Milius	Life Sciences
John Travis	Biology
Corinna Wu	Chemistry/ Materials Science
Sid Perkins	Science Writer Intern
Meghan Mitchell	Editorial Assistant
Gwendolyn Gillespie	Editorial Secretary
Cait Anthony	Books/Advertising
Donald R. Harless	Business Manager

SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$49.50 for 1 year or \$88.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, 1719 N Street, N.W., Washington, D.C. 20036. Preferred Periodicals postage paid at Washington, D.C., and additional mailing office. POSTMASTER: Send address changes to SCIENCE NEWS, P.O. Box 1925, Marion, Ohio 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided. Copyright © 1997 by Science Service. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited. For permission to photocopy articles, contact Copyright Clearance Center at 508-750-8400 (phone) or 508-750-4470 (fax).

Editorial, Business, and Advertising Offices
1719 N St. N.W., Washington, D.C. 20036
202-785-2255; scinews@sciserv.org

Subscription Department
P.O. Box 1925, Marion, Ohio 43305
For new subscriptions and customer service, call 1-800-552-4412.

Visit SCIENCE NEWS ONLINE for special features, columns, and references.
<http://www.sciencenews.org>
Visit Science Service on the Web at <http://www.sciserv.org>

This Week

- 388 Nations Draft Kyoto Climate Treaty
- 388 Electric diode tunes in to plastic
- 389 Small comet theory faces barrage from foes
- 389 Even fraternal twins may share cancer risk
- 390 Deepening insight into solar outbursts
- 390 Let's repeat: Mutation gums up brain cells
- 391 Fine-tuned plant response to insect attack
- 391 Teens show sex-linked pull to cigarettes

Research Notes

- 396 Earth Science
- 410 Environment

Articles

- 394 The Art of Scientific Photography

Cover: These containers hold nanocrystals of cadmium selenide suspended in a liquid. Exposed to ultraviolet light, the crystals fluoresce in different colors, depending on particle size. Such imaging is an important part of an effort to enhance the role of visualization in scientific research. (Photograph ©Felice Frankel)

- 397 Science Safari in Cyberspace
- 400 The Deep Blue Sleep

Departments

- 387 Letters
- 402 Science News of the Year
- 410 Semi-Annual Index



SCIENCE NEWS is published by Science Service, a nonprofit corporation founded in 1921. The mission of Science Service is to advance the understanding and appreciation of science through publications and educational programs.

Board of Trustees — *Chairman*, Dudley Herschbach; *Vice Chairman*, Gerald F. Tape; *Secretary*, David A. Goslin; *Treasurer*, Willis Harlow Shapley; Robert W. Fri; Samuel Gubins; J. David Hann; Shirley M. Malcom; Eve L. Menger; C. Bradley Moore; Ben Patrusky; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe; *Chairman Emeritus*, Glenn T. Seaborg; *Honorary Trustees*, Edward Bliss Jr.; Bowen C. Dees; Elena O. Nightingale; John Troan.

Officers—*President*, Thomas Peter Bennett; *Vice President and Business Manager*, Donald R. Harless.

Letters

Northern exposure?

"Full report of nuclear test fallout released" (SN: 10/11/97, p. 231) contains a map showing the fallout patterns in the 1950s and 1960s. Neither those who generated the diagram nor those who wrote the article seemed the slightest bit aware of the fact that cities such as Calgary and Regina are quite close to areas where the highest fallout was measured.

It's nice to know our neighbors to the south are so concerned about our well-being.

Mark McBratney
Montreal, Canada

The National Cancer Institute study of fallout was mandated by U.S. law; therefore, its scope did not extend north of the U.S. border. Health officials on both sides of the border are aware that fallout from those tests traveled into Canada. At this time, however, there is no plan to

conduct a similar study for Canadian residents, says Dorothy Meyerhof, a division chief in the Radiation Protection Bureau of Health Canada in Ottawa. A preliminary review of health data for the areas of Canada likely to be affected revealed thyroid cancer rates at or below the national average, she adds.

—S. Perkins

Cultural mix and self-enhancement

Does the study described in "My Culture, My Self" (SN: 10/18/97, p. 248) account for the "sources" of the populations? In contrast to the U.S. population, the Japanese people are indigenous. The United States blends many cultures, and the struggles immigrants went through are also culture-bending.

Carmen Lorenz
Walla Walla, Wash.

Further studies are needed to examine the extent to which various U.S. populations engage in self-enhancement. Cultural psychologists suspect that self-enhancement repre-

sents a core mental tactic of most native U.S. citizens, regardless of their ethnic background.

—B. Bower

Plastics and health

Your report on a study measuring bisphenol A (BPA) release from polycarbonate under conditions so severe that polycarbonate hydrolysis was observed ("Lacing food with an estrogen mimic," SN: 10/18/97, p. 255) neglects to quote the study's most relevant implication for human health: "When whole polycarbonate baby bottles were tested by using typical fill conditions and less severe, normal use conditions, neither BPA migration nor hydrolysis was observed (limit of detection was 2 ng/ml [nanograms per milliliter])." This detection limit is equivalent to 2 parts per billion in foods or beverages.

Hugh Patrick Toner
Vice President
The Society of the Plastics Industry, Inc.
Washington, D.C.

