

# SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication  
Volume 125, No. 13, March 31, 1984

E. G. Sherburne Jr. Publisher  
Joel Greenberg Editor  
Dietrick E. Thomsen Senior Editor/  
Physical Sciences  
Joanne Silberner Managing Editor  
Bruce Bower Behavioral Sciences  
Deborah Franklin Biomedicine  
Linda Garmon Chemistry  
Cheryl Simon Earth Sciences  
Julie Ann Miller Life Sciences  
Janet Raloff, Ivars Peterson Policy/Technology  
Jonathan Eberhart Space Sciences  
Wendy McCarren Assistant to the Editor  
Stefi Weisburd Science Writer Intern  
Jane M. Livermore Books  
Donald R. Harless Business Manager  
Schicago Associates Advertising  
Fred Dieffenbach, Sales Director  
1515 Broadway, New York, N.Y. 10036

Copyright © 1984 by Science Service, Inc.,  
Editorial and Business Offices,  
1719 N St., N.W., Washington, D. C. 20036.  
Republication of any portion of SCIENCE NEWS  
without written permission of the publisher is  
prohibited.

Subscription Department  
231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50;  
3 yrs., \$67.00. (Foreign postage \$5.00 additional per  
year.) Change of address: Four to six weeks' notice is  
required. Please state exactly how magazine is to be  
addressed. Include zip code. For new subscriptions  
only call (1) 800-247-2160. Printed in U.S.A. Second  
class postage paid at Washington, D. C. Title  
registered as trademark U. S. and Canadian Patent  
Offices. Published every Saturday by SCIENCE  
SERVICE, Inc. 1719 N St., N.W., Washington, D. C.  
20036. (202-785-2255)  
ISSN 0036-8423

## Letters

### Naming volts

Hey! Is anybody using the term proton-volts ("800-GeV protons," SN: 3/3/84, p. 135)? After all, this is a study of protonics, er, nucleonics. Not electronics.

Also—have any studies been made of colliding proton-electron beams? At high energies, the two may interact differently, instead of forming hydrogen.

C.A.

No address given

Proton-volt or electron-volt is exactly the same amount. A single name avoids confusion. An apparatus to collide protons and electrons is about to be constructed at Hamburg. — D.E. Thomsen

### Money, money

As a reader of your magazine who lives outside the scientific community, I find some distress in the inordinate amount of space given to the subject of funding, or even more simply—money.

MARCH 31, 1984

## This Week

- 196 Technology for the Tropics
- 196 New flippers fail turtle
- 197 Fight ozone with a breath of vitamin E?
- 197 Mauna Loa fire curtains
- 197 New findings establish impact occurred
- 198 Ancient bones: From simians to *sapiens*
- 198 Hemoglobin bridge boosts O<sub>2</sub> delivery
- 199 New fluoride study
- 199 Restrictions in DOD-university contracts

## Research Notes

- 200 Technology
- 200 Behavior
- 201 Biomedicine
- 201 Biology

## Articles

- 202 Mathematical Shuffling
- 204 Life Through the Microscope

Cover: A portrait of a dog tick is one example of the power and appeal of scanning electron microscopy. The bloodsucking arachnid, magnified here 120-fold, is part of a new traveling exhibit on microscopes and the images they produce. (Micrograph from Smithsonian Institution National Museum of Natural History)



## Departments

- 195 Letters
- 206 Books

**Science Service** Institution for the public understanding of science founded 1921; a nonprofit corporation.  
Board of Trustees—President, Glenn T. Seaborg; Vice President, Gerald F. Tape; Treasurer, Willis Harlow Shapley; Secretary, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Milton Harris; Hilleary F. Hoskinson; Elizabeth F. Neufeld; O. W. Riegel; H. Guyford Stever; John Troan; Deborah P. Wolfe.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

It may be of vital interest to the success-minded technician, but is it science "news"?

Robert B. Conrad  
Anaheim, Calif.

### Perturbing Neptune

Your article "Mass Extinctions and Sister Stars" (SN: 2/25/84, p. 116) postulating that Sol has a dim sister star that periodically sends comets showering toward earth was very interesting. It made me think of another astronomical search in our solar neighborhood. We've long sought the cause of Neptune's orbital irregularities in the form of a tenth planet. Perhaps we should look for an object that would fit both criteria—to be able to nudge the comets as well as to perturb Neptune's orbit.

James Ricklef  
Los Angeles, Calif.

### Quasar qualifier

In the article "Gravitational Refractions" (SN: 3/10/84, p. 154) the quasar designation "1175+088" should read "1115+088."

Alan Hirshfeld  
Cambridge, Mass.

### Drug usage

In reading your article "Teen drug use drops, but problem remains" (SN: 2/18/84, p. 103), I have noticed the researchers' failure to address the possibility that students have become reluctant to admit drug abuse, even anonymously. The recent seizure of confidential school records by drug enforcement officials in New York shows their fears may be well founded. An increase in drug enforcement should produce a decrease in the number of people willing to admit drug abuse.

Johnston says the responses to the latest survey reveal "a greater caution about the regular use of marijuana." I suggest the survey may actually reveal a greater caution about admitting drug abuse.

Name withheld  
New York, N.Y.

Correction: The photo of the praying mantis and milkweed bug (SN: 3/17/84, p. 167) was taken by James Sternburg, an entomologist at the University of Illinois at Urbana-Champaign.

195