

This Week

- 292 Edible Compound Mimics Insulin
Nathan Seppa
- 292 Altered buckyballs go straight to bone
Corinna Wu
- 293 Pollutant waits to smite salmon at sea
Janet Raloff
- 293 Dam the bacteria, drugs and vaccines ahead
John Travis
- 294 Seattle's soft spot boosts power of quakes
Richard Monastersky
- 294 Land mines may set off little buzzers
Peter Weiss
- 295 Fossil may expose humanity's hybrid roots
Bruce Bower
- 295 Knotting weakens a polymer molecule
Ivars Peterson

Articles

- 296 Ready, Aim, Squirt
With atom lasers, physicists seek better measurements and new ways to manipulate matter
Peter Weiss

Letters

A matter of degrees

The article "The sun also writhes" (SN: 3/27/99, p. 200) says that I believe data collected from an erupting solar plasma ejected into space have shown that prominences within it remain at their typical temperatures. To the contrary, I believe the data show that prominence material typically gets ionized to coronal temperatures as it passes out through the corona into the solar wind, although exceptional cases to the contrary occasionally occur.

Jack Gosling
Los Alamos, N.M.

Milkweed forever!

In "Good and bad news for migrating monarchs" (SN: 1/2/99, p. 5), Orley Taylor suggests that the survival of monarch butterflies is under imminent threat because their primary food, milkweed, may soon be "wiped out" due to herbicide-resistant, bioengineered crops. Please!

Milkweed has already been largely "wiped out" on cropland, yet it is a prolific and

resilient plant. I, too, share your concern for conservation of our nation's biodiversity, but blatant fearmongering only serves to undercut legitimate conservation concerns.

Alex Avery
Churchville, Va.

That's life in the soup

The article "Life's first scalding steps" (SN: 1/9/99, p. 24) indicated a debate about life beginning in one place and in one type of environment. Is it not more likely that parts of life were concocted here and other parts were concocted there and they combined elsewhere? A wonderful thing about having a "soup" as big as the oceans is that there are a great variety of environments and efficient means to transport products between them.

M.G. Stapelbroek
Santa Ana, Calif.

Tube tallies

Your recent article "Carbon tubes pumped up with hydrogen" (SN: 1/16/99, p. 47) is a bit misleading with respect to our work. First, the 0.01 percent weight (wt%) value in our work refers to the total amount of hydrogen

absorbed in impure samples. The gravimetric storage density for pure nanotubes was determined to be between 5 and 10 wt%. These materials should be able to achieve the 6.5 wt% value required for a fuel-cell-powered vehicle. Also, I must note that we did not employ pressurized hydrogen gas, as your article states.

Michael J. Heben
National Renewable Energy Laboratory
Golden, Colo.

These observations are correct. To make a fair comparison, the carbon nanotube pellets most recently tested at the University of Freiburg take up 1.95 percent hydrogen by weight, which translates into about 4 wt% for a pure sample. The two results, therefore, are "relatively consistent," says Freiburg's Christoph Nützenadel.

—C. Wu

Send communications to:
Editor, SCIENCE NEWS
1719 N Street, N.W.
Washington, D.C. 20036
or scinews@sciserv.org
All letters subject to editing.

- 300 Spider Solidarity Forever
Social spiders create the communes of the arachnid world
Laura Helmuth

Research Notes

- 302 Biomedicine
Most cancers less common, less deadly
Portrait of the artery as a motivator
- 303 Computers
Looking beyond the Melissa virus
Developing digital fluency
- 303 Physics
Electrons hop; current and heat drop
Hole pattern hinders ground ripples

Departments

- 290 Books
- 291 Letters



Cover: Most spiders live as loners. In a few dozen social species, however, spiders band together to share nests, hunt, and even care for young. These social spiders are introducing new twists into lines of thought on evolution and kin recognition. **Page 300** (Photo: © George W. Uetz)

Visit SCIENCE NEWS ONLINE for special features, columns, and references.

<http://www.sciencenews.org>