

SCIENCE NEWS®

A Science Service Publication
Vol. 109/May 15, 1976/No. 20
Incorporating Science News Letter

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COVER: From such tiny experimental solar cells as this one, produced at Bell Laboratories, may someday come giant arrays to convert light directly into useable power. Such cells are rapidly being made cheaper and will be more efficient. Further down the road another class of solar-electric devices—photoelectrochemical cells—may provide even cheaper power. See p. 316.

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Editorial and Business Offices
1719 N Street, N.W.
Washington, D.C. 20036

Subscription Department
231 West Center Street
Marion, Ohio 43302

Subscription rate: 1 yr., \$10; 2 yrs., \$18; 3 yrs., \$25. (Add \$2 a year for Canada and Mexico, \$3 for all other countries.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code.

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). Cable SCIENSERV. Telex 64227.

MAY 15, 1976

LETTERS

Taconite in water

My ego continues to be hurt first by SCIENCE (10/4/74), and now by your article "Science and Safety: 'Acceptable' risk" (SN: 4/24/76, p. 263). Your article repeats the error of SCIENCE in reporting that colloids of taconite from the Reserve Mining Co. were first reported in 1973, also that these colloids cannot be seen under a light microscope, but only by electron microscopy. I was the first senior research scientist at the National Water Quality Laboratory in Duluth, Minn., from 1965 to 1967, and I did find and did report taconite colloids in the size range from 0.5 to 3.0 micrometers by using a high-resolution light microscope with 1,000 × magnification from both Lake Superior and the Duluth drinking water.

I returned to Duluth to a federal public hearing in May 1969, where my printed statement clearly shows that I first reported these tiny colloids in the range of 0.5 to 3.0 micrometers. I also had these colloids checked by X-ray diffraction, which more than confirmed my earlier findings, by showing that I had missed many of the tiniest colloids that could not be seen with my high-resolution light microscope. I first found these colloids in 1958, while identifying diatoms in plankton samples from the Duluth drinking water when I was in charge of the plankton program of the National Water Quality Network at the Taft Sanitary Engineering Center in Cincinnati.

Louis G. Williams
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University of Alabama
University, Ala.

Teller short-sighted?

In reference to your article "Teller on Technology in America: Success to Uncertainty" (SN: 4/17/76, p. 253), I am amazed by the apparent contradictions Dr. Teller espouses. He includes sinking of nuclear wastes in the sea as one of four "good ways" of disposal, yet also sees the oceans as a much-needed future source of food.

Is the science/technology Dr. Teller praises really capable of creating totally secure and unbreakable containers able to withstand the tremendous pressures and corrosive qualities of the ocean for periods extending hundreds of thousands of years? If not, would his science/technology accept the responsibility for radiation contami-

nation of the "main possible source of additional food" for the populations of the future?

Such short-sightedness on the part of one of the country's leading scientists is extremely disheartening.

William Burger
Palmetto, Calif.

Insects to control microbes

Microorganisms have been used to control insects. For example, *Bacillus thuringiensis* is employed to destroy lepidoptera such as the alfalfa caterpillar and the cabbage butterfly. Now, a turnabout may be on the horizon: the use of insects to destroy microbes. The approach I am proposing has not, to the best of my knowledge, been tried. But it would seem to merit exploration, and if successful, exploitation.

Peter Albersheim, Barbara Valent, Jurgen Ebel and Arthur R. Ayers, of the University of Colorado, at the most recent meeting of the American Chemical Society (SN: 4/10/76, p. 230), reported that the polysaccharide beta-glucan, found on the surface of fungi, and similar elicitors found on the surfaces of other microorganisms stimulate plants to produce protective substances, phytoalexins.

A problem exists at the present time because the phytoalexin-inducing substances must be introduced into the plant by making incisions.

Phytophagous insects with piercing-sucking mouth parts, such as the Hemiptera (Hemiptera and Homoptera) may provide the answer. Before feeding, these insects inject fluids into their foods. If these insects could be made to incorporate the phytoalexin-inducers in their to-be-injected digestive fluids and inject them into the target plant when they feed, or attempt to feed, a whole new technique for the control of microbes pathogenic to plants would be available.

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ACS charter

This is indeed the centennial year of the American Chemical Society. But its chartering by Congress did not occur till 1937, 61 years later than stated in SN: 4/10/76, p. 230!

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