

The Weekly Newsmagazine of Science

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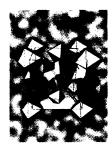
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**COVET:** The crystal structure of zirconium tungstate allows the compound to shrink when heated. Unbonded oxygen atoms (blue) give the components room to twist, making the crystal collapse in on itself. **Page 120** (Illustration: Lucent Technologies)

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# **Letters**

Vague on the plague?

How scientific is the statement in "Taking a bite out of the plague" (SN: 11/14/98, p. 316) that the Black Death killed 75 percent of Europe's population? The standard estimate is more like one-third.

Roland Stromberg Fair Point, Wis.

The first sweep of the Black Death did kill an estimated one-third of the population. Subsequent epidemics over the next 100 years increased that total to 75 percent, according to the texts I consulted.

—J. Travis

That burning sensation

As soon as I saw the article "The ice that burns" (SN: 11/14/98, p. 312), I was struck with a sense of déjà vu. Today's euphoria over methane hydrate is identical to that which surrounded oil shale (the rock that burns) and tar sands a couple of decades ago. Just because these materials are sources of natural gas or oil does not mean they are sources of energy.

Billions of American tax dollars were poured into the unsuccessful search for a practical way of extracting oil from shale. The method was not economically feasible. Almost all of this money could have been saved if the investigators had recognized the fact that the universe operates on an energy economy instead of a monetary one. After all, the criterion that separates good and bad extraction methods of any potential energy resource is not the cost of extraction but rather the amount of energy needed to accomplish it.

J. Richard Guadagno Paonia, Colo.

Nuts to everyone

"High-fat and healthful" (SN: 11/21/98, p. 328) exposes the belief that nuts harm people as a nutty idea. Such fears are not new. There was an early English superstition, as reported in H. Friend's *Flowers and Flower Lore* (1884), that maintained, "Many nits [nuts], many pits [graves]." In other words, a bountiful year of nuts presages an abundance of human deaths. Perhaps the

present anxiety over the shelled fruits will not be a tough nut to crack?

William J. Scheick Austin, Texas

### The carbon till

"Where has all the carbon gone?" (SN: 11/21/98, p. 332) reports differing ideas on where and how much carbon is being sequestered on the North American continent. I think researchers will find more carbon sequestered in agricultural lands than anticipated. Economics and technology are driving conservation tillage. I have read that mold-board plowing (complete turning) releases 10 times more carbon than does burning stubble.

\*\*Ken Lehmann Forrest, Ill.\*\*

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

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