

The Weekly Newsmagazine of Science

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COVET: One way to fight conflagrations such as this is to make objects out of materials that don't burn. Researchers are now developing fire-resistant plastics for use in airplane cabins and other environments where fire safety is paramount. **Page 40**

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Letters

In defense of physics

Rustum Roy has taken the physics community to task for the use of "extremely primitive theories" and the failure to create new materials ("Letters," SN: 9/26/98, p. 195). Roy is perhaps ignoring the contributions of the theoreticians [John] Bardeen, [Walter] Brattain, and [William] Shockley, whose theories—and they were primitive—gave rise to the transistor and subsequent technology. Or, Roy should consider a modern periodic table, which has about 10 percent more entries than would have appeared when he was born, all based on primitive theories developed in the first half of the 20th century.

It would be possible to extend this demonstration ad nauseam. However, it would be much more productive for all of us to educate the nonscientific public as to the value and contributions of scientific research, as Roy has so wisely counseled in the past.

Richard A. Craig West Richland, Wash.

The trouble with trash data

Is it possible that the height of waves of the July 17 tsunami in Papua New Guinea, as estimated by debris hanging from the tops of palm trees ("Waves of Death," SN: 10/3/98, p. 221), might be off by a factor of two due to water bending the trees almost in half and collecting debris at their lowest elevation?

Gary D. Scherer Encinitas. Calif.

It is possible that the trees collected debris while they were bent over, says Costas Synolakis, who studied the tsunami. The reverse is also possible, he says. If the wave was breaking, as eyewitness reports suggest, the motion of the wave might have driven debris below

CORRECTION

"The Ice that Burns" (SN: 11/14/98, p. 312) stated that the U.S. Geological Survey estimates that 200 trillion cubic feet of natural gas are stored as methane hydrates beneath U.S. waters. The correct estimate is 200,000 trillion cubic feet.

the water surface, where it then snagged on a submerged tree. Because of such uncertainties, researchers prefer to measure tsunamis by mapping how far inland the waves penetrate. In this case, however, the researchers could not safely do this. —R. Monastersky

Pills that put fat on

I am interested in your article on leptin ("Hormone links malnutrition and immunity," SN: 8/29/98, p. 135). Many people get fat as the result of taking prescription drugs. I gained 50 pounds from prescription drugs I took over 20 years ago. Do these drugs interfere with leptin? Can the leptin research help with this problem? latrogenic fat is extremely hard to get off!

Elin Larson Purcellville, Va.

Since leptin is such a recently discovered hormone, it's still unclear what prescription drugs might influence leptin's production. —J. Travis

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