

confirmed carbon date placing the shroud in the medieval time frame has nothing to do with determining the nature of the image on the cloth. It is true that if the shroud is dated to the 14th century then the most likely mode of rendering such images would be painting. But the nature of the image is still highly controversial, and further research is called for to settle the matter.

Paul C. Maloney  
General Projects Director  
Association of Scientists and Scholars  
International for the Shroud of Turin, Ltd.  
Quakertown, Pa.

If, in fact, the shroud was forged by a 14th-century artist, that in itself represents a mystery perhaps far deeper than if the shroud is authentic. For how could a man 631 years ago create a computer-perfect image with the primitive knowledge and technology available at that time? I refer to the observation that the dorsal/ventral symmetry of the image is within angstrom accuracy and the image density is perfectly proportional to the distance the shroud once laid from the body contained within it.

Barry E. Taff  
Los Angeles, Calif.

The Shroud of Turin Research Team uncovered facts during their exhaustive investigation in the late 1970s and early '80s strongly suggesting that the image in the shroud was not the result of painted pigments, and that the image was bilaterally

symmetrical — i.e., three dimensional — and possibly the result of flash photolysis or a "light burn." Are we to ignore all the previous data collected and rely totally on the evidence of radiocarbon dating, which is known for its inaccuracy? One might also give thought to the possibility that whatever energetic process produced the flash photolytic "burn" in the cloth might have dramatically altered both the atomic and molecular structure of the linen, thus resulting in faulty or artifactual carbon-14 readings.

Lawrence Brooks  
Los Angeles, Calif.

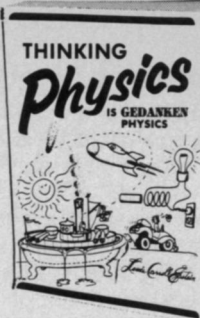
**Concentration clarification**

In "Aspirin fells flu viruses *in vitro*" (SN: 10/1/88, p.218), you state that "as the concentration increased, viral activity gradually decreased until, at 1.8 grams, aspirin completely prevented the synthesis. . . ." My question is 1.8 grams/*what*? The amount specified is not a concentration but a quantity.

David A. Mathews  
Cullowhee, N.C.

In laboratory tests, aspirin completely prevented the synthesis of two key viral proteins when present in the viral growth medium at a 10-millimolar concentration — about eight times the concentration of aspirin one might expect to find in the blood of an adult who had taken two 500-milligram aspirins four times within 24 hours.

While this concentration is too high to be clinically safe, it remains to be seen, the researchers note, whether a lower dose might prove equally effective in vivo. — the editors



**THINKING Physics**  
IS GEDANKEN PHYSICS


**GIVE YOUR KIDS A TASTE OF ANALYTIC THINKING**  
via illustrated questions and explanations.

"Thinking Physics is fascinating to dip into, even for the informed physicist." NEW SCIENTIST

**BACKWATER**

The main current in a creek is flowing to the right. The small current behind the rock is flowing to the

a) right  
b) left  
c) neither way



SAMPLE PAGE... Answer and explanation on following page.

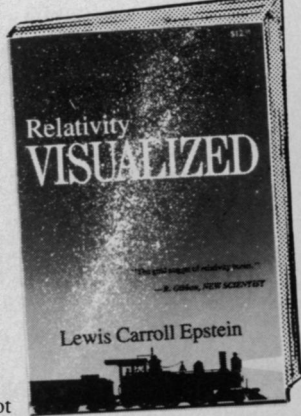
"Explanations deal with concepts and don't require mathematical aptitude. The best explanations I have ever seen. Students will love it." CHOICE

"No other physics book can match this. It is rigorously correct despite lighthearted style and cleverly designed to spur thought in physics students of all ages." THE PHYSICS TEACHER

\$18.95 postpaid; no billing. Or send a stamped envelope for sample pages to:  
**INSIGHT PRESS**  
614 VERMONT STREET  
SAN FRANCISCO, CA 94107

**WHY CAN'T YOU GO FASTER THAN LIGHT?**

What makes space shrink & time go slow?



**Relativity VISUALIZED**

Lewis Carroll Epstein

"The gold nugget of relativity books." NEW SCIENTIST

"This book not only explains relativity; it makes it entertaining." ASTRONOMY MAGAZINE

"I doubt if you are going to find a simpler or more friendly treatise on relativity." CO-EVOLUTION QUARTERLY

"What an extraordinary, unique, and magical book! I wonder if Einstein saw his own theory so directly and simply." CHOICE

\$16.95 postpaid; no billing. Or send a stamped envelope for sample pages to:  
**INSIGHT PRESS**  
614 VERMONT STREET  
SAN FRANCISCO, CA 94107

NEW VERSION 3.1

# SigmaScan™

measures areas, lengths  
coordinates, angles,  
slopes, and more —

IBM PC and Compatibles



**Quickly and accurately digitize, measure and analyze photomicrographs, strip charts, X-rays, maps, and more — using your own PC.**

- Areas, lengths, angles, and slopes
- X, Y digitizing
- User-defined units
- Standard ASCII data output (use in Lotus, dBase, etc.)
- Keyboard macros
- User-defined data transforms

**Save hundreds of hours annually over manual measurement techniques. Automate complex analyses. Comes complete with software, choice of digitizing tablet, money-back guarantee and full year hardware warranty.**

---

Sigma-Scan™ software is also available separately.

Free brochure **800-874-1888**  
In CA **415-924-8640**  
FAX: 415-924-2850 / Telex: 4931977  
In Europe: R.J.A. Handers, Germany  
Ph #02101/666268

Jandel

"Microcomputer Tools for the Scientist"

SCIENTIFIC

■ 65 Koch Road ■ Corte Madera, CA 94925