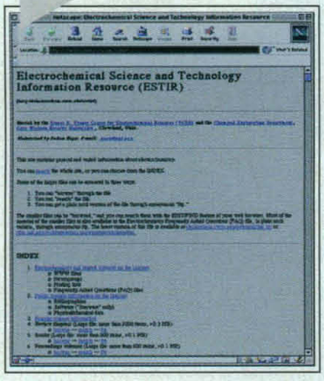
SITE VISIT

Throw the Switch

A pair of wires immersed in a chemical solution is the basic blueprint for everything from the batteries in your flashlight to the method for gold-plating costume jewelry. To get an idea of how electrochemical cells pervade our lives, check out the Electrochemical Science and Technology Information Resource.

electrochem.cwru.edu/estir



Zoltan Nagy, an adjunct professor at Case Western Reserve University in Cleveland, Ohio, says his simple, graphics-free site grew from information that piled up after he helped start an electrochemistry newsgroup in 1994. Popular Web pages include bibliographies, a graduate school directory of over 400 professors and their programs, and a catalog of more than 700 Web links. Trolling through the sites yields online electrochemistry courses and lecture notes, as well as Web sites on fuel cells and some 20 journals. And for those with labile hard drives, free software simulates, for example, what happens when different mixes of chemicals are dumped together and zapped with electricity.

HOT PICKS

Lighting up. Plucked from a glowing jellyfish, the gene for green fluorescent protein (GFP) has become a key tool in cell biology labs for watching everything from the protein actin moving along a muscle fiber to nerves growing. This page links to GFP laboratories, a newsgroup, lab suppliers, and more. pantheon.cis.yale.edu/~wfm5/gfp_gateway.html

Cultural exchange. From guides on Native American artifacts to software for teaching ancient architecture, you can get the skinny on nearly 200 books, films, CDs, and more at the Anthropology Review Database. Some reviews are external links, for example in online journals; others are written for the database. wings.buffalo.edu/anthropology/ARD

Space Odysseys. Want to skim the surface of Venus, or relive the Ariane 5 rocket explosion? The Space Movie Archive offers 2600 movies and animations, including solar eclipses, Hale-Bopp scenes, planet flyovers, and clips from shuttle missions—not to mention trailers from *Star Trek* movies. graffiti.u-bordeaux.fr/MAPBX/roussel/anim-e.html

NET NEWS

E-Biomed Under Fire

It wasn't the sizzling hot temperatures in Washington, D.C., earlier this month that scorched National Institutes of Health (NIH) director Harold Varmus: Rather, a gang of fire-breathing scientific publishers lined up to torch his idea for an electronic publishing database called E-Biomed. Heat shields up, Varmus is plowing ahead and intends to respond to his critics.

Under a proposal released by Varmus in April, NIH would set up two routes to publication in E-Biomed: Manuscripts could be vetted by reviewers chosen by a governing board; or they could be posted in a preprint archive after being "validated" by two scientists (*Science*, 30 April, p. 718). Along with attacking the proposal through statements in the press, paper publishers have begun firing off official salvos. On 4 June, *Journal of the American Medical Association* editors wrote Varmus that E-Biomed "would undermine clinical journals"; the two-person cursory review, *The New England Journal of Medicine* warned in an editorial last week, "might well fill the clinical databases with misleading and inadequately evaluated information."

Many scientists have weighed in against the idea at a forum on an NIH Web site,* which had posted dozens of comments as of last week. Others were supportive, however, and some suggested an alternative: Find a way to add full text to MEDLINE, NIH's free abstracts database. "In the end it will be (or should be) simply PubMed with text and figures," wrote Harvard biochemist Kathleen J. Sweadner.

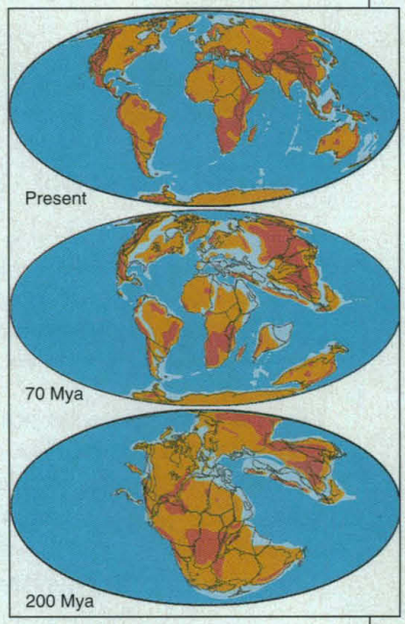
Varmus was unavailable for a rebuttal. However, spokesperson Anne Thomas said he plans to post "an addendum" to his E-Biomed proposal on the Web soon.

* www.nih.gov/welcome/director/ebiomed/comment.htm

COOL IMAGES

Breaking Plates

The continents are something like leaves floating in a superslow-motion Jacuzzi. Every few hundred million years, the land masses clump together; then pressures build, and they break up and spread out across the globe. Experts have built up this scenario over decades of excruciatingly precise measurements of magnetic patterns in the sea floor that trace the lumbering movements of continents, as well as from other geologic clues.



As an undergraduate in the 1970s, University of Texas, Arlington, paleogeographer Chris Scotese contrived a neat way to illustrate plate tectonics: He made flip books. Bend the book and riffle through the pages quickly, and you'd see a crude animation of, say, the ancient supercontinent Pangea breaking up. Now Scotese has brought his flip books into cyberspace at his Paleomap Project site (www.scotese.com). Click on an animation of the world, and you can zip back and forth in time between Pangea 200 million years ago (Mya), the Cretaceous 70 Mya, and today (see sequence above); or time travel to the next continental convocation. You can also zoom in for close-ups, such as India peeling off from Madagascar and making a beeline for Asia. The site (which sells CDs and maps) also offers detailed maps that show ancient mountain ranges and climates.

Send Internet news and great Web site suggestions to netwatch@aaas.org