

COOL IMAGES

Artful Science

No monarch butterfly alive is as punked out as the one at right, made by adding color to a digitized black-and-white scanning electron micrograph (SEM). But one can forgive such embellishments, for the results—about 40 images displayed by University of Hawaii, Manoa, microscopist Tina Carvalho on a Web page she calls Micro-Angela—turn SEMs of tiny creatures into a feast for screen-strained eyes (www.pbrc.hawaii.edu/bemf/microangela/). Among the offerings are a fat, purple-spotted aphid, a rainbow-colored copepod, orange spinnerets on a spider, and brushlike gecko toes in blue. Says Carvalho of the more fanciful hues (the monarch was actually black): "This is my creative release from being a logical scientist."



HOT PICKS

Homage to PCR. Perhaps no discovery has changed molecular biology more than the polymerase chain reaction (PCR). Several anthropologists have created Making PCR, a site that holds an archive of key papers on the 14-year-old DNA amplification technique and discussion forums on its past and future. sunsite.berkeley.edu/PCR/

Look it up. Compulsive fact-gathering and the Web go together like apple pie and ice cream. Now sample some of the finest in online scientific glossaries, a decade's worth of labor by planetary scientist Eric Weisstein. Math is the largest (over 14,000 entries), but he's also working on physics, astronomy, and even a history of rockets. www.astro.virginia.edu/~eww6n/TreasureTrove.html

NET NEWS

PTO to Let Sun Shine on Patents

One of the largest federal databases is set to open up for free public use this fall, when the U.S. Patent and Trademark Office (PTO) plans to begin releasing on the Internet all trademark filings and post-1976 patent texts. Secretary of Commerce William Daley announced on 25 June that 20 million pages of PTO data will be posted in parts: next month, texts of trademark applications; in November, trademark images and patent texts; and finally in March 1999, patent images. At present, except for full-text AIDS patents, PTO posts only patent abstracts on its Web site (www.uspto.gov). Although the agency has come under public attack recently for not sharing its files, the PTO claims its critics held little sway. The data release project has been "in the works for a long time," says spokesperson Brigid Quinn.

Provosts Tout "Decoupled" Review

Faced with spiraling costs of commercial journals, some university leaders are talking up an unusual proposal: They want to separate a paper's peer review from its publication, so that once "certified" the work could be published in a separate step—even on one's own Web server.

Journal prices are skyrocketing: For example, Elsevier Science's *Neuroscience* just 3 years ago cost \$3487 for a year's subscription; now it fetches \$5073 a year. Several provosts first aired the "decoupling" idea last year and have been shaping it ever since (www.econ.rochester.edu/Faculty/Phelps_paper.html). The proposal calls for learned societies to form review panels that would certify a paper as publishable; then the authors could seek to have it published on paper or electronically. Ideally, such certifications and old-fashioned publications would carry the same imprimatur in tenure decisions, says Provost Charles Phelps of the University of Rochester in New York, whose allies include provosts at Caltech and Columbia University.

The idea got a cool reception at a meeting with a few scientific societies at Columbia last month, however. Martin Blume, editor-in-chief of the American Physical Society's journals, says one big problem is that panels couldn't be asked to say "this is publishable" without a particular journal in mind. Blume also notes that APS and other groups plan to launch some online, low-cost journals, a move being promoted by a university coalition formed last fall by the Association of Research Libraries. Phelps says, "That's fine by me if they can achieve the same goals"—that is, "inject some competition into the certification of ideas."

SITE VISIT

volcano.und.edu

Hotter Than Hell

Oozing lava sizzles the pages of VolcanoWorld, a sprawling hot spot on the Web spewing out data on hundreds of volcanoes, from Kilauea to Kilimanjaro. The site chronicles eruptions around the world (and a few other places in the solar system) and offers maps and info on cones and calderas, lava type, plume size, and age. VolcanoWorld also showcases movies and gorgeous images of eruptions and lava flows collected by satellites and earthbound passers-by.



Rocky

Along with a hyperlinked glossary and educational features like Today in Volcano History (Etna erupted on 1 July 1614), there's a searchable bibliography of the *Bulletin of Volcanology*. Visitors can also sign up for e-mail alerts on eruptions, says project director Chuck Wood, a volcanologist at the University of North Dakota, Grand Forks, whose group built the 3-year-old site with magma-nimous support from NASA. Other nuggets nestled among the site's 10,000 pages, which attract nearly a million visitors a year: the oddly named "Kick-'em-Jenny" submarine volcano near Grenada; a photo of floating pumice from Krakatau; and even an account of New Agers finding "harmonic convergence" at Mount Shasta, California.

SCIENCE ONLINE

Ever feel the pull of science policy but don't know how to get a job as a wonk? A feature this week on *Science's* Next Wave explores how some young scientists have made the leap. Learn about options for pursuing a science policy career in the absence of a formal fellowship, and follow a day in the life of a policy-maker. www.nextwave.org

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