

NETWATCH

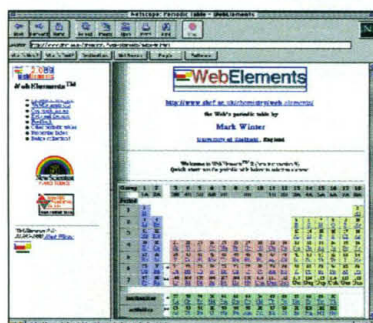
edited by JOCELYN KAISER

Actinium to Zinc

SITE VISIT

Back in the Web's infancy—5 years ago, that is—University of Sheffield, U.K., chemist Mark Winter decided to teach himself HTML on his Mac by creating a Web site consisting of a simple, one-page periodic table. That site has since grown into innumerable pages that make up Winter's WebElements,* perhaps the best known periodic table on the Web.

If only Mendeleev were alive today: Here you may find all you could ever want to know about the elements, from featherweight hydrogen to exotic ununbium, the temporary name for the table's latest addition, element 112. Click on an element and you'll get the basics: what compounds it forms, melting point, spectra, radioisotopes, radii, lattice energies, and so on. But there's also much more, including each substance's history and where in the universe you can find it.



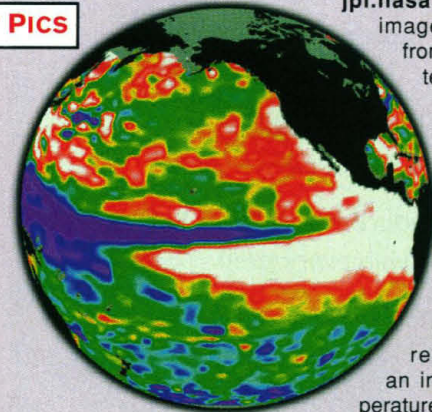
Sprinkled throughout are interesting factoids: For example, sulfur gives Jupiter's moon Io its yellowish colors (from sulfur dioxide) and the sea squirt its digestive prowess (from sulfuric acid). Among other cyberfeatures, three-dimensional images of atoms arranged in crystal structures bulge from the computer screen. Also bringing life to many a dull element are clever cartoons.

WebElements links to Winter's ChemDex, a directory of over 3500 chemistry sites. "I shudder to think how much time has gone into it," Winter says. His users, however, can only be grateful.

* www.shef.ac.uk/chemistry/web-elements/

Sea change. Even as this past year's El Niño continues its fade-away, true fans can relive the excitement at the Web site for the U.S.–French altimetry satellite TOPEX/Poseidon (topex-www.jpl.nasa.gov). Along with still

NET PICS



images like the one at left from November, when the temperature of the tropical Pacific warming phenomenon peaked, the site holds a series of Web movies based on data compiled from December 1996 through last March. Only the outlines of immutable continents stay fixed as colors representing sea level, an indicator of ocean temperature, writhe in climatic flux. (In this image, the highest—therefore warmest—regions are red and white.) A few clicks away, the data-addicted savvy will find hundreds of global images (updated every few hours) on everything from water vapor concentration to wind speed, as well as links to related sites.



Pyrowebnics. The devastating wildfires over the past year in places like Mexico and Indonesia inspired NASA to whip up this new Global Fire Monitoring site, which features snazzy, up-to-date maps and movies made from satellite data (at left, brushfires in east Florida on 6 June). modarch.gsfc.nasa.gov/fire_atlas/fires.html

Plasma bible. Despite its mystical name, the NRL Plasma Formulary is pretty straightforward: It's a handbook for studying the ionized gases known as plasmas. Filled with scientific formulas, densities for various plasmas, and the

HOT PICKS

like, the book's Naval Research Lab compilers call it "the mini-Bible of plasma physicists for the past 20 years." A new Web version just went up at wwwppd.nrl.navy.mil/nrlformulary/nrlformulary.html

Checking the alternatives. How good are studies showing that St. John's wort eases depression? Get one view on this and other medical fads, from acupuncture to wild yam cream, at www.quackwatch.com

Biologists Launch Electronic Preprints

When it comes to using the Internet for communicating scientific results, physicists are the undisputed front-runners. As of last week, however, human geneticists and molecular biologists can post preprints of their research papers on the Web—just as physicists have done since 1991 at Los Alamos National Lab's well-known e-print archive.

The new service is part of HUM-MOLGEN, a nonprofit Web site and monthly mailing list run by 10 U.S. and European scientist-editors (www.informatik.uni-rostock.de/HUM-MOLGEN/). After a survey this year of the list's 5000 subscribers showed that 80% of respondents favored a preprint service, the editors put out a call for papers in May. The first three submissions posted last week discuss legal issues surrounding human cloning.

Although Los Alamos served as "an example," according to Dutch geneticist and list owner Arthur Bergen, the new service likely won't shake up communication among biologists anytime soon. For now, the system handles only text, not images, so only short research notes and review articles can be accepted. Moreover, Bergen says, his highly

competitive field doesn't have a tradition of floating preprints around. Contributions will undergo "low-key peer review," meaning an editor will check the data for reliability, Bergen says. An "unverified" medical article "may do more harm" than a dubious physics report, he says.

Los Alamos physics e-prints founder Paul Ginsparg applauds the project but says the biologists could have simply joined his infrastructure. He added a mathematics archive in January, and computer science will join shortly. Bergen responds, "For the moment, we just want to test if there's any interest at all."

NEWS

SCIENCE ONLINE

Although a *Science* reader probably couldn't pick the fittest mate based on suitors' serenades, female gray tree frogs sure can, according to a report this week by Welch *et al.* (see p. 1928 and News story on p. 1837). Some male gray tree frogs have long calls; others have very short ones. You can hear recordings of these calls and guess which crooner is most desirable by following the "special features" link at www.sciencemag.org



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

www.sciencemag.org • SCIENCE • VOL. 280 • 19 JUNE 1998

1807