NETWATCH

edited by JOCELYN KAISER

COOL IMAGES

Lichen Lore

It looks kind of like oak leaves, but this green stuff is actually tree lungwort, a lichen, or fungus living symbiotically with algae. The fungus sheathes the algae and in return eats sugars made by the plant. Medieval Europeans thought *Lobaria pulmonaria* looked like lung tissue, so they ground it up and used it as a treatment for respiratory ailments. The photo was taken in New Brunswick, Canada, by Stephen Sharnoff for *Lichens of North America*, a guide that will be published by Yale University Press in 2001. You can see over 100 striking photos from the upcoming book and read about lichen's traditional uses in medicines, dyes, and more at www.lichen.com

HOT PICKS

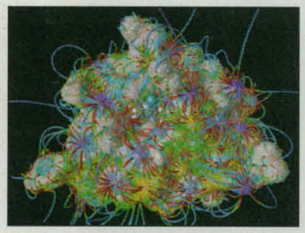
Wonders of the world. Must-sees include volcanoes and glaciers, and you should also try to fit in Africa's Great Rift Valley and Russia's Lake Baikal, the world's deepest lake. Those are a few destinations on "A Geologist's Lifetime Field List," an online article with links for virtual travelers. blues.fd1.uc.edu/www/geology/geologylist/index.html

Hungry for you. When a neutron star or black hole gobbles matter from a companion star, copious x-rays are given off, marking in the sky what's known as an x-ray binary. The Kilohertz QPO (quasi-periodic oscillations) Pages log recent papers and observations of x-ray binaries. www.astro.uva.nl/~ecford/qpos.html

Ligand primer. Need a quick reference on sigma-bond metathesis, hydrozirconation, or other chemical reactions in which metals and organic molecules hook up? Try this Organometallic HyperTextBook. www.ilpi.com/organomet/index.chtml

NET NEWS

IBM Launches Supercomputing Institute



IBM model of HIV-1 reverse transcriptase.

Hoping to spur the use of supercomputers in science and business, IBM has formed a virtual "deep computing" research center that will seek to interact with outside scientists, starting with sharing the secrets to IBM software that turns enormous data sets into images.

Scientists use parallel processing supercomputers—some of which can perform trillions of operations per second—to tackle giant problems like the way a protein folds, how weather patterns shift, and the big bang. IBM last week announced it's putting its $29 million a year of supercomputing research under one virtual roof, called the Deep Computing Institute (DCI). Named after Deep Blue, the chess-playing program that defeated Grand Master Gary Kasparov, the institute wants "to take the modeling that scientists are used to and extend it to business decision-making," such as managing investment risk and scheduling airline routes, says William Pulleyblank, DCI's director.

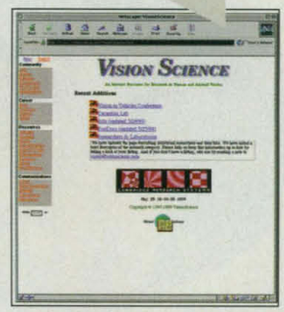
The institute also wants to get academic scientists involved, starting with a Web site* where it has just released the source code to IBM Visualization Data Explorer—software for turning data crunched on a supercomputer into understandable pictures. The site will also offer other freebies, like IBM problem sets for testing algorithms, and DCI will sponsor scientific conferences. That's good both for IBM—which will generate demand for its supercomputers—and for outside scientists, who can now tinker with and improve the software, says Rice University's Ken Kennedy, a member of DCI's advisory board of scientists and business leaders.

* www.research.ibm.com/dci

SITE VISIT

Sites to See

www.visionscience.com



From studying how we perceive motion to teaching computers to pick out airplanes or other objects in a photo, all sorts of work falls under the label of vision research. Hundreds of useful Web links in this area are cataloged at Vision Science, billed as "an Internet resource for research in human and animal vision."

The site aims to serve the entire community of vision researchers, drawn from disciplines such as neuroscience, cognitive science, and ophthalmology, says Web master Andrew Watson, a scientist at NASA's Ames Research Center in Moffett Field, California. The lists of links include software tools, information on buying and using photometers and other lab equipment, and databases of textures and photos of faces—useful for face recognition experiments. Find your way to demonstrations, such as a whole site in Japan devoted to the "waterfall illusion": Stare at a moving pattern for about 30 seconds and then look away, and stationary objects will seem to be moving backward. Or check out tutorials like *The Joy of Visual Perception: A Web Book*.

For active researchers, the most popular sections are postings of conferences, jobs, and rosters of colleagues around the world, Watson says. Vision Science also has its own e-mail list and archives another, the Color and Vision Network mailing list, where scientists talk shop.

Science ONLINE

Among the *Science* Online goodies this week is an x-ray video of a monitor lizard running on a treadmill, part of a report on p. 1661 on the biomechanics of how these creatures breathe (www.sciencemag.org/feature/data/982779.shl). And Next Wave explores the hot field of proteomics, which bridges the gap between wet chemistry and sequence databases to home in on protein function (www.nextwave.org).

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

CREDITS: (TOP TO BOTTOM) STEPHEN SHARNOFF; IBM