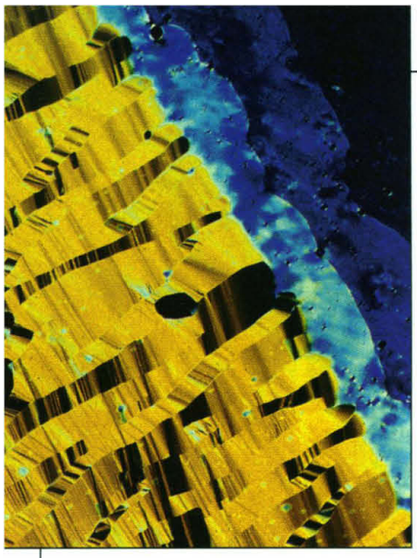
NETWATCH
edited by LAURA HELMUTH



COOL IMAGES

Beauty, Less Than Skin Deep

Magnified up to 2000 times, Ben & Jerry's ice cream looks tie-dyed, champagne crystals bubble, and potassium nitrate from gunpowder bursts from the slide in Technicolor blazes. Biophysicist Michael W. Davidson of the National High Magnetic Field Laboratory in Tallahassee, Florida, has chosen some portraits in his Molecular Expressions* gallery strictly for art's sake, while others serve scientific purposes. This full-color photo (above) shows DNA caught in the transition between a cholesteric crystalline phase (in blue) to a higher density, hexatic liquid crystalline phase (in yellow), a form DNA takes when packed tightly into the head of a bacterium or virus. The crystals polarize light from an optical microscope; colors correspond to different crystal thicknesses.

* micro.magnet.fsu.edu/micro/gallery.html

HOT PICKS

Batten down the hatches. Hurricane season has arrived, and the National Hurricane Center predicts it will be a doozy. Thanks to turbulence over the Atlantic Ocean triggered by La Niña's cooler Pacific temperatures, the agency expects at least three major hurricanes from August through October. Track storms, read up on hurricane history, and catch the latest forecasts. www.nhc.noaa.gov

Looking within. Ever wonder how those crisp, detailed magnetic resonance images are created? An online tutorial explains the physics behind MRI, provides tips for novice imagers, and gives patients advice on how to handle the claustrophobia from being inside an MRI machine. www.cis.rit.edu/htbooks/mri/inside.htm

NET NEWS

No Dusty Stacks for These Grads

If one scientist has his way, one of the last hassles of graduate schools around the world will be a thing of the past. Instead of struggling to feed watermarked bond paper into a printer and line up page margins just so, dissertation writers hopped up on caffeine and aspirin will file their magnum opuses electronically. More than 60 universities are already members of the Networked Digital Library of Theses and Dissertations,* which catalogs these creations and makes them available to others online.

Computer scientist Edward A. Fox of Virginia Tech in Blacksburg argues in an essay supplement to *Nature* that electronic filing saves money and library space and is more relevant to today's world. Students at Virginia Tech have had the option to submit theses by the kilobyte instead of by the ream for the past decade, and they've been required to file electronically since January 1997. More than half the grads add bells and whistles to their digital theses that would have been impossible to put on paper, says Fox, including virtual-reality tours of chemical structures, audio files of bird calls, and even a video file illustrating life in a Turkish coffee house.

More importantly, however, digital dissertations can be accessed easily and immediately by other scholars. Most paper theses in Virginia Tech's libraries languish in the stacks, rarely getting checked out, Fox says. Typical electronic theses, he says, have been downloaded from the Networked Digital Library "hundreds or thousands of times, from tens of thousands of sites around the world."

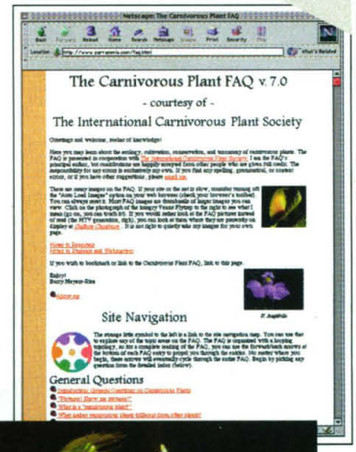
* www.ndltd.org

SITE VISIT

Bugs au Jus

Ever wonder whether there's a real-world version of the monster from the Little Shop of Horrors lurking out there, a plant that can devour a person? The Carnivorous Plant FAQ answers this and dozens more questions about the delicate and deadly flora, explaining how bloodthirsty plants trap and digest bugs, where they grow, and how to tend specimens.

www.sarracenia.com/faq.html



Web master and weed scientist Barry Meyers-Rice has cultivated the site since starting it 7 years ago as a listserv. Visitors include red thumbs who want tips on reviving their doomed Venus flytraps, students who want help with their homework, and exotic plant nerds who swap carnivorous plant starters like baseball cards, Meyers-Rice says. Of particular interest to scientists, the site includes a taxonomy of the 600-odd carnivorous plant species. Stars include *Nepenthes* pitcher plants known to trap rats, birds, and frogs.

The site's highlight is a whimsical photo collection called *Galleria Carnivora*, which Meyers-Rice unabashedly calls "snotty and pompous." Don't believe everything you see: The "Chernobyl giant" won't be found in any field guide to exotic plants.

Science ONLINE

Like banging a giant gong, the powerful earthquake that rocked Bolivia on 9 June 1994 triggered oscillations that reverberated through the entire planet. A Research Article on p. 1231 draws on data from that magnitude 8.3 event to model the density of Earth's mantle. Additional mantle models with various starting parameters and resolutions are online at www.sciencemag.org/feature/data/1040466.shl

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

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