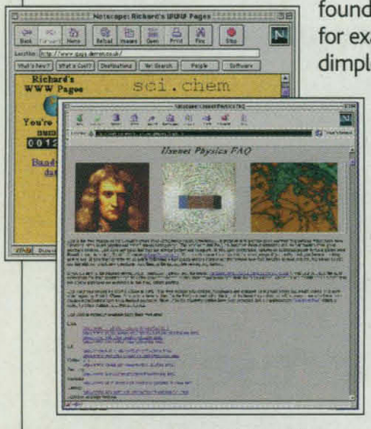
SITE VISIT

All the Answers

The multimedia Web may dominate today's Internet, but the network's grassroots spirit originated with the plain-text Usenet: electronic discussion groups started in 1980 where people gab about matters weighty and small. That tradition has spawned some of the most widely read scientific documents on the Net: Usenet science "frequently asked questions," or FAQs.

The FAQs are the collective efforts of Usenet group participants who, after a wave of questions on a topic, "would make a very intelligent post trying to end the conversation once and for all," says Scott Chase, a semiconductor researcher at Clear Logic in San Jose, California, who maintains the physics FAQ. The resulting documents, many of which have now migrated to the Web, span the practical to the profound: The physics and relativity FAQs,* for example, cover the purpose of golf ball dimples, tachyons (hypothetical particles that travel faster than light), and whether energy is conserved in the universe, with authors including top experts like John Bahcall of the Institute for Advanced Study in New Jersey. At the astronomy FAQ (linked to physics), you can learn why you sometimes see a flash of green at sunset, or download a glossary of space acronyms. And this chemistry FAQ site† details everything from finding patents on the Net to the meaning of "omega-2 fatty acids" and how to make chemical lightsticks.



Chase warns of "phony" science FAQs from "wackos peddling their personal opinion." One place to find the real thing is this site that mirrors an MIT archive of FAQs.‡ They run the gamut from the ozone layer to dodo extinctions and www.talkorigins.org, which debunks creationist arguments.

* math.ucr.edu/home/baez/physics/faq.html
† www.guyy.demon.co.uk
‡ www.faqs.org/faqs/by-newsgroup/sci

NET NEWS

Cyberterrorism Threat Hyped?

Cyberterrorism could bring the country to its knees unless security agencies are overhauled to cope with the threat, warns a new report from a Washington, D.C., defense think tank. But some observers call the report the latest in a wave of hype that misrepresents the problem of computer security.

Ominously titled "Cybercrime, Cyberterrorism, Cyberwarfare: Averting an Electronic Waterloo," the report made a media splash when it was released last month by an expert task force of the Center for Strategic and International Studies (CSIS). It's packed with scary anecdotes showing how the threat of "information warfare" is growing—from terrorist Osama bin Laden's encrypted messages sent by laptop, to a 16-year-old English hacker's 1994 crashes of "some 100 U.S. defense systems." The report calls for steps such as a presidential directive requiring a review of cybercrime policies across agencies and a "new breed of [intelligence] analyst" recruited from "odd cybergeek gangs." "The fact of the matter is, our community is not equipped," says CSIS's Frank Cilluffo.

"There's a real problem, but it's not necessary to make the case with all these lurid examples," says John Pike of the Federation of American Scientists. George Smith, editor of *Crypt Newsletter*, adds that the CSIS report repeats myths and exaggerations—for example, he says the 16-year-old (and a partner) didn't break into any classified systems and got as far as they did only because Air Force computer scientists allowed it so they could learn from the attack. "It ratchets up the level of paranoid hysteria and undermines the real education and work in this area," Smith says.

The real security concern is civilian networks, contends Pike, because they are much easier to crack than military ones. Their weaknesses, he says, are such basic things as the fact that the most common password for gaining access to a system is ... well, "password."

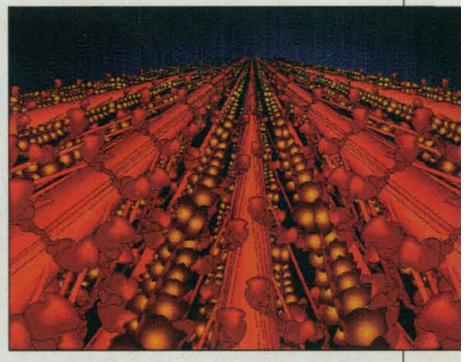
HOT PICKS

Molecular celebrities. Newsmakers like prion proteins and the p53 cancer gene get in-depth treatment at HotMolecBase, a set of hyperlink-rich reviews for specific molecules with info on antibodies that can home in on them, animal disease models, and the like. The 13 reviews could develop into a bigger resource if volunteers step up to edit pages for more molecules. bioinformatics.weizmann.ac.il/hotmolecbase

Cyber astronomy. Swing by this site to sign up for sky time on a newly online 0.9-meter telescope outside Cleveland, billed as "the country's first Earth-bound robotic telescope accessible to the public."astrwww.cwru.edu/nassau/nassau.html

COOL IMAGES

Showing Some Muscle



The landscape of a cell is "such an alien world," says David Goodsell, a computational chemist at The Scripps Research Institute, but artistry can "bring the molecular world to life." That's the idea behind an exhibit Goodsell organized at San Diego's Fleet Science Center that includes drawings and sculptures by 17 scientists, illustrators, and artists. Among them is this image by Ashton Taylor showing muscle fibers (the protein myosin is red, actin yellow) stretching off into the distance. On display until 15 January, the exhibit is posted permanently on the Web at www.scripps.edu/pub/goodsell/mgs_art/mgs_art2/index.html

Science ONLINE

On the lookout for your next biomedical training grant? Get a leg up at GrantsNet, a searchable, free-access database of funding options for grad students, postdocs, and junior faculty. Funded by the Howard Hughes Medical Institute and run by *Science* Online, the site includes contact info for more than 600 programs as well as interviews with funding officers and grant recipients. www.grantsnet.org

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