

IMAGES

Chemistry Goes to the Movies

Whether you're looking for a how-to on gel electrophoresis or a molecular model of the anticancer drug taxol, check out this grab-bag of chemistry animations and footage. Gábor Lente, a chemist at the University of Debrecen in Hungary, collected the diverse set of links, which range from step-by-step reaction mechanisms to depictions of historical experiments. A set of teaching animations from Sam Houston State University in Huntsville, Texas, explains the basics of titration, x-ray absorption spectroscopy, and gas chromatography. If history is your passion, footage from Imperial College in London records interviews with chemical luminaries such as Harry Kroto, who won the Nobel Prize for his work on buckyballs. Lente's site also lists more than 450 online chemistry journals, many of them free.

www.klte.hu/~lente/animate.html

EDUCATION

Good Medicine

Aimed at second-year med students, *Microbiology and Immunology Online* is a clear, thorough Web text written by faculty members at the University of South Carolina Medical School. The 70 chapters cover topics such as the workings of the immune system, how bacteria cause disease, the life cycle of viruses, and the symptoms of a swarm of diseases from anthrax to zoster. The text includes plenty of illustrations and advice on diagnosis and treatment.

www.med.sc.edu:85/book/welcome.htm

LINKS

A Web Map for Geographers

Even geographers can get lost in the labyrinth of the Internet. Get your bearings with Resources for Geographers. The University of Colorado site is replete with useful links for professionals and students, including map collections, job lists, online journals, and professional organizations. Links also take you to handy tools such as the U.S. Geological Survey's Geographic Names site, which provides coordinates for 2 million identified geographic features in the United States. The site also lists a wealth of data sets on topics as diverse as demography, remote sensing, topography, and land use.

www.colorado.edu/geography/virtdept/resources/contents.htm

RESOURCES

Plant Versus Plant

They may look like this shrub's own spring blossoms, but these dainty flowers (right) reveal the presence of an invader. They belong to the parasitic plant *Pilostyles thurberi*, which has infested this shrub. Only the buds poke through the bark; the rest of the parasite hides within the branch, sipping its host's nutrients.

More than 3900 species of plants—about 1% of the world's total—swipe their sustenance from other organisms, says botanist Daniel Nickrent of Southern Illinois University, Carbondale. His Parasitic Plant Connection, launched 5 years ago, is a clearinghouse of information

on these botanical thieves, including mistletoes, sandalwood, morning glories, and the world's largest flowers—the Rafflesiaceae of Indonesia, which grow up to a meter across and reek like rotting flesh. The site provides distribution maps and key characteristics for 18 families of parasitic plants. There's also a directory of researchers, an update on phylogeny, a glossary, and links to scores of images and to gene sequences. Despite their life-sapping reputation, Nickrent notes that most parasitic plants take only a small fraction of their host's resources—much less than a lawyer's 33%, for instance.

www.science.siu.edu/parasitic-plants



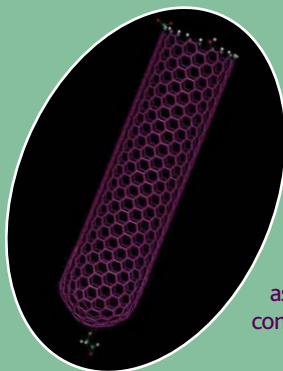
Downloaded from www.sciencemag.org on November 22, 2009

TOOLS

The Incredible Shrinking Circuit

Silicon could be on its way out. The resistors, transistors, and wires in the next generation of minute microchips might be made from individual molecules. NanoHub offers a software toolkit for electrical engineers, physicists, and other researchers investigating this radical technology. The site lets you run more than a dozen programs to simulate nanoelectronic circuits. "You can explore designs for devices that Intel might be building in 10 years," says electrical engineer Mark Lundstrom of Purdue University in West Lafayette, Indiana, one of nanoHub's founders. For example, one program calculates the electrical characteristics of different kinds of carbon nanotubes (left) put to use as transistors. Free registration gives you access to most of the site's programs, which provide tools unavailable in commercial software packages, Lundstrom says.

nanohub.purdue.edu



Send site suggestions to netwatch@aaas.org. Archive: www.sciencemag.org/netwatch