

IMAGES

Shot on Sight

This mouse cell may appear to be ensnared in a glowing net, but the greenish filaments are microtubules: minute pipes that shape the cell and help shuttle chromosomes and organelles around. The photo is one of more than 1500 free biology images available at the Learning and Teaching Support Network, hosted by the University of Leeds, U.K.

Instructors can download everything from a close-up of an ant's head to a shot of a dainty bee orchid to a cross section of skin. Botany, ecology, and histology are particularly well represented. Researchers and other shutterbugs can offer their best shots to the collection.

bio.ltsn.ac.uk/imagebank

RESOURCES

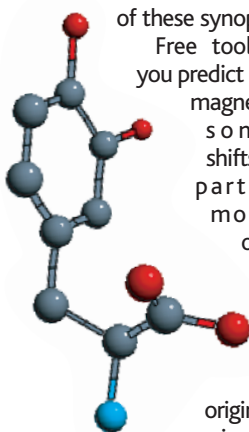
An Organic Solution

The Organic Chemistry Portal is a growing online reference created by industry chemist Reto Müller of Liestal, Switzerland. You'll find background data on some 100,000 compounds, including the Parkinson's disease drug L-dopa (bottom left). Search the chemicals database to unearth information such as density and boiling-point measurements, safety precautions, infrared spectra, and 3D structures. Trawl recent abstracts from eight organic chemistry journals, including *Molecules* and *Tetrahedron*, or browse the site's summaries of new synthesis schemes from the literature. Müller hopes that chemists will contribute more of these synopses.

Free tools help you predict nuclear magnetic resonance shifts for a particular molecule

or determine whether a drug is likely to cause side effects. Müller is gradually translating more features from the original German-language version.

organic-chemistry.org



DATABASE

Range of Newt and Name of Toad

From northern Sweden to Tierra del Fuego, from soggy Brazilian rainforests to the Australian outback, you can find amphibians hopping, slithering, and splashing. Amphibian Species of the World, from the American Museum of Natural History in New York City, provides an authoritative guide to the taxonomy of this slippery group. An update of curator Darrell Frost's 1985 reference book, the site encompasses more than 5500 species of frogs, toads, salamanders, and caecilians: legless burrowers found in the tropics. You can search the entries taxonomically or geographically. Species pages offer distribution data, references, comments on classification controversies, and other information.

research.amnh.org/herpetology/amphibia/index.html

TOOLS

Glossing the Genome

Genome Reviews, a new database from the European Bioinformatics Institute (EBI), makes it easier for researchers to track down the latest information on the function of sequenced genes and their proteins. The site adds fresh knowledge to the genome sequences housed in public gene databases by weaving in links to other sites. For example, you can learn more about a protein's function by connecting to the Gene Ontology Annotation database. Locate proteins with similar structural features by jumping to an EBI site called InterPro. So far, Genome Reviews offers upgraded records for more than 150 microbes, and new versions of the database will come online every 2 weeks.

www.ebi.ac.uk/GenomeReviews

DATABASE

Water, Water, Everywhere

Last year, large floods killed more than 4500 people worldwide, chased some 21 million from their homes, and wrecked more than \$7 billion worth of property. To discover more about past deluges or to find out where waters are surging today, wade into the Flood Observatory from Dartmouth College in Hanover, New Hampshire.

Drawing on news stories, satellite images, and other sources, the site's Global Archive records major floods dating back to 1985. Maps show locations of current and recent high water, and tables tally statistics such as each disaster's duration and number of deaths. The Global Flood Hazard feature uses satellite data to pinpoint areas that have been inundated over the last decade, and a gallery displays eye-catching illustrations. Above, a computer-enhanced radar image of the 1993 Midwest floods shows the confluence of the Des Moines and Mississippi rivers in Iowa.

www.dartmouth.edu/~floods

