

Science podcasts

The worldwide web is a wonderful source of information, but the sheer amount of content can be overwhelming. Where do you start looking for science news? In each issue of *Science in School*, we will suggest useful websites for particular purposes.

Whether you are looking for a quick snippet about stem cells or dark matter to use in a lesson, or want to inform yourself regularly about developments in science, podcasts could be the answer. You can subscribe (free) to these radio programmes on the web, automatically download new episodes, and listen to them when and where you like: on the train, in the gym, in the garden....

The files can be played either directly on your computer, or using an MP3 player or iPod. iTunes and other similar software allow you to search the vast range of topics available, download individual episodes or subscribe to regular podcasts, play them, read reviews by other listeners and leave your own comments. iTunes can be run on an Apple Mac or a PC, and is free to download:
www.apple.com/itunes/download

Below is a selection of the many science podcasts available. Most of those listed are in English, but if you tell us about your favourites in any European language, we'd be happy to mention them on the *Science in School* website.

Podcasts in English

Current Science and Technology:

feed://www.mos.org/cst/?cat=7;feed=rss2

Weekly interviews with guest researchers and staff from the Museum of Science in Boston, USA.

- 20 October 2006: How the deadly toxin botulinum (botox) can be used to limit facial scarring, and how melanoma can be detected by listening for cancer cells. (14 min)
- 13 October 2006: How anthrax spores can be detected and caught using sugar-coated carbon nanotubes, and why one researcher is studying ants by filling their nests with molten metal. (23 min)

Ecogeeks:

www.thewildclassroom.com/home/nav/subscribe.html

Aimed at science teachers and supported by lesson plans, further online information, and terrible music, these short video podcasts are presented by young biologists.

- 1 October 2006: Everything you wanted to know about alligator snapping turtles. (2 min)
- 31 August 2006: Grasslands and prairies – why do grasses dominate? (4 min)

ESApod:

esamultimedia.esa.int/multimedia/esc/esapod.xml

The European Space Agency brings audio and video news from space to your desktop.

- 16 October 2006: The Mars Express investigates water on Mars, demonstrating that it was once covered by vast oceans. (7 min)
- 10 October 2006: Life on the International Space Station, carrying out scientific experiments as part of the AstroLab mission. (5 min)

Fraunhofer podcast (also in German):

www.fraunhofer.de/fhg/EN/press/audio/2006/Audio-magazine_2006s.jsp

Short podcasts presenting research from Germany's Fraunhofer institutes.

- 4 October 2006: Applications of nanotechnology range from car manufacture to medicine. (7 min)
- 20 September 2006: White biotechnology – using plants to manufacture raw materials. (4 min)

Microbe World Radio:

<http://feeds.feedburner.com/microbeworld>

Daily 90-second podcasts from the American Society for Microbiology, USA.

- 20 October 2006: Astrobiologists from NASA speculate that a group of salt-loving microbes called halophiles once existed on Mars. (2 min)
- 19 October 2006: Producing electricity – by feeding microbes on chocolate waste. (2 min)

Nature podcast:

www.nature.com/nature/podcast/subscribe.html

By the Naked Scientists team, this weekly podcast highlights contents from the journal *Nature*, sets the research in context and allows the scientists to explain the significance of their work in their own words.

- 4 October 2006: The evolution of insect eyes, five-billion Jupiter-sized exoplanets, a scientific pub guide to zoology (fish that fake orgasms, kidnapping among penguins), climate change regulation, and more. (32 min)
- 7 September 2006: Cancer and unintelligent design, methane emissions from the permafrost, chiral-selective catalysts, and more. (26 min)

Science@NASA:

feed://science.nasa.gov/itunespodcast.xml

Frequent short podcasts about recent space research at NASA, USA.

- 3 October 2006: Climate scientists are learning new things from an old and very powerful Alaskan volcano: Novarupta. (4 min)
- 1 September 2006: With astronauts returning to the Moon, reliable forecasts of space weather are more important than ever. A new proposed mission called Solar Sentinels would surround the Sun with spacecraft to monitor solar activity. (5 min)

Science magazine podcast:

www.sciencemag.org/about/podcast.dtl

This bi-weekly podcast presents research from *Science* magazine and its news website.

- 13 October 2006: Cancer therapy with monoclonal antibodies, building the world's biggest fusion experiment (ITER), the neurobiology of face recognition, and more. (30 min)
- 15 September 2006: The oldest writing from the New World (1000 BC), the most precise test yet of relativity, geo-engineering to prevent climate change, and more. (34 min)

Science Talk, the podcast of *Scientific American*:

www.sciam.com/podcast/

This weekly podcast of *Scientific American* covers cutting-edge developments and controversial issues with leading scientists and journalists. A useful resource is the list of related websites.

- 4 October 2006: Court cases increasingly deal with complex science and technical issues. Shouldn't judges be trained in cutting-edge science? (20 min)
- 6 September 2006: MIT astrophysicist Paul Schechter discusses recent research into dark matter. (23 min)

sciPod, the *New Scientist* podcast:

www.newscientist.com/podcast.ns

This podcast from the popular science magazine *New Scientist* reviews the week's science stories and interviews scientists.

- 6 October 2006: Confabulation is a tendency among some brain-injured patients to create fictional memories. What can it tell us about the way the human mind separates fact from fiction? And more. (29 min)
- 4 August 2006: Increased carbon dioxide levels in the atmosphere are acidifying the world's oceans. What are the consequences for marine life? And more. (26 min)

60-Second Science, from *Scientific American*:

www.sciam.com/podcast/

In this daily, one-minute commentary, *Scientific American* casts a brief look at some of the most exciting scientific developments.

- 5 October 2006: Did the Ancient Greeks use nanotechnology to conceal grey hairs? (1 min)
- 20 September 2006: Discrimination against women academics is still depriving American science of an important source of talent. (1 min)

The Naked Scientists:

www.thenakedscientists.com/HTML/Shows/streaming_media.htm

In this weekly UK podcast, Cambridge University's Naked Scientists answer your science questions, interview top scientists and cover the latest science news.

- 1 October 2006: Would you invest in an allergy-free cat, what stimulated life's diversity, how are magnets made, why is blood red, and how are leeches used in medicine? And more. (57 min)
- 17 September 2006: Peruvian mummies, why exercising can keep your guts healthy, environmental clues in 10 000-year-old pollen, and how to make your own futuristic forcefield. And more. (56 min)

The Science Show:

www.abc.net.au/rn/scienceshow/subscribe/

A review of this week's news about scientific research, scandal and discovery, from the Australian Broadcasting Corporation. A table of contents allows you to skip directly to the topic of interest.

- 13 October 2006: Ancient coral reefs, how our ancestors lived 3.5 million years ago, the applications of RNA interference, other Nobel-Prize winning research, and more. (49 min)
- 29 September 2006: The environmental cost of your PC, what affects Australia's climate, whether the dinosaurs died of constipation, and more. (49 min)

Teachers' TV News:

www.teachers.tv/podcasting

The weekly Teachers' TV News video podcast covers the latest UK education news stories, interviews and analysis.

- 22 September 2006: Schoolgirl violence, primary school truancy, school meals, and other news stories. (25 min)
- 15 September 2006: Is modern life poisoning childhood, does drug education work, compulsory language learning, how war is robbing children worldwide of education, and other news stories. (25 min)

The Week from *The Scientist*:

www.the-scientist.com/xml/podcasts/theweek/index.xml

This weekly podcast from the popular life science magazine, *The Scientist*, presents recent science news and research.

- 13 September 2006: Nutrigenomics: why what your grandmother ate when she was pregnant with your mother may affect your children's health. (18 min)
- 2 June 2006: RNAi toxicity, blood diseases involving SNPs and how Italy should fund its research. (15 min)

Woods Hole Oceanographic Institution podcast:

www.whoi.edu/services/graphics/WHOIPodcast.xml

Scientists from the Woods Hole Oceanographic Institution, USA, describe their research in marine science and the fascinating, scary and beautiful moments involved. Choose between video or audio-only podcasts.

- 30 May 2006: Rhian Waller describes – and shows – deep sea corals and investigates how they reproduce. (6 min)
- 20 March 2006: Susan Humphris explains what hydrothermal vents are and why they are important. (4 min)

Podcasts in German

dradio Wissenschaft und Forschung:

www.dradio.de/rss/podcast/sendungen/forschak/

Science news from Deutschland Radio.

- 1 November 2006: To make more use of wind power, new methods of storing energy are necessary. (3 min)
- 27 October 2006: What happens to our rubbish after it is collected for recycling? A new Dutch robot demonstrates just how finely the different types of rubbish can be separated – with sufficiently high-tech equipment. (4 min)

Fraunhofer podcast (also in English):

www.fraunhofer.de/fhg/data/pub5/dcp/jsp/dcp67165_67166.jsp

Short podcasts presenting research from Germany's Fraunhofer institutes.

- 4 October 2006: Applications of nanotechnology range from car manufacture to medicine. (7 min)
- 20 September 2006: White biotechnology – using plants to manufacture raw materials. (4 min)

Helmholtz Schongewusst podcast:

www.helmholtz.de/audio/schongewusst.xml

These short podcasts present gems from the wide range of research carried out at Germany's Helmholtz institutes.

- 10 October 2006: Acid bath or swimming lake? How bacteria can make the difference. (3 min)
- 4 October 2006: Deep-frozen history in the Antarctic. (3 min)

Pisa Polizei:

www.ndr.de/podcastlink/pisa.xml

Not always science, but definitely education-related. These daily podcasts from the Norddeutscher Rundfunk investigate the general knowledge of Hamburg's teenagers. Scary and hilarious.

- 12 October 2006: What is the Periodic Table? (1 min)
- 17 August 2006: What is 3% of 100? (1 min)

To suggest types of websites that you would like us to review, or to tell us about your own favourite websites, email editor@scienceinschool.org. In the subject field of the email, please include the text 'Website review'.

