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| http://images.magnetmail.net/images/template/acs/gold.gif In This Edition  |  | | --- | | [Biofuel cell generates electricity when implanted in False Death’s Head Cockroach](#1)    [Potatoes lower blood pressure in people with obesity and hypertension without increasing weight](#ARTICLE_2)  [Handheld device for doing blood tests moves closer to medical use](#3)  [Mercury releases into the atmosphere from ancient to modern times](#4)  [New web-based tool details greenhouse gas emissions for 6,700 facilities nationwide](#5) |  |  | | --- | | [**Journalists’ Resources:**](#Resources)  [News media registration for ACS’ 243rd National Meeting & Exposition in San Diego](#Registration)  [Press releases, briefings, and more from ACS’ 242nd National Meeting](#registration)  [Inside Science News Service](#InsideScience)  [Must-reads from C&EN: Whatever happened to arsenic-based life?](#mustread)  [ACS Pressroom Blog](#pressroomblog)   [*Bytesize Science* Blog](#bytesizeblog)  [ACS Satellite Pressroom: Daily news blasts on Twitter](#twitter)  [C&EN on Twitter](#CENTwitter)  [ACS Press Releases](#releases) |  |  | | --- | | [**ACS Videos:**](#Videos)[Spellbound: A video series on how kids became scientists](#Spellbound) [Prized Science video series](#Dance)  [First Living, Dancing Periodic Table of the Elements](#Mars)  [A Day Without Chemistry](#daywithoutchemistry)  [The Chemistry of Sourdough Bread](#sourdough)  [The Chemistry of Fireworks](#fireworks)  [The Chemistry of Grilling and Barbecuing](#barbecue) |  |  | | --- | | [**ACS Podcasts:**](#podcasts)     [Bytesize Science: A podcast for young listeners](#globalchallenges)  [Global Challenges/Chemistry Solutions](#Bytesizescience)    [Science Elements: From the PressPac](#Scienceelements)   [*SciFinder®* Podcasts](#scifinder)  [**And Don't Miss:**](#dontmiss)  [Chemistry Glossary](#glossary)  [Chemical Abstracts Service (CAS) Web site on everyday chemicals](#CAS)  [Colors of Chemistry Photo Contest Seeks Entries](#colors)  [Science Connections from CAS](#CAS2) |   [PressPac Archives](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344679&m=1716200&u=ACS&j=8866005&s=http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_PRESSPACS&node_id=223&use_sec=false&sec_url_var=region1&__uuid=a0c923e3-c385-4d96-bdc8-eadaa07eb02f) | **ACS NEWS SERVICE Weekly Press Package - February 1, 2012   ALL CONTENT IS FOR IMMEDIATE RELEASE  Please credit the individual journal or the American Chemical Society as the source for this information.**  Here is the latest American Chemical Society (ACS) Weekly PressPac from the Office of Public Affairs. It has news from ACS’ 41 peer-reviewed journals and Chemical & Engineering News.  Science Inquiries: Michael Woods, editor [m\_woods@acs.org](mailto:m_woods@acs.org) 202-872-6293  General Inquiries: Michael Bernstein [m\_bernstein@acs.org](mailto:m_bernstein@acs.org)  202-872-6042  ARTICLE #1 **FOR IMMEDIATE RELEASE**  **Biofuel cell generates electricity when implanted in False Death’s Head Cockroach** Journal of the American Chemical Society   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112CockroachACS_thumb.jpg Biofuel cell generates electricity when implanted in False Death’s Head Cockroach Credit: American Chemical Society |   Scientists have developed and implanted into a living insect — the False Death's Head Cockroach — a miniature fuel cell that converts naturally occurring sugar in the insect and oxygen from the air into electricity. They term it an advance toward a source of electricity that could, in principle, be collected, stored and used to power sensors, cameras, microphones and a variety of other microdevices attached to the insects in a paper in the Journal of the American Chemical Society.  Daniel Scherson and colleagues explain that scientists are developing ways to generate electricity from chemicals inside living things or from their movements to power implanted sensors or other miniature devices. Such devices could provide researchers or physicians with important information about processes going on inside insects, animals or even people without the need for batteries. They also could someday power artificial organs, nanorobots or wearable personal electronics. But before such “sci-fi”-sounding advances can be realized, practical biofuel cells are necessary. That’s why Scherson and colleagues developed an implantable biofuel cell for use in a live cockroach.  The biofuel cell uses a sugar in the cockroaches’ bodies called trehalose and oxygen from the air to generate electricity. It did not kill the insects or impair functioning of their internal organs. They also implanted the device into a Shiitake mushroom, and it worked. Neither fuel cell — in the roach or the mushroom — produced a large amount of energy, so the team says that any microdevice that requires high power could operate only intermittently. The electricity generated by the biofuel cell, “in principle, could be collected and stored and subsequently used to power a variety of microdevices,” say the researchers.  The researchers acknowledge funding from the [National Science Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344680&m=1716200&u=ACS&j=8866005&s=http://www.nsf.gov/).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112JACS_thumb.jpg [Click](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344681&m=1716200&u=ACS&j=8866005&s=http://web.1.c2.audiovideoweb.com/1c2web3536/020112JACS.jpg) [here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344682&m=1716200&u=ACS&j=8866005&s=http://web.1.c2.audiovideoweb.com/1c2web3536/020112JACS.jpg) for high-resolution image. |   ARTICLE #1 **FOR IMMEDIATE RELEASE** “An Implantable Biofuel Cell for a Live Insect”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344683&m=1716200&u=ACS&j=8866005&s=http://pubs.acs.org/stoken/presspac/presspac/abs/10.1021/ja210794c)   CONTACT: Daniel Scherson, Ph.D. Department of Chemistry Case Western Reserve University Cleveland, Ohio 44106 Phone: 216-368-5186  Email: [daniel.scherson@case.edu](mailto:daniel.scherson@case.edu)  [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif  ARTICLE #2 **FOR IMMEDIATE RELEASE**  **Potatoes lower blood pressure in people with obesity and hypertension without increasing weight** Journal of Agricultural and Food Chemistry   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112PotatoesIstock_thumb.jpg Potatoes lower blood pressure in people with obesity and hypertension without increasing weight Credit: iStock |   The first study to check the effects of eating potatoes on blood pressure in humans has concluded that two small helpings of purple potatoes (Purple Majesty) a day decreases blood pressure by about 4 percent without causing weight gain. In a report in the ACS’ Journal of Agricultural and Food Chemistry, the researchers say that decrease, although seemingly small, is sufficient to potentially reduce the risk of several forms of heart disease.  Joe Vinson and colleagues point out that people in the U.S. eat more potatoes than any other vegetable. Purple-skinned potatoes, a boutique variety increasingly available in food stores, are noted for having high levels of healthful antioxidant compounds. And in Korea, purple potatoes are renowned in folk medicine as a way to lose weight. Vinson’s team thus decided to investigate the effects of eating 6-8 small microwaved purple potatoes twice a day on 18 volunteers, most of whom were overweight with high blood pressure. The volunteers ate potatoes or no potatoes for four weeks, and then switched to the opposite regimen for another four weeks while researchers monitored systolic and diastolic blood pressure (the higher and lower numbers in a blood pressure reading like 120/80), body weight and other health indicators.  Average diastolic blood pressure dropped by 4.3 percent and systolic pressure decreased by 3.5 percent. The majority of subjects took anti-hypertensive drugs and still had a reduction in blood pressure. None of the study participants gained weight. Vinson said that other studies have identified substances in potatoes with effects in the body similar to those of the well-known ACE-inhibitor medications, a mainstay for treating high blood pressure. But he suspects that the effects may be due to other substances in potatoes. The scientists do not know yet whether ordinary white potatoes have the same beneficial effects.  The authors acknowledge funding through a Cooperative Agreement Grant from the [United States Department of Agriculture (USDA)](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344684&m=1716200&u=ACS&j=8866005&s=http://www.usda.gov/wps/portal/usda/usdahome).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112AgFood_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344685&m=1716200&u=ACS&j=8866005&s=http://web.1.c2.audiovideoweb.com/1c2web3536/020112AgFood.jpg) for high-resolution image. |   ARTICLE #2 **FOR IMMEDIATE RELEASE** “High Antioxidant Potatoes: Acute in vivo Antioxidant Source and Hypotensive Agent in Humans after Supplementation to Hypertensive Subjects”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344686&m=1716200&u=ACS&j=8866005&s=http://pubs.acs.org/stoken/presspac/presspac/abs/10.1021/jf2045262)   CONTACT: Joe Vinson, Ph.D. University of Scranton Department of Chemistry Scranton, Penn. 18510-4626 Phone: 570-941-7551 Fax: 570-941-7510  Email: [vinson@scranton.edu](mailto:vinson@scranton.edu)  [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif    ARTICLE #3 **FOR IMMEDIATE RELEASE**  **Handheld device for doing blood tests moves closer to medical use**  Analytical Chemistry   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112BloodCellsIstock_thumb.jpg Handheld device for doing blood tests moves closer to medical use Credit: iStock |   Scientists are reporting a key advance in efforts to develop a handheld device that could revolutionize the complete blood cell count (CBC), one of the most frequently performed blood tests used to diagnose and treat disease. In a report in ACS’ journal Analytical Chemistry, they describe adding a key feature to their “blood lab-on-a-chip” that allows it to count white blood cells more accurately.  Hywel Morgan, Cees van Berkel and colleagues explain that current CBC technology requires expensive equipment housed in central laboratories, which can take several days to process tests. The CBC test measures levels of the different components of human blood, including red and white blood cells. High or low levels of certain components can indicate a variety of conditions, ranging from infections and anemia to certain forms of cancer. Hoping to make those diagnoses faster and easier, Morgan and van Berkel have been working on a handheld device similar to the blood sugar tests used by people with diabetes.  In their latest advance, the scientists describe successfully adding a new feature to the chip, which sends a blood sample through channels only a few times as wide as a human hair to an electrode that counts blood cells as they pass. The feature breaks down red blood cells in a way that allows the chip to count white blood cells more accurately. Tests on blood samples from patients produced results comparable to those from tests performed on the same samples by a full-scale hematology lab.  The authors acknowledge funding from the [Technology Strategy Board](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344687&m=1716200&u=ACS&j=8866005&s=http://www.innovateuk.org/) and the [Engineering and Physical Sciences Research Council](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344688&m=1716200&u=ACS&j=8866005&s=http://www.epsrc.ac.uk/Pages/default.aspx).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112AnaChem_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344689&m=1716200&u=ACS&j=8866005&s=http://web.1.c2.audiovideoweb.com/1c2web3536/020112anachem.jpg) for high-resolution image. |   ARTICLE #3 **FOR IMMEDIATE RELEASE** “Microfluidic Lysis of Human Blood for Leukocyte Analysis Using Single Cell Impedance Cytometry”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344690&m=1716200&u=ACS&j=8866005&s=http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/ac202700x)   CONTACT: Hywel Morgan, Ph.D. University of Southampton Southampton, United Kingdom Phone: +44-23-8059-3330 Fax: +44-2380-593029 Email: [hm@ecs.soton.ac.uk](mailto:hm@ecs.soton.ac.uk)  [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif    ARTICLE #4 **FOR IMMEDIATE RELEASE: A PressPac Instant Replay\*  Mercury releases into the atmosphere from ancient to modern times**  Environmental Science and Technology   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/121411Mercury_thumb.jpg Mercury releases into the atmosphere from ancient to modern times Credit: iStock |   In pursuit of riches and energy over the last 5,000 years, humans have released into the environment 385,000 tons of mercury, the source of numerous health concerns, according to a new study that challenges the idea that releases of the metal are on the decline. The report appears in ACS’ journal Environmental Science & Technology.  David Streets and colleagues explain that humans put mercury into the atmosphere by burning fossil fuels and through mining and industrial processes. Mercury is present in coal and the ores used to extract gold and silver. Much information exists about recent releases of mercury, but there is little information on releases in the past. To find out how much impact people have had over the centuries, the scientists reconstructed human additions of mercury to the atmosphere using historical data and computer models.  Their research shows that mercury emissions peaked during the North American gold and silver rushes in the late 1800s, but after a decline in the middle of the 20th century, are quickly rising again thanks mostly to a surge in coal use. They report that Asia has overtaken Europe and America as the largest contributor of mercury. Recent data suggest that mercury concentrations in the atmosphere are declining, and this is not consistent with their conclusion of increasing emissions. Changing atmospheric conditions may be partly responsible, but more work is also needed to understand the fate of large amounts of mercury in discarded products like batteries and thermometers. The researchers predict mercury released from mining and fuel may take as many as 2,000 years to exit the environment and be reincorporated into rocks and minerals in the Earth.  The authors acknowledge funding from the [Department of Energy](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344691&m=1716200&u=ACS&j=8866005&s=http://energy.gov/), the [National Science Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344692&m=1716200&u=ACS&j=8866005&s=http://nsf.gov) and from the [Harvard University NIEHS Center for Environmental Health](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344693&m=1716200&u=ACS&j=8866005&s=http://www.hsph.harvard.edu/research/niehs/).     |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112EST_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344694&m=1716200&u=ACS&j=8866005&s=http://web.1.c2.audiovideoweb.com/1c2web3536/020112est.jpg) for high-resolution image. |   ARTICLE #4 **FOR IMMEDIATE RELEASE** "All-Time Releases of Mercury to the Atmosphere from Human Activities"  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344695&m=1716200&u=ACS&j=8866005&s=http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/es202765m)  CONTACT:  David Streets, Ph.D.  Argonne National Laboratory Argonne, Illinois 60439 Phone: 630-252-3448 Email: [dstreets@anl.gov](mailto:dstreets@anl.gov)  **\* A previous PressPac item that you may have missed**  [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif  ARTICLE #5 **FOR IMMEDIATE RELEASE**  **New web-based tool details greenhouse gas emissions for 6,700 facilities nationwide** Chemical & Engineering News   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/020112CEN_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344696&m=1716200&u=ACS&j=8866005&s=http://web.1.c2.audiovideoweb.com/1c2web3536/020112CEN.jpg) for high-resolution image. |   How many tons of greenhouse gases are coming out of that smokestack? For the first time, people around the U.S. can get answers to that question instantly with a new online interactive tool — the topic of an article in the current edition of Chemical & Engineering News (C&EN), the weekly newsmagazine of the American Chemical Society, the world’s largest scientific society.  Jeff Johnson, C&EN senior correspondent, explains that [the web-based tool](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344697&m=1716200&u=ACS&j=8866005&s=http://ghgdata.epa.gov/ghgp/main.do), developed by the U.S. Environmental Protection Agency (EPA), gives people the power to analyze greenhouse gas emissions from 6,700 electric power-generating stations, chemical plants, refineries and other facilities. Based on self-reporting required by a 2008 federal law, the tool was developed to display data from the 2010 calendar year. The data only cover the largest greenhouse gas emitters but include about 80 percent of the emissions from stationary sources. (Stationary sources, such as factories, emit about 40 percent of all U.S. greenhouse gases.)  With the tool, users can limit the data to certain types of facilities (power plants or refineries, for example) and can close in on a specific facility on the map. Users also can sort the data by industry sector and location. Mining the data shows that carbon dioxide accounts for 95 percent of direct greenhouse gas emissions, followed by methane at 4 percent and other gases at 1 percent. The EPA plans to refine and upgrade the tool and will start collecting 2011 data next month.  ARTICLE #5 **FOR IMMEDIATE RELEASE** “Mapping Greenhouse Gases” This story is available at: [http://cenm.ag/data](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344698&m=1716200&u=ACS&j=8866005&s=http://cenm.ag/data)  [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif    **Journalists’ Resources** **News media registration for ACS’ 243rd National Meeting & Exposition in San Diego** News media [registration](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344699&m=1716200&u=ACS&j=8866005&s=https://www.xpressreg.net/register/acsa032/media/start.asp) is now open for the American Chemical Society’s (ACS) 243rd National Meeting & Exposition in San Diego, March 25-29, 2012. The event will include more than 11,500 reports on new discoveries in medicine and health, food and nutrition, energy, the environment and other fields where chemistry plays a central role. One of the largest scientific conferences of 2012, the meeting will take place at the San Diego Convention Center and area hotels. To view full news release about meeting registration, click [here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344700&m=1716200&u=ACS&j=8866005&s=http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=222&content_id=CNBP_028895&use_sec=true&sec_url_var=region1&__uuid=077ccb29-4a64-4924-98b7-ed219e050a6d).  **Press releases, briefings, and more from ACS’ 242nd National Meeting** [www.eurekalert.org/acsmeet.php](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344701&m=1716200&u=ACS&j=8866005&s=http://www.eurekalert.org/acsmeet.php)  [http://www.ustream.tv/channel/acslive](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344702&m=1716200&u=ACS&j=8866005&s=http://www.ustream.tv/channel/acslive%20) **Inside Science News Service** For thoroughly enjoyable multimedia coverage of the science behind the news — a valuable resource for journalists and news media organizations everywhere. [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344703&m=1716200&u=ACS&j=8866005&s=http://www.insidescience.org/) to visit the Inside Science News website. **Must Reads From C&EN: Whatever happened to arsenic-based life?** C&EN updates the controversy over the sensational 2010 claim for existence of an arsenic-based life-form that would have radically rewritten the rules of biology. For the full text, contact Michael Bernstein at [m\_bernstein@acs.org](mailto:m_bernstein@acs.org).  **ACS Pressroom Blog** The ACS Office of Public Affairs' [pressroom blog](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344704&m=1716200&u=ACS&j=8866005&s=http://www.acspressblog.com) highlights research from ACS’ 43 peer-reviewed journals and National Meetings.  **Bytesize Science Blog**  Educators and kids, put on your thinking caps: The American Chemical Society has [a blog for Bytesize Science](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344705&m=1716200&u=ACS&j=8866005&s=http://www.bytesizescience.com), a science podcast for kids of all ages.  **ACS Satellite Pressroom: Daily news blasts on Twitter** The satellite press room has become one of the most popular science news sites on Twitter. To get our news blasts and updates, create a free account at [https://twitter.com/signup](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344706&m=1716200&u=ACS&j=8866005&s=https://twitter.com/signup). Then visit [http://twitter.com/ACSpressroom](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344707&m=1716200&u=ACS&j=8866005&s=http://twitter.com/ACSpressroom) and click the ‘join’ button beneath the press room logo.   **C&EN on Twitter** Follow @cenmag <[http://twitter.com/cenmag](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344708&m=1716200&u=ACS&j=8866005&s=http://twitter.com/cenmag)> for the latest news in chemistry and dispatches from our blog, C&ENtral Science <[http://centralscience.org](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344709&m=1716200&u=ACS&j=8866005&s=http://centralscience.org)>.**ACS Press Releases**  [Press releases](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344710&m=1716200&u=ACS&j=8866005&s=http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_NEWSRELEASES&node_id=222&use_sec=false&sec_url_var=region1&__uuid=50b5ab93-801d-4d0d-868f-b9507ff9d709) on a variety of chemistry-related topics.  [To Top](#top)  http://images.magnetmail.net/images/clients/acs/goldline.gif  **ACS Videos**  The American Chemical Society encourages news organizations, museums, educational organizations, and other web sites to embed links to these videos.  **Spellbound: How Kids Became Scientists**   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/Spellbound3.jpg |   The road to a Nobel Prize began for one scientist in elementary school when his father placed a sign on his bedroom door proclaiming him to be a “doctor.” This is just one of the many experiences that helped launch the careers of scientists from diverse backgrounds who are featured in a new ACS video series called [Spellbound: How Kids Became Scientists](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344711&m=1716200&u=ACS&j=8866005&s=http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=1355&content_id=CNBP_028033&use_sec=true&sec_url_var=region1&__uuid=e8e6ee76-0abe-4e78-84c4-3717c995c65e).  **Prized Science video series**   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/PrizedScienceCraiksmall.jpg |   Prized Science: How the Science Behind ACS Awards Impacts Your Life video series is new for 2011! In the first episode, see how Ahmed Zewail, Ph.D., developed a technology that's paving the way for new medicines, new fuels and new materials that will give people longer, healthier, happier lives. Zewail is the winner of the 2011 Priestley Medal. The second episode features the work of David Craik, Ph.D., who made advances toward new drugs for treating health problems that affect millions of people around the world, including antibiotic-resistant bacteria and AIDS. Craik is the winner of the ACS 2011 Ralph F. Hirschmann Award in Peptide Chemistry, sponsored by Merck Research Laboratories. More episodes will appear later in the year. The series is available at the [Prized Science](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344712&m=1716200&u=ACS&j=8866005&s=http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=446&content_id=CTD1_018821&use_sec=true&sec_url_var=region1&__uuid=594bce97-0b05-4df7-b759-1a0f9156c5d8) website and on [DVD](mailto:m_bernstein@acs.org).  **First Living, Dancing Periodic Table of the Elements**   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/Chemists.jpg |   That famous chart displaying the chemical elements that make up everything on Earth — a fixture on the walls of classrooms and labs — literally comes alive in this new video from the American Chemical Society (ACS). [Chemists Can Dance!](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344713&m=1716200&u=ACS&j=8866005&s=http://bytesizescience.com/index.cfm/2011/3/29/The-Chemistry-Dance) features scores of chemists wearing symbols representing the elements, kicking up their heels to the tune of an original rap song. It's all part of ACS's celebration of the International Year of Chemistry. Check out the fun and share the link.  **A Day Without Chemistry**  Imagine a day without cars, electric lights, TV, telephones, safe food, and water, medicine, clothing, your house, and thousands of other familiar objects that make up modern society. Do it, and you are imagining a day in a world without chemistry. ACS explores that thought-provoking premise in a new high-definition video released as part of the celebration of the International Year of Chemistry. [A Day Without Chemistry](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344714&m=1716200&u=ACS&j=8866005&s=http://www.youtube.com/watch?v=AbfW_CMMe48) follows a person who sees more and more everyday necessities and conveniences disappear before his widening eyes. [The Chemistry of Sourdough Bread](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344715&m=1716200&u=ACS&j=8866005&s=http://www.bytesizescience.com/index.cfm/2010/9/27/Chemistry-of-Sourdough)  [The Chemistry of Fireworks](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344716&m=1716200&u=ACS&j=8866005&s=http://www.bytesizescience.com/index.cfm/2010/6/25/Bytesize-Science-Presents-The-Chemistry-of-Fireworks)  [The Chemistry of Grilling and Barbecuing](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344717&m=1716200&u=ACS&j=8866005&s=http://www.bytesizescience.com/index.cfm/2010/6/15/Chemistry-of-Barbeque)  [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif  **ACS Podcasts**   |  |  | | --- | --- | | **Bytesize Science, a podcast for young listeners**  Bytesize Science is a science podcast for kids of all ages that entertains and educates, with new high-definition video podcasts and some episodes in Spanish. 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The SciFinder podcasts are available in English, Chinese, Japanese, and Portuguese. | http://images.magnetmail.net/images/clients/ACS/SciFinder_PodcastLogo.gif | | **And Don’t Miss. . .**  **[General Chemistry Glossary](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344726&m=1716200&u=ACS&j=8866005&s=http://antoine.frostburg.edu/chem/senese/101/glossary.shtml)** Simple definitions and explanations of chemistry terms. |  | | **Chemical Abstracts Service (CAS) Web site on everyday chemicals** Whether you want to learn more about caffeine, benzoyl peroxide (acne treatment), sodium chloride (table salt), or some other familiar chemical, [CAS Common Chemistry](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344727&m=1716200&u=ACS&j=8866005&s=http://www.commonchemistry.org/) can help. The new Web site provides non-chemists and others with useful information about everyday chemicals by searching either a chemical name or a corresponding CAS Registry Number. The site includes about 7,800 chemicals of general interest as well as all 118 elements from the Periodic Table, providing alternative names, molecular structures, a Wikipedia link, and other information. | http://images.magnetmail.net/images/clients/ACS/CAS.bmp | | **Colors of Chemistry Photo Contest Seeks Entries** Each year in the Colors of Chemistry calendar, CAS highlights remarkable chemistry from the CAS databases with exceptional photography from around the world. This year, they want to see your great photos in the Colors of Chemistry Photo Contest. Each month features a new theme for photographers to explore while on vacation, relaxing at home, or at work in the lab. For more information, visit the Colors of Chemistry website at [colorsofchemistry.org](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344728&m=1716200&u=ACS&j=8866005&s=http://colorsofchemistry.org). |  | | **Science Connections from CAS** [CAS - Science Connections](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344729&m=1716200&u=ACS&j=8866005&s=http://www.cas.org/newsevents/connections/index.html) is a series of articles that showcases the value of CAS databases in light of important general-interest science and technology news. Topics range from fruit flies to Nobel Prize winners, with the CAS - Science Connections series pointing to [CAS databases](http://www.mmsend88.com/link.cfm?r=800557068&sid=17344730&m=1716200&u=ACS&j=8866005&s=http://www.cas.org/expertise/cascontent/index.html) for a more complete understanding of the latest news. |  |   [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif      The American Chemical Society is a nonprofit organization chartered by the U.S. Congress. With more than 164,000 members, ACS is the world’s largest scientific society and a global leader in providing access to chemistry-related research through its multiple databases, peer-reviewed journals and scientific conferences. Its main offices are in Washington, D.C., and Columbus, Ohio.  PressPac information is intended for your personal use in news gathering and reporting and should not be distributed to others. 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