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| http://images.magnetmail.net/images/template/acs/gold.gif In This Edition  |  | | --- | | [Trashing old, unused medications best for reducing environmental impact](#1)  [New, inexpensive paper-based diabetes test ideal for developing countries](#ARTICLE_2)  [Potential new drugs for fox tapeworm infection in humans](#3)  [Corn insecticide linked to great die-off of beneficial honeybees](#4)  [Research boom on ingredients for “enhanced cosmetics”](#5) |  |  | | --- | | [**Journalists’ Resources:**](#Resources)  [About the PressPac](#About)  [News media registration for ACS’ 244th National Meeting & Exposition in Philadelphia](#registration)  [Press releases, briefings and more from ACS’ 243rd National Meeting](#registration) [Inside Science News Service](#InsideScience)  [C&EN Video Spotlight: Protein Camouflage Might Inspire Better Biosensors](#VideoSpotlight)  [Must-reads from C&EN: Deciphering New Claims of “Cold Fusion”](#mustread)  [ACS Pressroom Blog](#pressroomblog)   [Bytesize ScienceBlog](#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) |   [PressPac Archives](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900294&m=1918877&u=ACS&j=10280420&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 - May 16, 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' more than 40 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**  **Trashing old, unused medications best for reducing environmental impact** Environmental Science & Technology   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612PillIstock_thumb.jpg Trashing old, unused medications best for reducing environmental impact Credit: iStock |   A new study suggests that dumping old or unneeded medications in the trash can may be the best way to reduce the environmental impact of the 200 million pounds of pharmaceuticals that go unused in the U.S. each year. The report, which weighs the emissions from flushing, incinerating or trashing drugs, appears in ACS’ journal Environmental Science & Technology.  Stephen J. Skerlos and colleagues explain that to avoid the risks of abuse and accidental poisoning, as well as other problems that unused, unwanted or expired pharmaceuticals pose, they shouldn’t be kept in homes. If thrown away or flushed down a toilet, however, antibiotics, hormones and other drugs can get into lakes, rivers and other water supplies, where they can affect humans and animals. Some places in the U.S. have recently started take-back programs, in which pharmacies collect unneeded drugs and incinerate them with other medical waste, but this burning and transportation produces greenhouse gases and other pollution. The authors wanted to assess the different disposal methods to see which might make the most sense for U.S. households.  Their evaluation shows that, on balance, trash disposal may be the best option in the U.S. Flushing unwanted drugs puts more drug compounds into the environment. Incineration of drugs taken back to a pharmacy could significantly reduce releases to the environment, but the authors note that take-back programs often have limited participation and could have major financial costs. A national program could cost $2 billion each year. A national participation rate of 50 percent in a take-back program, considered to be a high level of participation, would reduce releases of drugs by 93 percent, which is only five percent more than 100 percent participation in trash disposal. “Furthermore, since 60 percent of individuals in the U.S. already trash their unused pharmaceuticals, trash disposal is likely to accomplish faster removal of unused pharmaceuticals from households due to higher participation rates and greater convenience,” the authors say.  The authors acknowledge funding from the [University of Michigan’s Graham Environmental Sustainability Institute (GESI)](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900295&m=1918877&u=ACS&j=10280420&s=http://www.graham.umich.edu/) and the [National Science Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900296&m=1918877&u=ACS&j=10280420&s=http://www.nsf.gov/).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612EST_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900297&m=1918877&u=ACS&j=10280420&s=http://web.1.c2.audiovideoweb.com/1c2web3536/051612est.jpg) for high-resolution image |   ARTICLE #1 **FOR IMMEDIATE RELEASE** “Life Cycle Comparison of Environmental Emissions from Unused Pharmaceutical Disposal Options”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900298&m=1918877&u=ACS&j=10280420&s=http://pubs.acs.org/stoken/presspac/presspac/abs/10.1021/es203987b)   CONTACT: Steven J. Skerlos, Ph.D. University of Michigan Ann Arbor, Mich. 48109 Phone: 734-615-5253 Fax: 734-647-3170 Email: [skerlos@umich.edu](mailto:skerlos@umich.edu)     [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif  ARTICLE #2 **FOR IMMEDIATE RELEASE**  **New, inexpensive paper-based diabetes test ideal for developing countries** Analytical Chemistry   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612DiabetesCDC_thumb.gif New, inexpensive paper-based diabetes test ideal for developing countries Credit: Centers for Disease Control and Prevention[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900299&m=1918877&u=ACS&j=10280420&s=http://web.1.c2.audiovideoweb.com/1c2web3536/051612DiabetesCDC.gif) for larger image. |   With epidemics of Type 2 diabetes looming in rural India, China and other areas of the world where poverty limits the availability of health care, scientists are reporting development of an inexpensive and easy-to-use urine test ideally suited for such areas. The report describing the paper-based device, which also could be adapted for the diagnosis and monitoring of other conditions and the environment, appears in ACS’ journal Analytical Chemistry.  Jan Lankelma and colleagues point out that monitoring glucose levels is important. Although diabetes test strips seem inexpensive, the cost can be prohibitive in areas where people must choose between that and the essentials of life, such as food and shelter. In addition, current handheld diabetes monitoring devices measure glucose levels in blood, which requires a pin-prick to a finger — something that could deter patients from taking the measurements. To address these challenges, the researchers built a new type of glucose monitor — one that detects glucose levels in urine (which is easy to obtain) and is made from inexpensive materials, such as paper.  The device consists of three electrodes, a buffer solution, a piece of paper (or nitrocellulose) and a plastic dish. The sample is injected onto the paper with a slightly modified medical syringe, and the solution moves along the paper by gravity and capillary action. An enzyme called glucose oxidase is already on the paper, and it reacts with glucose in the sample to produce hydrogen peroxide, which is detected by the electrodes. The system can be built quickly, is inexpensive and produces results similar to those from a more expensive, commercially available clinical instrument. The authors state that the device could be used not only in a clinical lab, but it could also be further developed for applications as diverse as analyzing food quality and environmental monitoring.  The authors acknowledge funding from the [Bill and Melinda Gates Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900300&m=1918877&u=ACS&j=10280420&s=http://www.gatesfoundation.org/Pages/home.aspx).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612AnaChem_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900301&m=1918877&u=ACS&j=10280420&s=http://web.1.c2.audiovideoweb.com/1c2web3536/051612anachem.jpg) for high-resolution image |   ARTICLE #2 **FOR IMMEDIATE RELEASE** “A Paper-Based Analytical Device for Electrochemical Flow Injection Analysis of Glucose in Urine”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900302&m=1918877&u=ACS&j=10280420&s=http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/ac3003648) CONTACT: Jan Lankelma, Ph.D. VU University 1081 HV Amsterdam The Netherlands Fax: +31-205-98-7229 Email: [j.lankelma@vu.nl](mailto:j.lankelma@vu.nl)    [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif  ARTICLE #3 **FOR IMMEDIATE RELEASE  Potential new drugs for fox tapeworm infection in humans** Journal of Medicinal Chemistry   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612TapewormCDC_thumb.jpg Potential new drugs for infection in humans by fox tapeworm, cousin of Taenia solium, pictured above. Credit: Centers for Disease Control and Prevention |   Scientists are reporting development and testing of a new series of drugs that could finally stop the fox tapeworm — which causes a rare but life-threatening disease in humans — dead in its tracks. The report, which appears in ACS’ Journal of Medicinal Chemistry, shows that specific organometallic substances that help combat cancer are also the surprising best new hope for a treatment against tapeworm infection.  Carsten Vock, Andrew Hemphill and colleagues explain that alveolar echinococcosis (AE) is a parasitic disease caused by the fox tapeworm Echinococcus multilocularis. Although rare, AE disease results in the death of about 94 percent of patients worldwide within 10-20 years of diagnosis if not treated appropriately. Most infections occur in the Northern hemisphere, in places like central Asia, northwestern China, and parts of Japan and Europe. People become infected from eating food contaminated with the parasite’s eggs, which are found in the feces of infected foxes, cats or dogs. Surgery is the best option for AE patients, but it does not always remove all of the parasites. Current AE drugs do not cure the disease, but simply keep the parasites at bay. These medicines must be taken life-long. In AE patients, the tapeworms cause tumor-like growths, which can metastasize or spread to different parts of the body. This reminded the researchers of cancer, so they looked at whether ruthenium complexes, promising anti-cancer agents, could also treat tapeworm.  The group prepared and evaluated several ruthenium complexes as potential drugs against the fox tapeworm. Some were effective in killing the tapeworms and also were less toxic on normal cells in laboratory dish tests, making them prime candidates for further development as treatments for AE.  The authors acknowledge funding from the [Swiss National Science Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900304&m=1918877&u=ACS&j=10280420&s=http://www.snf.ch/E/Pages/default.aspx), the [Bangerter Rhyner Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900305&m=1918877&u=ACS&j=10280420&s=http://www.bangerter-stiftung.ch/), the [Swiss Life Foundation](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900306&m=1918877&u=ACS&j=10280420&s=http://www.swisslife.com/en/home/aboutus/responsibility/society/foundations.html) and [Fondation Sana](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900307&m=1918877&u=ACS&j=10280420&s=http://www.fondation-sana.ch/).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612JMC_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900308&m=1918877&u=ACS&j=10280420&s=http://web.1.c2.audiovideoweb.com/1c2web3536/051612jmc.jpg) for high-resolution image |   ARTICLE #3 **FOR IMMEDIATE RELEASE** “A New Promising Application for Highly Cytotoxic Metal Compounds: ?6-Arene Ruthenium(II) Phosphite Complexes for the Treatment of Alveolar Echinococcosis”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900309&m=1918877&u=ACS&j=10280420&s=http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/jm300291a)  CONTACT: Dr. Carsten A. Vock Ernst-Moritz-Arndt-University of Greifswald D-17487 Greifswald, Germany Phone: +49-3834-86-4343 Fax: +49-3834-86-4377 Email: [vockc@uni-greifswald.de](mailto:vockc@uni-greifswald.de)  or  Andrew Hemphill, Ph.D. University of Berne CH-3012 Berne, Switzerland Phone: +41-31-631-2384 Fax: +41-31-631-2477 Email: [andrew.hemphill@vetsuisse.unibe.ch](mailto:andrew.hemphill@vetsuisse.unibe.ch)    [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif    ARTICLE #4 **FOR IMMEDIATE RELEASE: A PressPac Instant Replay\***  **Corn insecticide linked to great die-off of beneficial honeybees** Environmental Science & Technology   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/031412HoneybeesIstock_thumb.jpg Corn insecticide linked to great die-off of beneficial honeybees Credit: iStock |   New research has linked springtime die-offs of honeybees critical for pollinating food crops — part of the mysterious malady called colony collapse disorder — with technology for planting corn coated with insecticides. The study, published in ACS’ journal Environmental Science & Technology, appears on the eve of spring planting seasons in some parts of Europe where farmers use the technology and widespread deaths of honeybees have occurred in the past.  In the study, Andrea Tapparo and colleagues explain that seeds coated with so-called neonicotinoid insecticides went into wide use in Europe in the late 1990s. The insecticides are among the most widely used in the world, popular because they kill insects by paralyzing nerves but have lower toxicity for other animals. Almost immediately, beekeepers observed large die-offs of bees that seemed to coincide with mid-March to May corn planting. Scientists thought this might be due to particles of insecticide made airborne by the pneumatic drilling machines used for planting. These machines forcefully suck seeds in and expel a burst of air containing high concentrations of particles of the insecticide coating. In an effort to make the pneumatic drilling method safer, the scientists tested different types of insecticide coatings and seeding methods.  They found, however, that all of the variations in seed coatings and planting methods killed honeybees that flew through the emission cloud of the seeding machine. One machine modified with a deflector to send the insecticide-laced air downwards still caused the death of more than 200 bees foraging in the field. The authors suggest that future work on this problem should focus on a way to prevent the seeds from fragmenting inside the pneumatic drilling machines.  The authors acknowledge funding from the [University of Padova](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900310&m=1918877&u=ACS&j=10280420&s=http://www.unipd.it/index_en.htm) and the [Ministero delle Politiche Agricole Alimentari e Forestali, Italy](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900311&m=1918877&u=ACS&j=10280420&s=http://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/202).   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612EST_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900312&m=1918877&u=ACS&j=10280420&s=http://web.1.c2.audiovideoweb.com/1c2web3536/051612est.jpg) for high-resolution image |   ARTICLE #4 **FOR IMMEDIATE RELEASE** “Assessment of the Environmental Exposure of Honeybees to Particulate Matter Containing Neonicotinoid Insecticides Coming from Corn Coated Seeds”  [DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900313&m=1918877&u=ACS&j=10280420&s=http://pubs.acs.org/stoken/presspac/presspac/abs/10.1021/es2035152)  CONTACT: Professor Andrea Tapparo  Universita` degli Studi di Padova Padova, Italy E-mail: [andrea.tapparo@unipd.it](mailto:andrea.tapparo@unipd.it)  **\* 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**  **Research boom on ingredients for “enhanced cosmetics”** Chemical & Engineering News   |  | | --- | | http://images.magnetmail.net/images/clients/ACS/051612CEN_thumb.jpg [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900314&m=1918877&u=ACS&j=10280420&s=http://web.1.c2.audiovideoweb.com/1c2web3536/051612cen.jpg) for high-resolution image. |   Growing demand among baby boomers and others for “enhanced cosmetics” that marry cosmetics and active ingredients to smooth wrinkled skin and otherwise improve appearance is fostering research on micro-capsules and other technology to package those ingredients in creams, lotions and other products. That boom in research on encapsulation and other delivery technology is the topic of the cover story in the current edition of Chemical & Engineering News (C&EN), the weekly newsmagazine of the American Chemical Society (ACS), the world’s largest scientific society.  In the article, C&EN Senior Correspondent Marc S. Reisch explains that major chemical companies like BASF, Dow Chemical and Air Products & Chemicals are acquiring or partnering with makers of beauty and personal care ingredients to take advantage of a global market valued at $425 billion in 2011. Active ingredient delivery systems are already incorporated into 10 to 20 percent of cosmetics on the market today, a number predicted to grow to 35 or 45 percent in five years. To meet that demand, chemical companies are looking for better ways to encapsulate these additives ? which can reduce inflammation, repair hair or prevent wrinkles ? to stop them from breaking down in the bottle or help deliver them to the skin and hair more effectively.  Reisch describes several new approaches. For example, Air Products & Chemicals, which produces gases like oxygen and helium, as well as adhesives and electronic chemicals, has adapted an insulin sugar delivery system to make better sunscreen. Microcapsules help coat the skin with protective ingredients, while another capsule system carries vitamins C and E beneath the skin as a second line of defense. Another product, from German specialty chemical maker Evonik Industries, uses water droplets coated in silica to make a “dry water.” When combined with a powder containing fragrances or vitamins and rubbed on skin or in hair, the water is released to form a cream that delivers the ingredients.  ARTICLE #5 **FOR IMMEDIATE RELEASE** "Enhancing Cosmetics"  This story is available at: [http://cenm.ag/cosmetics](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900316&m=1918877&u=ACS&j=10280420&s=http://cenm.ag/cosmetics)    [To Top](#top)  http://images.magnetmail.net/images/clients/ACS/goldline.gif    **Journalists’ Resources**  **About the PressPac** The ACS PressPac consists of alerts to journalists about potentially newsworthy research published in ACS journals and Chemical & Engineering News. These alerts, or news tips, are not traditional press releases that provide comprehensive coverage of the research. Journalists can read the full text of the research provided with each alert and use the contact information for the lead authors to resolve any questions about the research or its newsworthiness.  **News media registration for ACS’ 244th National Meeting & Exposition in Philadelphia** News media [registration](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900317&m=1918877&u=ACS&j=10280420&s=https://www.xpressreg.net/register/acsf082/media/start.asp) is now open for the American Chemical Society’s (ACS’) 244th National Meeting & Exposition in Philadelphia, August 19-23, 2012. The event will include more than 8,600 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 Pennsylvania Convention Center and area hotels.  **Press releases, briefings and more from ACS’ 243rd National Meeting** [www.eurekalert.org/acsmeet.php](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900318&m=1918877&u=ACS&j=10280420&s=http://www.eurekalert.org/acsmeet.php)  [http://www.ustream.tv/channel/acslive](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900319&m=1918877&u=ACS&j=10280420&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=18900320&m=1918877&u=ACS&j=10280420&s=http://www.insidescience.org/) to visit the Inside Science News website.  **C&EN Video Spotlight: Protein Camouflage Might Inspire Better Biosensors** When proteins interact with each other, biology happens. And chemists are interested in controlling how it happens. Such work could lead to better drugs or biosensors. To that end they’re studying several classes of molecules, including the cup-shaped calixarenes, which bind to protein surfaces. Now, chemists led by Peter B. Crowley of National University of Ireland Galway have the most detailed information yet about how a calixarene binds to a protein. They developed an animation to explain how the calixarene might roam this protein's surface. Effectively, by moving around, it disguises or camouflages the protein’s surface, which the team says could affect how that protein binds to partners.  [Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900321&m=1918877&u=ACS&j=10280420&s=http://www.youtube.com/watch?v=pOTWEPF925c&feature=youtu.be) to view the video.  **Must-reads from C&EN: Deciphering New Claims of “Cold Fusion”** An Italian engineer who claims invention of a tabletop reactor that produces large amounts of energy via a fusion-like process has left scientists looking for answers that, so far, are not forthcoming. For the full story, 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=18900322&m=1918877&u=ACS&j=10280420&s=https://communities.acs.org/community/science/science_news) highlights research from ACS’ more than 40 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=18900323&m=1918877&u=ACS&j=10280420&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=18900324&m=1918877&u=ACS&j=10280420&s=https://twitter.com/signup). Then visit [http://twitter.com/ACSpressroom](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900325&m=1918877&u=ACS&j=10280420&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=18900326&m=1918877&u=ACS&j=10280420&s=http://twitter.com/cenmag)> for the latest news in chemistry and dispatches from C&EN's blog, CENtral Science <[http://centralscience.org](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900327&m=1918877&u=ACS&j=10280420&s=http://centralscience.org)>.**ACS Press Releases**  [Press releases](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900328&m=1918877&u=ACS&j=10280420&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=18900329&m=1918877&u=ACS&j=10280420&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=18900330&m=1918877&u=ACS&j=10280420&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=18900331&m=1918877&u=ACS&j=10280420&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' 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=18900332&m=1918877&u=ACS&j=10280420&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=18900333&m=1918877&u=ACS&j=10280420&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=18900334&m=1918877&u=ACS&j=10280420&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=18900335&m=1918877&u=ACS&j=10280420&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. [Subscribe to Bytesize Science using iTunes](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900336&m=1918877&u=ACS&j=10280420&s=http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=266670954). No iTunes? No problem. [Listen to the latest episodes of Bytesize Science](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900337&m=1918877&u=ACS&j=10280420&s=http://feeds.feedburner.com/BytesizeScience) in your web browser. |  | | **Global Challenges/Chemistry Solutions**  This special series of ACS podcasts focuses on some of the 21st century’s most daunting challenges, and how chemists and other scientists are finding solutions. [Subscribe at iTunes](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900338&m=1918877&u=ACS&j=10280420&s=http://itunes.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=283627508) or listen and access other resources at the ACS web site [www.acs.org/GlobalChallenges](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900339&m=1918877&u=ACS&j=10280420&s=http://www.acs.org/GlobalChallenges). | http://images.magnetmail.net/images/clients/ACS/GlobalChallenges(1).jpg | | **Science Elements: ACS science news podcast**  Science Elements is a podcast of PressPac content that makes cutting-edge scientific discoveries from ACS journals available to a broader public audience. [Subscribe to Science Elements using iTunes](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900340&m=1918877&u=ACS&j=10280420&s=http://itunes.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=259674986). [Listen to the latest episodes of Science Elements in your web browser](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900341&m=1918877&u=ACS&j=10280420&s=http://feeds2.feedburner.com/acs/scienceelements). Science Elements is on Facebook — [check out the latest updates and information](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900342&m=1918877&u=ACS&j=10280420&s=http://www.facebook.com/pages/Science-Elements/135606971011). |  | | **SciFinder® Podcasts** Interested in healthful plant phytochemicals, nanotechnology or green chemistry? Check out [the SciFinder series of podcasts](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900343&m=1918877&u=ACS&j=10280420&s=http://www.videogateway.tv/cas/index.php?SectionID=5), which explore a vast array of current interest topics and new discoveries in the 21st century. The SciFinder podcasts are available in English, Chinese, Japanese and Portuguese. | http://images.magnetmail.net/images/clients/ACS/SciFinderlogo(3).jpg | | **And Don’t Miss. . .**  **[General Chemistry Glossary](http://www.mmsend88.com/link.cfm?r=800557068&sid=18900344&m=1918877&u=ACS&j=10280420&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=18900345&m=1918877&u=ACS&j=10280420&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 |   [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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