|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| http://images.magnetmail.net/images/template/acs/gold.gifIn This Edition

|  |
| --- |
| [Green plants reduce pollution on city streets up to eight times more than previously believed](#1)[All-they-can-eat diet for lab mice & rats may foster inaccurate test results](#ARTICLE_2)[Enhanced royal jelly produces jumbo queen bee larvae](#3)[Kitchen exhaust fans vary in effectiveness in reducing indoor air pollution](#4)  [The taste and fragrance of orange, vanilla, rose and more — courtesy of bacteria and yeast](#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: Studying Strutting Pigs to Keep Pigs from Going Lame](#VideoSpotlight)[Must-Read from C&EN: More than just party balloons](#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=19746174&m=2063423&u=ACS&j=10810321&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 SERVICEWeekly Press Package - July 18, 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, editorm\_woods@acs.org202-872-6293General Inquiries: Michael Bernsteinm\_bernstein@acs.org 202-872-6042  ARTICLE #1 **FOR IMMEDIATE RELEASE****Green plants reduce pollution on city streets up to eight times more than previously believed**Environmental Science & Technology

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812Green_thumb.jpgGreen plants reduce pollution on city streets up to eight times more than previously believedCredit: iStock |

Trees, bushes and other greenery growing in the concrete-and-glass canyons of cities can reduce levels of two of the most worrisome air pollutants by eight times more than previously believed, a new study has found. A report on the research appears in the ACS journal Environmental Science & Technology.Thomas Pugh and colleagues explain that concentrations of nitrogen dioxide (NO2) and microscopic particulate matter (PM) — both of which can be harmful to human health — exceed safe levels on the streets of many cities. Past research suggested that trees and other green plants can improve urban air quality by removing those pollutants from the air. However, the improvement seemed to be small, a reduction of less than 5 percent. The new study sought a better understanding of the effects of green plants in the sometimes stagnant air of city streets, which the authors term "urban street canyons."The study concluded that judicious placement of grass, climbing ivy and other plants in urban canyons can reduce the concentration at street level of NO2 by as much as 40 percent and PM by 60 percent, much more than previously believed. The authors even suggest building plant-covered "green billboards" in these urban canyons to increase the amount of foliage. Trees were also shown to be effective, but only if care is taken to avoid trapping pollutants beneath their crowns.The authors acknowledge funding from the [UK Engineering and Physical Sciences Research Council Sustainable Urban Environment program](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746175&m=2063423&u=ACS&j=10810321&s=http://www.epsrc.ac.uk/ourportfolio/themes/engineering/activities/sue/Pages/default.aspx).

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812EST_thumb.jpg[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746176&m=2063423&u=ACS&j=10810321&s=http://web.1.c2.audiovideoweb.com/1c2web3536/071812est.jpg) for high-resolution image |

ARTICLE #1 **FOR IMMEDIATE RELEASE**“The Effectiveness of Green Infrastructure for Improvement of Air Quality in Urban Street Canyons”[DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746177&m=2063423&u=ACS&j=10810321&s=http://pubs.acs.org/stoken/presspac/presspac/abs/10.1021/es300826w) CONTACT:Thomas A. M. Pugh, Ph.D.Karlsruhe Institute of TechnologyGarmisch-Partenkirchen 82467GermanyEmail: thomas.pugh@imk.fzk.de [To Top](#top)http://images.magnetmail.net/images/clients/ACS/goldline.gifARTICLE #2 **FOR IMMEDIATE RELEASE****All-they-can-eat diet for lab mice & rats may foster inaccurate test results**Chemical Research in Toxicology

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812Mouse_thumb.jpgAll-they-can-eat diet for lab mice & rats may foster inaccurate test resultsCredit: iStock |

The widespread practice of allowing laboratory rats and mice to eat as much as they want may be affecting the outcome of experiments in which scientists use these “test-tubes-on-four-feet” to test new drugs and other substances for toxicity and other effects. That’s the conclusion of a new analysis published in ACS’ journal Chemical Research in Toxicology.Laboratory mice and rats serve as stand-ins for people for research that cannot be done on humans. In the article, Gale Carey and Lisa Merrill point out that the millions of lab rodents used in laboratory studies each year have a nutritional status that is different from other test animals. While other test animals are fed meals, rodents have round-the-clock access to food. And eat they do, gaining more weight and more body fat than meal-fed rodents. The authors cite other research indicating that lab rodents with free access to food tend to develop abnormally high blood fat levels, high cholesterol, nerve and heart damage, cancer and other disorders.Their analysis of 54 studies concluded that having free access to food is likely to affect the results of tests for the toxicity and cancer-causing effects of new drugs and other substances in rodents, and could be the reason why such studies have been varying so much in recent years. “Therefore, it is crucial that feeding regimen be carefully considered in designing toxicology experiments,” say the authors.

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812CRT_thumb.jpg[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746178&m=2063423&u=ACS&j=10810321&s=http://web.1.c2.audiovideoweb.com/1c2web3536/071812crt.jpg) for high-resolution image |

ARTICLE #2 **FOR IMMEDIATE RELEASE**“Meal-Feeding Rodents and Toxicology Research”[DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746179&m=2063423&u=ACS&j=10810321&s=http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/tx300109x)CONTACT:Gale Carey, Ph.D.Department of Molecular, Cellular and Biomedical SciencesUniversity of New HampshireDurham, N.H. 03824Phone: 603-862-4628Fax: 603-862-1148Email: gale.carey@unh.edu [To Top](#top)http://images.magnetmail.net/images/clients/ACS/goldline.gifARTICLE #3 **FOR IMMEDIATE RELEASEEnhanced royal jelly produces jumbo queen bee larvae**Journal of Agricultural and Food Chemistry

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812Bees_thumb.jpgEnhanced royal jelly produces jumbo queen bee larvaeCredit: iStock |

Scientists have discovered a way to make worker bees produce an enhanced version of royal jelly (RJ) – the super-nutritious substance that dictates whether larvae become workers or queens, and that is also renowned as a health supplement for people. Their study, which found that the super RJ that makes queen bee larvae grow 2-3 times larger than normal, appears in ACS’ Journal of Agricultural and Food Chemistry.Chia-Nan Chen and colleagues explain that royal jelly is a thick liquid made up of proteins, sugars and fats that is secreted by glands in the throats and jaws of worker bees and fed to larvae. Workers feed all bee larvae RJ for the first three days of their lives, but only the queen gets it throughout life, growing larger and living up to 15 times longer than other bees. The scientists treated worker bees with drugs called histone deacetylase inhibitors (HDACis) to see whether they could enhance the larvae’s growth.They found that worker bees given HDACis produced a fortified royal jelly that made the queen bee larvae grow to be 2-3 times larger than larvae fed standard royal jelly. A couple HDACis have already been approved for treating certain forms of cancer. The scientists noted that this is the first study showing that the composition of RJ can be modified in a way that changes the body size of queen bees during development.The authors acknowledge funding from the Small Business Innovation Research (SBIR) grant (SBIR, 1Z-960165) from the [Ministry of Economic Affairs, Taiwan](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746181&m=2063423&u=ACS&j=10810321&s=http://www.moea.gov.tw/Mns/english/home/English.aspx).

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812JAF_thumb.jpg[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746182&m=2063423&u=ACS&j=10810321&s=http://web.1.c2.audiovideoweb.com/1c2web3536/071812jaf.jpg) for high-resolution image |

ARTICLE #3 **FOR IMMEDIATE RELEASE**“Growth Stimulating Effect on Queen Bee Larvae of Histone Deacetylase Inhibitors”[DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746183&m=2063423&u=ACS&j=10810321&s=http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/jf300815b)CONTACT:Chia-Nan Chen, Ph.D.NatureWise Biotech & Medicals Corp.Nankang, Taipei 115TaiwanPhone: 886-2-590-2655-9109Fax: 886-2-2655-9110E-mail: cnchen@mail.nbic.org.tw [To Top](#top)http://images.magnetmail.net/images/clients/ACS/goldline.gif ARTICLE #4 **FOR IMMEDIATE RELEASE: A PressPac Instant Replay\*****Kitchen exhaust fans vary in effectiveness in reducing indoor air pollution**Environmental Science & Technology

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/053012HoodIstock.jpgKitchen exhaust fans vary in effectiveness in reducing indoor air pollutionCredit: iStock |

Here’s the recipe from a new study for minimizing indoor air pollution from cooking – which can produce levels of indoor air pollution higher than those encountered in heavily polluted outdoor air: Turn on the range exhaust fan and cook on the back burners. The study appears in ACS’ journal Environmental Science & Technology.Brett C. Singer and William W. Delp explain that cooking with gas burners on stovetops and in ovens can produce unhealthy levels of indoor air pollution. Exhaust fans mounted in hoods over cooktops and downdraft systems that suck air directly from the cooking surface can remove those pollutants. These systems vary widely in price, loudness, power consumption and effectiveness in removing pollution. But the authors note that there is no rating standard to help consumers know which hood is best at capturing pollutants. They set out to measure the performances of seven different over-the-range hood designs.The scientists found that none of the devices performed well in all of the key functions: fan efficiency, efficiency in capturing polluted air for exhaust and sound levels. Two hoods that operated quietly and removed 70 to 90 percent of pollutants had high fan speeds that hurt their efficiencies. A third device, which proved to be the best at removing contaminated air from the burners and the oven, was so loud that it made normal conversation impossible. The authors suggest that the best option may not require buying a new hood at all: “Routine use of even moderately effective venting range hoods can substantially reduce in-home exposures to cooking and burner-generated air pollutants. Effectiveness can be substantially enhanced by preferential use of back versus front cooktop burners and by using higher fan settings.” The study includes a table comparing prices and performances of the models tested. The authors acknowledge funding from the [U.S. Department of Energy Building Technologies Program](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746184&m=2063423&u=ACS&j=10810321&s=http://www1.eere.energy.gov/buildings/), [HUD's Healthy Homes Program](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746185&m=2063423&u=ACS&j=10810321&s=http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/hhi), the [U.S. EPA Indoor Environments Division](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746186&m=2063423&u=ACS&j=10810321&s=http://www.epa.gov/aboutepa/oar.html) and the [California Energy Commission's PIER program](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746187&m=2063423&u=ACS&j=10810321&s=http://www.energy.ca.gov/contracts/pier/contractors/index.html).

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812EST_thumb.jpg[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746188&m=2063423&u=ACS&j=10810321&s=http://web.1.c2.audiovideoweb.com/1c2web3536/071812est.jpg) for high-resolution image |

ARTICLE #4 **FOR IMMEDIATE RELEASE**“Performance Assessment of U.S. Residential Cooking Exhaust Hoods”[DOWNLOAD FULL TEXT ARTICLE](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746189&m=2063423&u=ACS&j=10810321&s=http://pubs.acs.org/stoken/presspac/presspac/abs/10.1021/es3001079)CONTACT:Brett C. Singer, Ph.D.Lawrence Berkeley National LaboratoryBerkeley, Calif. 94720Phone: 510-486-4779Email: bcsinger@lbl.gov**\* A previous PressPac item that you may have missed**   [To Top](#top)http://images.magnetmail.net/images/clients/ACS/goldline.gifARTICLE #5 **FOR IMMEDIATE RELEASE****The taste and fragrance of orange, vanilla, rose and more — courtesy of bacteria and yeast**Chemical & Engineering News

|  |
| --- |
| http://images.magnetmail.net/images/clients/ACS/071812CEN_thumb.jpg[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746190&m=2063423&u=ACS&j=10810321&s=http://web.1.c2.audiovideoweb.com/1c2web3536/071812cen.jpg) for high-resolution image. |

Suppliers of the orange, vanilla and other flavor and fragrance ingredients used in hundreds of foods, beverages and personal care products are putting their faith in microbes as new sources for these substances. That migration away from the natural plant oils used for centuries to delight the taste buds and nose is the topic of a story in the current edition of Chemical & Engineering News. C&EN is the weekly newsmagazine of the American Chemical Society, the world’s largest scientific society.Melody M. Bomgardner, C&EN senior business editor, points out that manufacturers are looking for more reliable sources of these ingredients. They now face price-swings and supply disruptions caused by natural disasters, poaching and other problems in the far-flung places where fragrant natural plant oils originate. Major flavor and fragrance houses thus are turning to biotechnology companies that use genetically engineered microbes to produce ingredients that mimic natural flavors and fragrances.The microbes can produce vanillin, for instance, which is the stuff of vanilla, and picrocrocin, normally extracted from saffron, which costs about $900 a pound. Microbial production has another advantage aside from reliability, Bomgardner notes: It reduces the cost of such otherwise rare and expensive ingredients.ARTICLE #5 **FOR IMMEDIATE RELEASE**"The Sweet Smell Of Microbes"This story is available at: [http://cenm.ag/microbes](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746192&m=2063423&u=ACS&j=10810321&s=http://cenm.ag/microbes)  [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=19746193&m=2063423&u=ACS&j=10810321&s=https://www.xpressreg.net/register/acsf082/media/reginfo.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.To view the full news release about meeting registration, [click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746194&m=2063423&u=ACS&j=10810321&s=http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=222&content_id=CNBP_029922&use_sec=true&sec_url_var=region1&__uuid=3e808d0e-dcbd-4957-9ceb-468b230b8951).**Press releases, briefings and more from ACS’ 243rd National Meeting**[www.eurekalert.org/acsmeet.php](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746195&m=2063423&u=ACS&j=10810321&s=http://www.eurekalert.org/acsmeet.php) [http://www.ustream.tv/channel/acslive](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746196&m=2063423&u=ACS&j=10810321&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=19746197&m=2063423&u=ACS&j=10810321&s=http://www.insidescience.org/) to visit the Inside Science News website.**C&EN Video Spotlight: Studying Strutting Pigs to Keep Pigs from Going Lame**Following in the hoof-steps of Hollywood superstar Miss Piggy, a group of female breeding pigs are stepping in front of the camera for their own star-making turn: a role in the Ph.D. project of grad student Sophia Stavrakakis at England’s Newcastle University. Stavrakakis and her team have trained sows to walk in front of a three-dimensional motion-capture camera system that records data related to the length of the pigs’ strides as well as the angles of their elbows and knees. The data will assist Stavrakakis’ team in identifying correlations between a female breeding pig’s gait and its likelihood of eventually becoming lame. The results could help farmers to really, ahem, bring home the bacon given that the administration of preventive care to at-risk swine can reduce costly sow fatalities.[Click here](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746198&m=2063423&u=ACS&j=10810321&s=http://www.youtube.com/watch?v=ylheyk_sYN4&feature=youtu.be) to view the video.**Must-Read from C&EN: More than just party balloons**For the second time in 5 years, the world is in the midst of a shortage of helium, the buoyant and inert gas critical for applications, ranging from MRI scans to guiding air-to-air missiles toward their targets. For the full story, contact newsroom@acs.org. **ACS Pressroom Blog** The ACS Office of Public Affairs' [pressroom blog](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746199&m=2063423&u=ACS&j=10810321&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=19746200&m=2063423&u=ACS&j=10810321&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=19746201&m=2063423&u=ACS&j=10810321&s=https://twitter.com/signup). Then visit [http://twitter.com/ACSpressroom](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746202&m=2063423&u=ACS&j=10810321&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=19746203&m=2063423&u=ACS&j=10810321&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=19746204&m=2063423&u=ACS&j=10810321&s=http://centralscience.org)>.**ACS Press Releases** [Press releases](http://www.mmsend88.com/link.cfm?r=800557068&sid=19746205&m=2063423&u=ACS&j=10810321&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=19746206&m=2063423&u=ACS&j=10810321&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=19746207&m=2063423&u=ACS&j=10810321&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. **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=19746208&m=2063423&u=ACS&j=10810321&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=19746209&m=2063423&u=ACS&j=10810321&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=19746210&m=2063423&u=ACS&j=10810321&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=19746211&m=2063423&u=ACS&j=10810321&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=19746212&m=2063423&u=ACS&j=10810321&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=19746213&m=2063423&u=ACS&j=10810321&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=19746214&m=2063423&u=ACS&j=10810321&s=http://feeds.feedburner.com/BytesizeScience) in your web browser.    | http://images.magnetmail.net/images/clients/ACS/Bytesizelogo(1).jpg |
| **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=19746215&m=2063423&u=ACS&j=10810321&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=19746216&m=2063423&u=ACS&j=10810321&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=19746217&m=2063423&u=ACS&j=10810321&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=19746218&m=2063423&u=ACS&j=10810321&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=19746219&m=2063423&u=ACS&j=10810321&s=http://www.facebook.com/pages/Science-Elements/135606971011).      | http://images.magnetmail.net/images/clients/ACS/scienceelements_02_150.gif |
| **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=19746220&m=2063423&u=ACS&j=10810321&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=19746221&m=2063423&u=ACS&j=10810321&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=19746222&m=2063423&u=ACS&j=10810321&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. Anyone using advance PressPac information for stocks or securities dealing may be guilty of insider trading under the federal Securities Exchange Act of 1934.    |