From: cns-weekly-clips-bounces@lists.isber.ucsb.edu on behalf of CNS - Weekly News Clips from UCSB
To: cns-weekly-clips
Subject: [CNS-weekly-clips] CNS-UCSB News Clips, October 16-31, 2011
Date: Wednesday, November 09, 2011 9:00:34 PM
Attachments: CNS-UCSB Postdoctoral Researcher Announcement.pdf
Untitled attachment 00921.txt

CNS-UCSB
Center for Nanotechnology in Society

Center for Nanotechnology in Society
University of California, Santa Barbara
www.cns.ucsb.edu

News Clips

October 16-31, 2011

Announcements

- Please find attached an announcement for open post-doctoral positions at CNS-UCSB.

- **Clips survey**: If you have completed the reader survey online, thank you! If not, please take a few moments to participate. Your opinion matters to us and is anonymous and confidential. The survey can be accessed at www.cns.ucsb.edu/weeklyclips.

Top Deck

What the nation's (& world's) top papers, news wires and sources have been saying about

Science Weekly podcast: The carbon nanotechnology revolution
Guardian (U.K.)
Oct. 16
Alok Jha

"Professor Ravi Silva believes we're about to experience a new industrial revolution, driven by nanotechnology and carbon."

Electronic Circuits Rewire Themselves on Demand, Depending On What They're Needed For

Popular Science
Oct. 17
Clay Dillow

"Northwestern University researchers-the same ones that brought us self-erasing documents a couple

of years ago-are envisioning a day when computers and other gadgets can rewire themselves automatically to better suit the user's needs at a given moment. As a step in that direction, they have today published a paper in *Nature Nanotechnology* describing tiny circuits they've created from nano-scale materials that can be resistors, diodes, transistors, or other components depending on what the computer needs them to be at a given time."

Also noted by Forbes, BBC

EU defines nanomaterials in bid to assess health risks
Reuters
Oct. 18

"The European Union's executive published a definition of nanomaterials on Tuesday, a move that will help regulators identify whether such ultra-fine particles - whose risks are still largely unknown - are present in food and consumer goods."

Also noted by PhysOrg.

E. Coli Testing Technology From Yale Engineers Could Save Thousands Of Lives
Huffington Post
Oct. 21
Joe Satran

"Right now, just one in 1000 cows that pass through the deathly gates of an industrial slaughterhouse is tested for harmful pathogens. That's because the current method for testing meat costs $50 and takes 12 hours. The consequences of this languorous process speak for themselves: 5000 Americans die from food-borne illness, while 76 million others -- one in four people in the country -- fall sick."

With a Carbon Nanotube Glut, What Do You Do with Them?
IEEE Spectrum Nanoclast
Oct. 21
Dexter Johnson

"While I was attending the EuroNanoForum 2011 conference earlier this year, I ran into old acquaintance who works at a national nanotechnology laboratory."

Nanotech to Play Big Role in Modernization Plans
The Moscow Times
Oct. 26
Justin Varilek

"President Dmitry Medvedev's modernization committee will review the status of the nanotechnology sector, including plans to invest in more than 13 domestic factories and develop local expertise via a partnership with the Massachusetts Institute of Technology, during its meeting on Wednesday."

Nurturing Basic Nanotech Research for Others to Enjoy the Fruit
IEEE Spectrum Nanoclast
Oct. 28
Dexter Johnson

"It seems the last decade of the US-along with parts of Europe and Asia-pouring money into nanotechnology research, which led to a few fledgling nanotechnology-based businesses, is finally paying off . . . for Russia."

On Deck

What Local Sources are Reporting

Is That Face Cream Safe?
New Haven (CT) *Independent*
Oct. 21
Gwyneth K. Shaw

"As nanomaterials become more common, the cosmetics aisle is at the forefront of new nano-infused consumer products. Sunscreens, wrinkle-fighters and even lip plumpers are using these super-small particles to attract customers."

Non-invasive imaging technique for detecting advanced breast cancer
Examiner.com
Oct. 23
Ruben Dagda

"October is breast cancer awareness month and there is a public campaign to increase awareness around Western Pennsylvania on the diagnosis and treatment of breast cancer, a disease that affects over 23% of all people worldwide."

Feds Urge Probe Of Nano 'Life Cycles'
New Haven (CT) *Independent*
Oct. 28
Gwyneth K. Shaw

"The National Nanotechnology Initiative (NNI) has released its latest blueprint for fostering the safe development of nanotechnology, giving fresh emphasis to the idea of studying a product or application from birth to death."

Nano press

What nanotechnology related publications are reporting

Autonomous nanomotor based on a true nanobattery
Nanowerk
Oct. 17

"The catalytic conversion of chemical to mechanical energy, which is ubiquitous in biological systems, also is the basis for many of the engine systems that nanotechnology researchers are developing."

Crumpled graphene balls for high surface area applications
Nanowerk
Oct. 18

"How often have you crumpled a sheet of paper in frustration and thrown it into the bin without further thought? You'll be amazed to hear that researchers - inspired by a trash can full of crumpled-up papers - have now applied this to solving one of the challenges of scaling up production of graphene sheets."

Quantum dots may be less stable than thought
Nanotechweb
Oct. 27

"Quantum dots (semiconductor nanoparticles) may not be as stable in some environments as currently thought, according to new work by researchers at the University of Massachusetts at Amherst. The unexpected finding raises questions about the use of these materials for *in vivo* imaging of biological cells - an application in which they are routinely used."

Other (science) issues related to nanotechnology

Shedding Nanoparticles
Chemical and Engineering News
Oct. 17
Stephen K. Ritter

"Silver and copper ions shedding from synthetic nanoparticles-and even from ordinary metal objects such as silverware and jewelry-combine to form new, smaller nanoparticles, a team of Oregon chemists has found. The discovery provides additional details about nanoparticle stability and behavior in the environment and implies that people have been exposed to significant background levels of metal nanoparticles for millennia."

New method of growing high-quality graphene promising for next-gen technology
EurekAlert
Oct. 17

"Making waves as the material that will revolutionize electronics, graphene - composed of a single layer of Carbon atoms - has nonetheless been challenging to produce in a way that will be practical for innovative electronics applications. Researchers at UC Santa Barbara have discovered a method to synthesize high quality graphene in a controlled manner that may pave the way for next-generation electronics application."

Twisted self-assembly may lead to artificial bone
Royal Chemical Society
Oct. 19

"Under the right conditions, bacteria-infecting viruses known as M13 phages can self-assemble to form a whole host of useful structures, say US scientists. These structures are able to scatter different wavelengths of light and even act as scaffolds for the growth of patterned sheets of cells or bone-like minerals."

Nanoparticles and their size may not be big issues
EurekAlert
Oct. 24

"If you've ever eaten from silverware or worn copper jewelry, you've been in a perfect storm in which nanoparticles were dropped into the environment, say scientists at the University of Oregon."

R&D 100 Winner's Highly Anticipated Product Launch Helps to Make World Cleaner Using Nanotechnology
PR Newswire
Oct. 25

"FibeRio Technology Corporation, winner of this year's prestigious R&D 100 Award, announced that industrial-scale equipment models will be launched at the Filtration 2011 trade show, which will finally enable the mass use of nanofibers in air and water filters."

Study aims at risk of the very tiny

Health Zone.com (*Albany Times-Union* New York)
Oct. 25

"Workers handled asbestos for years before science studied and understood how dangerous the microscopic fibers were when inhaled. Able to cause cancer years after being lodged deep into the lungs, the fibers are part of the infinitely small realm of nanoscale."

Biologically targeted nanoparticles may boost radiation therapy effects
PhysOrg
Oct. 27

"Making a tumor more sensitive to radiotherapy is a primary goal of combining chemo and radiation therapy to treat many types of cancer, but with the chemotherapy drugs come unwanted side effects."