

Center for Nanotechnology in Society University of California, Santa Barbara

www.cns.ucsb.edu

News Clips

May 1-15, 2011

Top Deck

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

[Application Of Nanotechnology - Nanoparticles Breakthrough Expected To Aid In Early Detection Of Any Cancer](#)

Star Global Tribune (from Stanford University)

May 1, 2011

"STANFORD, Calif. - A class of engineered nanoparticles - gold-centered spheres smaller than viruses - has been shown safe when administered by two alternative routes in a mouse study led by investigators at the Stanford University School of Medicine. This marks the first step up the ladder of toxicology studies that, within a year and a half, could yield to human trials of the tiny agents for detection of colorectal and possibly other cancers."

[Advance in nanotechnology by Israeli researcher could lead to mini navigation devices for surgery](#)

Ha'aretz (Israel)

May 4

Lital Levin

"Dr. Koby Scheuer of Tel Aviv University's fiber-optic nanosensors are 100 times more sensitive to their surroundings than other optic sensors; these sensors have the potential to be used for a plethora of purposes."

[Calgary non-profit wins award for online cartoon](#)

CBC (Canada)

May 4

"A short online film for children about nanotechnology has won a Webby Award.

'Do You Know What Nano Means?' was produced by the Calgary-based non-profit Science Alberta Foundation. The short animated film can be viewed on the organization's website wonderville.ca and on YouTube."

[Tipco turns to nanotechnology](#)

Bankok Post (Thailand)

May 5

"Nanotechnology, associated mainly with apparel and cosmetics, has found a new application in herbal drinks developed by a subsidiary of the fruit juice producer Tipco Foods (Thailand)."

[Will the US Congress Reauthorize the National Nanotechnology Initiative?](#)

IEEE Spectrum Nanoclast blog

May 11

Dexter Johnson

"While the National Nanotechnology Initiative (NNI) is now 10 ten years old, it wasn't until 2003 when President George W. Bush signed into law the 21st Century Nanotechnology Research and Development Act that a statutory framework was established for the NNI and appropriations for it were authorized through fiscal year 2008."

[Explosive detector uses nanotechnology](#)

UPI

May 11

"BOSTON, May 10 - U.S. researchers say they've used nanotechnology to develop a detector capable of sensing a single molecule of explosive such as TNT."

Local

[Cancer Fight 'Vaults' Ahead](#) [includes YouTube embed]

New Haven (CT) Independent

May 5

Gwyneth K. Shaw

"Scientists at UCLA are touting a new method of using a nano-therapy based on a patient's own cells to rouse their immune system and fight cancer. The barrel-shaped 'vault' could be a big step forward in battling conditions, such as lung cancer, that are particularly difficult to treat."

[Federal nano center sought](#)

Albany (N.Y.) Times-Union

May 13

Larry Rulison

"ALBANY - U.S. Rep. Chris Gibson is pushing for a new federally funded nanotechnology center for the Defense Department - potentially worth tens of millions of dollars if not more - that could end up one day being located at the University at Albany's College of Nanoscale Science and Engineering."

[Small science, big results](#)

Columbia (MO) Tribune

May 14

Jacob Barker

"The researchers behind Nanoparticle Biochem Inc. have technology that's been tested in the lab and in the field. They've received independent verification of their results, and now they're hunting for capital to enable them to develop their products in Columbia."

Nano Press

What nano-centered publications are reporting

[Exposing ZnO nanorods to visible light removes microbes](#)

Nanotechweb

May 3

"The practical use of visible light and zinc oxide nanorods for destroying bacterial water contamination has been successfully demonstrated by researchers in Thailand. Nanorods grown on glass substrates and activated by solar energy have been found to be effective in killing both gram positive and gram negative bacteria - a finding that has immense possibilities for affordable and environmentally friendly water purification techniques."

[Nokia's Morph nanotechnology concept device to benefit from graphene \(w/video\)](#)

Nanowerk

May 4

"Morph is a joint nanotechnology concept developed by Nokia Research Center (NRC) and the University of Cambridge (UK). Morph is a concept that demonstrates how future mobile devices might be stretchable and flexible, allowing the user to transform their mobile device into radically different shapes. It demonstrates the ultimate functionality that nanotechnology might be capable of delivering: flexible materials, transparent electronics and self-cleaning surfaces."

[Stamping antibacterial nanoparticles onto wounds](#)

Nanowerk

May 5

"The potential use of antimicrobial surface coatings ranges from medicine, where

medical device infection is associated with significant healthcare costs, to the construction industry and the food packaging industry. Thin films containing silver nanoparticles have been seen as promising candidate coatings. Silver is known as one of the oldest antimicrobial agents. Silver ions are thought to inhibit bacterial enzymes and bind to DNA. Silver nanomaterials have been used effectively against different bacteria, fungi and viruses (see for instance: 'Antibacterial nanotechnology multi-action materials that work day and night')."

[Upright Cells Absorb More Gold Nanoparticles than Upside Down Ones](#)

Azonano

May 6

Cameron Chai

"Research results on nanoparticle applications and their toxicity depend on how well scientists are able to quantify the communication between the nanoparticles and cells, particularly the number of nanoparticles a cell can absorb. In clinical trials, cells are kept on the bottom of a dish, and a culture with nanoparticles is poured over them."

Other (science) issue related to nanotechnology

[Are Nanotech Workers at Risk?](#)

Care Fair.com

May 1

"While nanotech has been hailed as a modern wonder, it continues to attract intense scrutiny from the scientific community. Recent reports online indicate that the latest studies have unearthed even more potential risks. Workers involved in the production of nanomaterials are now thought to be in danger of absorbing these tiny particles into the lungs."

[Drug nano- encapsulation system may have food applications: Study](#)

FoodNavigator.com

May 3

Nathan Gray

"A method of producing nano-capsules for drug delivery may have potential to create food-grade nano-encapsulations of ingredients for the food industry, according to new research."

[Turning coal into methane using nanotechnology](#)

PhysOrg

May 5

"University of Alberta researcher wants to adapt a bioconversion process that occurs naturally over millions of years into a fast-moving production that breaks down coal and captures methane gas in storage tanks."

[EPA seeks more information to identify nanomaterials not needing regulation](#)

AgraNet

May 5

"While EPA has regulated nearly every nanomaterial for which it has received a new chemical notice, the agency would like more information, such as hazard, exposure, physical and chemical property data, to make better decisions and more readily identify those nanomaterials that don't need regulation."

[Portable filter paper laced with silver nanoparticles cleans dirty water](#)

Environmental Health News

May 10

"A simple and inexpensive filtering system could provide safe drinking water for millions of people who are in short supply of clean water, especially following natural disasters and other emergencies, report McGill University researchers who devised the first-of-its-kind system. People without a reliable source of potable water could use the paper filter, which is impregnated with small particles of pure silver that kill disease-causing bacteria as they pass through it. Very little silver escapes the portable filter, which could provide an efficient source of potable water to alleviate diseases - such as cholera and giardiasis - that are associated with drinking foul water."

[Silver Nanoparticles May Form in Nature](#)

Treehugger.com

May 11

Christine Lepisto

"Silver nanoparticles are turning up everywhere: from your socks (antimicrobial) to your solar panels (nanoparticle ink). At least one study has shown that the tiny dots of silver can cause dramatic mutations in fish. A new study demonstrates processes by which silver nanoparticles may be created from silver ions in nature. If silver nanoparticles are 'natural,' does that let them off the risk-management hook?"

[Research Team to Develop Therapeutic Nanoparticles to Destroy Latent HIV Virus](#)

Azonano

May 13

Cameron Chai

"Professor João Gonçalves at Faculdade de Farmácia de Lisboa and researcher at Instituto de Medicina Molecular in Lisbon, Portugal, will receive a Grand Challenges Exploration Grant from the Bill & Melinda Gates Foundation. He will use the grant to create therapeutic nanoparticles to silence HIV-1 viruses from the infected organisms."