



Your Input Invited: the Nanomedicines Alliance Survey for Industry Symposium Programming

The Nanomedicines Alliance is planning an industry symposium for early 2013, entitled “**Nanomedicines: Charting a Roadmap to Commercialization.**” As part of the planning, the Alliance is surveying the industry for key issues to address. We invite you to participate in this 4-question survey at <https://www.research.net/s/LYDXKV3>

REGULATORY AND LEGISLATIVE DEVELOPMENTS

EU OSHA Publishes Literature Review on Nanomaterial Risks

The European Agency for Safety and Health at Work (EU-OSHA) has issued a literature review on the risks of handling nanomaterials at work.. The review finds that there is poor communication of the potential risks of nanomaterials to employees, and notes that the majority of Europeans do not know what nanotechnology is. The document urges stakeholders such as policymakers, occupational health agencies, and public health agencies, to increase awareness of the potential risks associated with nanomaterials through more effective communication. EU-OSHA has created a database of good practices for managing workplaces that handle nanomaterials. The review can be found here:

http://www.innovationsgesellschaft.ch/media/archive2/20120621_Literature%20Review_Risk%20Perception%20Communication%20Nanomaterials%20Workplace.pdf

SMART-NANO project is launched in EU

The Sensitive Measurement, Detection, and Identification of Engineered Nanoparticles (SMART-NANO) project, funded by FP7, was launched in June 2012. The objective of the project is to develop an innovative and cost-effect technology platform to measure nanoparticles in products, biological systems, food, or the environment. The project, which will receive €3.5 million and last for four years, is made up of 3 non-profits and 5 SMEs. They

include Centre Suisse d'Electronique et de Microtechnique (Switzerland), EC Joint Research Centre, FeyeCon (Netherlands), Postnova Analytics (Germany), Avid Nano (UK), AHAVA (Israel), Ruđer Bošković Institute (Croatia), and ABICH (Italy).

More on SMART-NANO can be found here: http://ihcp.jrc.ec.europa.eu/our_activities/nanotechnology/launch-of-smart-nano-project

Joint Research Centre hosts ISO Nanotechnology Technical Committee (ISO/TC229) Spring Meeting

The EC Joint Research Centre (JRC) hosted the spring meeting of the ISO Nanotechnology Technical Committee on 11-15 June 2012 in Stresa, Italy. The next meeting will be in March 2013 in Quarétera, Mexico.

More on TC229 can be found here: http://www.iso.org/iso/iso_technical_committee?commid=381983

GAO Releases Report on Nanotechnology EHS Research

The Government Accountability Office (GAO) issued their report on Nanotechnology on 20 June 2012. The report is entitled “Report to the Chairman of the U.S. Senate Committee on Environment and Public Works on Nanotechnology: Improved Performance Information Needed for Environmental, Health, and Safety (EHS) Research.” The report recommends that the Director of the Office of Science and Technology Policy coordinates measurement of NNI performance on EHS Research and estimate the resources necessary to meet the EHS research needs.

The full report can be found here: <http://www.gao.gov/products/GAO-12-427>

REVIEWS AND OTHER PUBLICATIONS OF INTEREST

Analysis of Current Research Addressing Complementary Use of Life-Cycle Assessment and Risk Assessment for Engineered Nanomaterials: Have Lessons Been Learned from Previous Experience with Chemicals? Journal of Nanoparticle Research, July 2012, Vol. 14, No. 7.
<http://www.springerlink.com/content/5q202w7656x16786/?MUD=MP>

Nanoparticles Release Drugs on Demand. C&EN, 13 March 2012. Jeffery M. Perkel.
<http://cen.acs.org/articles/90/web/2012/03/Nanoparticles-Release-Drugs-Demand.html>

A Pilot Study in Non-Human Primates Shows No Adverse Response to Intravenous Injection of Quantum Dots. Nature Nanotechnology, July 2012, Vol. 7, No. 7, pp.453-458.. L Ye, K Yong, et al.
<http://links.ealert.nature.com/ctt?kn=74&ms=Mzk0MTcxNjUS1&r=NzQ3MDc4MDQ5MgS2&b=0&j=MTQ5MjEwODc3S0&mt=1&rt=0>

Graphite Nanoplatelets and *Caenorhabditis elegans*: Insights from an *in Vivo* Model. Nano Letters, 13 June 2012, Vol. 12, No. 6, pp. 2740-2744. Elena Zanni, Giovanni De Bellis, Maria P. Bracciale, Alessandra Broggi, Maria L. Santarelli, Maria S. Sarto, Claudio Palleschi, and Daniela Uccelletti.
<http://pubs.acs.org/doi/abs/10.1021/nl204388p>

Multidimensional Conducting Polymer Nanotubes for Ultrasensitive Chemical Nerve Agent Sensing. Nano Letters, 13 June 2012, Vol. 12, No. 6, pp.2797-2802. Oh Seok Kwon, Seon Joo Park, Jun Seop Lee, Eunyu Park, Taejoon Kim, Hyun-Woo Park, Sun Ah You, Hyeonseok Yoon, and Jyongsik Jang.
<http://pubs.acs.org/doi/abs/10.1021/nl204587t>

Digital Switching of Local Arginine Density in a Genetically Encoded Self-Assembled Polypeptide Nanoparticle Controls Cellular Uptake. Nano Letters, 13 June 2012, Vol. 12, No. 6, pp.3322-3328. Sarah R. MacEwan and Ashutosh Chilkoti.
<http://pubs.acs.org/doi/abs/10.1021/nl301529p>

REVIEW: One-Dimensional ZnO Nanostructures. Journal of Nanoscience and Nanotechnology, June 2012, Vol. 12, No. 6, pp. 4409-4457. K. P. Jayadevan and T. Y. Tseng.
<http://openurl.ingenta.com/content?genre=article&issn=1533-4880&volume=12&issue=6&spage=4409&epage=4457>

REVIEW: Diagnostic Applications of Raman Spectroscopy. Nanotechnology, Biology, and Medicine, July 2012, Vol. 8, No. 5, pp. 545-558. Qiang Tu, Chang Chang.
[http://www.nanomedjournal.com/article/S1549-9634\(11\)00370-4/abstract](http://www.nanomedjournal.com/article/S1549-9634(11)00370-4/abstract)

Core-shell Biodegradable Nanoassemblies for the Passive Targeting of Docetaxel: Features, Antiproliferative Activity and *in Vivo* Toxicity. Nanotechnology, Biology, and Medicine, July 2012, Vol. 8, No. 5, pp. 637-646. Francesca Ungaro, Claudia Conte, Luisanna Ostacolo, Giovanni Maglio, et al.
[http://www.nanomedjournal.com/article/S1549-9634\(11\)00349-2/abstract](http://www.nanomedjournal.com/article/S1549-9634(11)00349-2/abstract)

REVIEW: Norovirus P Particle: A Subviral Nanoparticle for Vaccine Development Against Norovirus, Rotavirus, and Influenza Virus. Nanomedicine, June 2012, Vol. 7, No. 6, p. 889-897. Ming Tan, Xi Jiang.
<http://www.futuremedicine.com/doi/pdf/10.2217/nmm.12.62>

REVIEW: Emerging Engineered Magnetic Nanoparticulate Probes for Molecular MRI of Atherosclerosis: How Far Have We Come? Nanomedicine, June 2012, Vol. 7, No. 6, pp. 899-916. Rupinde K. Kanwar, Rajneesh Chaudhary, Takuya Tsuzuki, Jagat R. Kanwar.
<http://www.futuremedicine.com/doi/pdf/10.2217/nmm.12.57>

REVIEW: Colloidal Nanomaterial-based Immunoassay. Nanomedicine, June 2012, Vol. 7, No. 6, pp. 917-929. Bruno Teste and Stephanie Descroix.
<http://www.futuremedicine.com/doi/pdf/10.2217/nmm.12.58>

CONFERENCES AND WORKSHOPS

Nanobio-Europe 2012, June 18-20, 2012, Varese, Italy

Nano-enabled drug delivery
Nanotechnology for medical applications
In vivo imaging
Biomarkers and nanoparticles
Cell analysis and manipulation
Sensors and actuators
Bioanalytics
Bio-nano materials and tissues

<http://nanobio-europe-2012.jrc.ec.europa.eu/>

3rd International NanoMedicine Conference, July 2-4, 2012, Sydney, Australia

Target delivery
Sensing
Diagnostics
Regenerative medicine
Imaging
Translational medicine
Safety

<http://www.oznanomed.org/>

9th International Conference on Nanosciences & Technologies, July 3-6, 2012, Thessaloniki, Greece

Nanotechnology in biology
Nanostructures for medical applications
Cell/Nanomaterial interactions
In-vitro and in-vivo diagnostics
Targeted drug delivery
Regenerative nanomedicine
Nanotoxicity, risk assessment, and ethics
Nanomedicine commercialization

http://www.nanotextology.com/index.php?option=com_content&view=article&id=48&Itemid=60

Working Safely with Nanomaterials. July 6, 2012, Edinburgh, Scotland.

Nanomaterials categories
Nano toxicology/hazard banding
Nano controls/monitoring
Nano health surveillance

<http://www.bohs.org/Events/WorkingwithNanomaterials/>

77th Prague Meetings on Macromolecules: Polymers in Medicine. July 8-12, 2012, Prague, Czech Republic

Polymers for Nanomedicine
Stimuli responsive polymers
Polymers for Advanced Drug Delivery
Polymers for Biomedical Applications
Biomaterials for Tissue Engineering

<http://www.imc.cas.cz/sympo/pmm2012/>

Need for New Biological Assays for New Nanomaterials, July 10-11, 2012, Dublin, Ireland.

Cytotoxicity
Biological assays
Immunosafety

<http://www.nanosafetycluster.eu/news/57/66/NanoToes-Need-for-new-biological-assays-for-new-nanomaterials.html>

Colloids and Nanomedicine 2012. July 15-17, 2012, Amsterdam, Netherlands.

Biomaterials
Tissue engineering and regenerative medicine
Drug delivery
Biosensors
Toxicology and risk assessment of nanomedicine systems
Proteins and peptides at interfaces
Soft matter, surfactants, polymers in biological systems
Novel phenomena and techniques

<http://www.colloidsandnanomedicine.com/index.html>

Drug Carriers in Medicine & Biology, August 12-17, 2012, Waterville Valley, NH

Vascular delivery, targets and barriers
Translational studies, clinical trials, and combination therapies
Local, pulmonary, GI, and CNS delivery
Emerging technologies, materials, carriers, and mechanisms
Carriers for vaccines and antigen delivery
Intracellular delivery, trafficking and cellular barriers
Biological response to delivered drugs and genes

<http://www.grc.org/programs.aspx?year=2012&program=drugcarr>

First International Symposium on Nanomedicine in Drug Delivery and cancer Diagnostics, August 16-17, Delaware, MD

Principles of Nanomedicine
Nanotechnological advances and potential medical applications
Benefits of nanomedical tools versus traditional techniques
Therapeutic applications of nanotechnology and nanomaterials
Drug delivery using nanoparticles

<http://www.udel.edu/nanomedicine/presenters.html>

IEEE Nano 2012 Conference, August 20-23, 2012, Birmingham, UK

Nanobiomedicine
Nanosensors
Nanoplasmonics

http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=19746

European Congress of Molecular Spectroscopy, August 26-31, 2012, Cluj-Napoca, Romania

Spectroscopic methods and techniques
Computational and theoretical approaches
Structure and dynamics of molecular systems

<http://www.nanowerk.com/nanotechnology-event.php?eventid=3484>

2012 Workshop on Nanoinformatics for Biomedicine, October 4-7, 2012, Philadelphia, PA.

Nanomaterial-biological interactions

Translational nanoinformatics
Ethical and social issues

<http://workshops.i-a-i.com/nanoinfo2012>

Nanosafe 2012, November 13-15, 2012, Grenoble, France

Exposure assessment
Characterisation, detection, and monitoring
Nanomaterials life cycle
Toxicology
Environmental impact
Nanoparticle release from consumer products
Personal protective equipment
Secure industrial production
Safety parameters evaluation
Standardisation, regulations

<http://www.nanosafe.org/scripts/home/publigen/content/templates/show.asp?P=121&L=EN&ITEMID=65>

REFERENCE SECTION**Nanobiotech and Nanomedicine Companies**

Listed alphabetically:

http://www.nanowerk.com/nanotechnology/nanomaterial/nanobiomedicine_a.php

Nano Organizations

Nat'l Center for Toxicological Research (NCTR):

<http://www.fda.gov/AboutFDA/CentersOffices/NCTR/default.htm>

Nat'l Nanotechnology Initiative (NNI):

<http://www.nano.gov/>

Nano Science and Technology Consortium (NSTC):

<http://www.nstc.in/>

Nano Science and Technology Institute (NSTI):

<http://www.nsti.org/>

The Nanotechnology Institute (NTI):

<http://nanotechinstitute.org/>

Nano Journals

American Chemical Society -- Nano Letters:

<http://pubs.acs.org/journal/nalefd>

Institute of Physics – Nanotechnology:

<http://iopscience.iop.org/0957-4484/>

Journal of Nanoscience and Nanotechnology:

<http://www.aspbs.com/jnn/>

NanoTrends - A Journal of Nanotechnology and its Applications:

<http://www.nstc.in/journal/default.aspx>

BCC Research -- Nanotechnology Reports:

<http://www.bccresearch.com/index/category/code/nanotechnology>

Nanomedicine: Nanotechnology, Biology, and Medicine:

<http://www.nanomedjournal.com/home>

Nanomedicine:

<http://www.futuremedicine.com/page/about.jsp>

Nature Nanotechnology:

http://www.nature.com/nano/focus/highlights/index.html?WT.mc_id=NM1110CT010

CONTACT

The Nanomedicines Alliance promotes the scientific advancement, regulatory approval, safe use, and public appreciation of nanotechnology-based medicines world-wide.

For further information or to join, please contact the Nanomedicines Alliance Secretariat at 1-202-230-5607 or info@nanomedicines-alliance.org

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