



Please consider joining the Nanomedicines Alliance. If you are interested, please contact us at info@nanomedicines-alliance.org.

REGULATORY AND LEGISLATIVE DEVELOPMENTS

Canadian Consultation on Nanoscale Substances

Health Canada and Environment Canada have issued a joint consultation document on their "Proposed Approach to Address Nanoscale Forms of Substances on the Domestic Substances List". The proposal aims to gather data to establish a list of existing nanomaterials in Canada. The agencies will then assess which nanomaterials may require further action, such as further examination or research, or risk assessment and risk management. Health Canada and Environment Canada plan to publish an information-gathering survey and hold a stakeholder workshop in June 2015.

<http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=1D804F45-1>

EPA Proposal Requires Reporting on Nanomaterials

The US Environmental Protection Agency (EPA) issued a Proposed Rule on March 25 that would require one-time reporting and record-keeping on nanomaterials. Companies that manufacture products or process chemical substances as nanoscale materials would be required to report to EPA on available health and safety data, specific chemical identity, production volume, and manufacturing and processing methodology. Biotechnology products are exempted from the Proposed Rule. Public comments on the proposal will be accepted within 90 days of publication.

<http://yosemite.epa.gov/opa/admpress.nsf/21b8983ffa5d0e4685257dd4006b85e2/36465ec76a3b4efd85257e13004e8c95!OpenDocument>

REVIEWS AND OTHER PUBLICATIONS OF INTEREST

Trans-Blood Brain Barrier Delivery of Dopamine-Loaded Nanoparticles Reverses Functional Deficits in Parkinsonian Rats.

ACS Nano, March 2015. Richa Pahuja, Kavita Seth, Anshi Shukla, Rajendra Kumar Shukla, Priyanka Bhatnagar, Lalit Kumar Singh Chauhan, Prem Narain Saxena, Jharna Arun, Bhushan Pradosh Chaudhari, Devendra Kumar Patel, Sheelendra Pratap Singh, Rakesh Shukla, Vinay Kumar Khanna, Pradeep Kumar, Rajnish Kumar Chaturvedi, Kailash Chand Gupta.

<http://pubs.acs.org/doi/abs/10.1021/nn506408v>

Controlling Epileptiform Activity with Organic Electronic Ion Pumps. Advanced Materials, 2015. Adam Williamson, Jonathan Rivnay, Loïg Kergoat, Amanda Jonsson, Sahika Inal, Ilke Uguz, Marc Ferro, Anton Ivanov, Theresia Arbring Sjöström, Daniel T. Simon, Magnus Berggren, George G. Malliaras, Christophe Bernard.

<http://onlinelibrary.wiley.com/doi/10.1002/adma.201500482/abstract>

Molecular protein adaptor with genetically encoded interaction sites guiding the hierarchical assembly of plasmonically active nanoparticle architectures. Nature Communications, 2015. Andreas Schreiber, Matthias C. Huber, Helmut Cölfen, Stefan M. Schiller.

<http://www.nature.com/ncomms/2015/150327/ncomms7705/full/ncomms7705.html>

New Self-Assembling Multifunctional Templates for the Biofabrication and Controlled Self-Release of Cultured Tissue.

Tissue Engineering Part A, 2015. Ricardo M. Gouveia, Valeria Castelletto, Ian W. Hamley, Che J. Connon.

<http://online.liebertpub.com/doi/10.1089/ten.tea.2014.0671>

Enhancement of radiation effect on cancer cells by gold-pHLIP. Proceedings of the National Academy of Sciences, April 2015. Michael P. Antosh, Dayanjali D. Wijesinghe, Samana Shrestha, Robert Lanou, Yun Hu Huang, Thomas Hasselbacher, David Fox, Nicola Neretti, Shouheng Sun, Natalia Katenka,

For further information, or if you have any questions about the Nanomedicines Alliance, please contact the Nanomedicines Alliance Secretariat at 1-202-230-5653.

Leon N Cooper, Oleg A. Andreev, Yana K. Reshetnyak.

<http://www.pnas.org/content/112/17/5372>

Inhibiting macrophage proliferation suppresses atherosclerotic plaque inflammation. Science Advances, Vol. 1, No. 3, April 2015. Jun Tang, Mark E. Lobatto, Laurien Hassing, Susanne van der Staay, Sarian M. van Rijs, Claudia Calcagno, Mounia S. Braza, Samantha Baxter, Francois Fay, Brenda L. Sanchez-Gaytan, Raphaël Duivenvoorden, Hendrik B. Sager, Yaritzky M. Astudillo, Wei Leong, Sarayu Ramachandran, Gert Storm, Carlos Pérez-Medina, Thomas Reiner, David P. Cormode, Gustav J. Strijkers, Erik S. G. Stroes, Filip K. Swirski, Matthias Nahrendorf, Edward A. Fisher, Zahi A. Fayad, Willem J. M. Mulder. <http://advances.sciencemag.org/content/1/3/e1400223>

Chemical tagging and customizing of cellular chromatin states using ultrafast trans-splicing inteins. Nature Chemistry, Vol. 7, pp.394 – 402, April 2015. Yael David, Miquel Vila-Perelló, Shivam Verma, Tom W. Muir. <http://www.nature.com/nchem/journal/v7/n5/full/nchem.2224.html>

Massively parallel delivery of large cargo into mammalian cells with light pulses. Nature Methods, Vol. 12, pp. 439 – 444, April 2015. Yi-Chien Wu, Ting-Hsiang Wu, Daniel L Clemens,

Bai-Yu Lee, Ximiao Wen, Marcus A Horwitz, Michael A Teitell, Pei-Yu Chiou.

<http://www.nature.com/nmeth/journal/v12/n5/full/nmeth.3357.html>

Two-dimensional IR spectroscopy of the anti-HIV agent KP1212 reveals protonated and neutral tautomers that influence pH-dependent mutagenicity. Proceedings of the National Academy of Sciences, Vol. 112, No. 11, March 2015. Chunte Sam Peng, Bogdan I. Fedeles, Vipender Singh, Deyu Li, Tiffany Amariuta, John M. Essigmann, Andrei Tokmakoff. <http://www.pnas.org/content/112/11/3229>

Direct observation of structure-function relationship in a nucleic acid-processing enzyme. Science, Vol. 348, No. 6232, pp. 352 – 354, April 2015. Matthew J. Comstock, Kevin D. Whitley, Haifeng Jia, Joshua Sokoloski, Timothy M. Lohman, Taekjip Ha, Yann R. Chemla. <http://www.sciencemag.org/content/348/6232/352>

Efficiency of Conditionally Attenuated *Salmonella enterica* Serovar Typhimurium in Bacterium-Mediated Tumor Therapy. mBio, Vol. 6, No. 2, April 2015. Michael Frahm, Sebastian Felgner, Dino Kocijancic, Manfred Rohde, Michael Hensel, Roy Curtiss, Marc Erhardt, Siegfried Weiss. <http://mbio.asm.org/content/6/2/e00254-15>

CONFERENCES AND WORKSHOPS

EuroNanoForum 2015, 10 – 12 June 2015, Riga, Latvia

Nanomanufacturing
Advanced Materials

<http://euronanoforum2015.eu/>

NNI/CPSC Workshop on Quantifying Exposure to Engineered Nanomaterials (QEEN) from Manufactured Products, 7 – 8 July 2015, Arlington, VA

Toxicology

<http://www.nano.gov/node/1327>

International Society for Biomedical Polymers and Polymeric Biomaterials, 8 – 10 July 2015, Orlando, FL

Nanocomposites
Drug delivery systems
Controlled release systems
Biomedical pharmaceutical polymers

<http://isbpb.org/conferences-workshops/>

The European Summit for Clinical Nanomedicine and Targeted Medicine - The Translation to Knowledge Based Nanomedicine, 28 June – 1 July 2015, Basel, Switzerland

Personalized medicine
Cancer therapies
Regulatory perspectives

<https://www.clinam.org/>

International Conference on Biomedical Engineering and Systems, 13 – 14 July 2015, Barcelona, Spain.

Biomedical devices
Biomaterials
Drug design
Nanotechnology for biomedical applications

<http://icbes.net/papers/>

International Conference on Nanotechnology: Fundamentals and Applications, 15 – 17 July 2015, Barcelona Spain

Cancer Therapy
Cell-based Regenerative Medicine

<http://icnfa.com/>

International Conference on Advanced Nanomaterials, 20 – 22 July 2015, Aveiro, Portugal

Nanomedicine
Graphene Technology
<http://www.anm2015.com/>

Trends in Nanotechnology 2015, 7 – 11 September 2015, Toulouse, France

Toxicity
Modeling
Nanobiotechnologies
<http://www.tntconf.org/2015/index.php?conf=15>

AAPS Workshop on Challenges in the Assessment of Similarity or Equivalence of (Non) Biological Complex Drug Products, 28 - 29 September, Baltimore, MD

Nanomedicines
Generics
<http://www.aaps.org/CDP/>

Crossing Biological Barriers – Advances in Nanocarrier Design for Targeted Delivery, 9 – 11 November 2015, Dresden, Germany

Biodistribution and In Vivo Imaging of Nanoparticles
Scale-up, Translational and Regulatory Issues of Drug Delivery Systems
Targeted Drug Delivery Systems (Oral, Ocular, Pulmonary, Dermal, Blood Brain Barrier Crossing)
<http://ec.europa.eu/research/index.cfm?pg=events&eventcode=9D4D1F8C-A9D2-D06C-2B60AA77AF593EB3>

REFERENCE SECTION

Nanobio- and Nanomedicine Companies

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

Nano Organizations

National Center for Toxicological Research (NCTR):
<http://www.fda.gov/AboutFDA/CentersOffices/NCTR/default.htm>

National 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/>

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

Nature Nanotechnology:
http://www.nature.com/nnano/focus/highlights/index.html?WT.mc_id=NM1110CT01

CONTACT

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