



Nanomedicines ALLIANCE

NanoMed Digest

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Join the Nanomedicines Alliance. Contact us at info@nanomedicines-alliance.org

- Meet with industry colleagues, government partners, and other stakeholders
- Help define the issues of science, regulation, and policy
- Participate in our ongoing advocacy, regulatory, and scientific efforts
- Join as a trial member for six months at half the annual fee

Belgian Register of Nanomaterials

Companies established in Belgium are required to inform their Committee for Protection and Prevention at Work (CPPW) of the [registration of nanomaterials by January 1, 2016](#). This registry of nanomaterials will impact all companies importing, producing, or distributing chemical substances and products, and includes an individual of private entity active in R&D. The registry does exclude some products, including human and veterinary medicines. Companies will need to declare any chemical substances which are considered nanomaterials, including those previously produced, imported or distributed, for professional purposes, register new nanomaterials before marketing, and submit relevant scientific and commercial information to the National Public Health Instances. In 2017, compulsory registration will be extended to mixtures containing nanomaterials. In 2018, registration of products containing any form of nanomaterial could also become compulsory.

Reviews and Other Publications of Interest

[Chitosan-Decorated Doxorubicin-Encapsulated Nanoparticle Targets and Eliminates Tumor Reinitiating Cancer Stem-like Cells.](#) ACS Nano, Vol. 9, No. 6, pp. 5725 – 5740, May 2015. Wei Rao, Hai Wang, Jianfeng Han, Shuting Zhao, Jenna Dumbleton, Pranay Agarwal, Wujie Zhang, Gang Zhao, Jianhua Yu, Debra L. Zynger, Xiongbin Lu, Xiaoming He.

[Self-Assembled DNA Nanoclews for the Efficient Delivery of CRISPR–Cas9 for Genome Editing.](#) Angewandte Chemie, August 2015. Wujin Sun, Wenyan Ji, Jordan M. Hall, Quanyin Hu, Chao Wang, Chase L. Beisel, Zhen Gu.

[Production of amorphous nanoparticles by supersonic spray-drying with a microfluidic nebulator.](#) Science, Vol. 349, No. 6251, pp. 956 – 960, August 2015. Esther Amstad, Manesh Gopinadhan, Christian Holtze, Chinedum O. Osuji, Michael P. Brenner, Frans Spaepen, David A. Weitz.

[Risk Analysis of Nanomaterials: Exposing Nanotechnology's Naked Emperor.](#) Review of Policy Research, Vol. 32, Issue 4, pp. 485 – 512, July 2015. Georgia Miller and Fern Wickson.

[Synthesis of high-quality lanthanide oxybromides nanocrystals with single-source precursor for promising applications in cancer cells imaging.](#) Applied Materials Today, Vol. 1, Issue 1, pp. 20 – 26, November 2015. Dong Yan, Bo Lei, Bo Chen, Xue-Jun Wu, Zhengqing Liu, Na Li, Juan Ge, Yumeng Xue, Yaping Du, Zhiping Zheng, Hua Zhang.

[Guiding the folding pathway of DNA origami.](#) Nature, Vol. 525, pp. 82 – 86, August 2015. Katherine E. Dunn, Frits Dannenberg, Thomas E. Ouldrige, Marta Kwiatkowska, Andrew J. Turberfield, Jonathan Bath.

[Observing Changes in the Structure and Oligomerization State of a Helical Protein Dimer Using Solid-State Nanopores.](#) ACS Nano, August 2015. David J. Niedzwiecki, Christopher J. Lanci, Gabriel Shemer, Phillip S. Cheng, Jeffery G. Saven, Marija Drndić.

[Stretch-Triggered Drug Delivery from Wearable Elastomer Films Containing Therapeutic Depots.](#) ACS Nano, August 2015. Jin Di, Shanshan Yao, Yanqi Ye, Zheng Cui, Jicheng Yu, Tushar K. Ghosh, Yong Zhu, Zhen Gu.

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

Non-plasmonic nanoantennas for surface enhanced spectroscopies with ultra-low heat conversion. Nature Communications, Vol. 6, Article no. 7915, August 2015. Martín Caldarola, Pablo Albella, Emiliano Cortés, Mohsen Rahmani, Tyler Roschuk, Gustavo Grinblat, Rupert F. Oulton, Andrea V. Bragas, Stefan A. Maier.

Dissolvable Base Scaffolds Allow Tissue Penetration of High-Aspect-Ratio Flexible Microneedles. Advanced Healthcare Materials, Vol. 4, Issue 3, pp. 1949 – 1955, September 2015. Satoshi Yagi, Shota Yamagiwa, Yoshihiro Kubota, Hirohito Sawahata, Rika Numano, Tatsuya Imashioya, Hideo Oi, Makoto Ishida, Takeshi Kawano.

A paclitaxel-loaded recombinant polypeptide nanoparticle outperforms Abraxane in multiple murine cancer models. Nature Communications, Vol. 6, 7939, August 2015. Jayanta Bhattacharyya, Joseph J. Bellucci, Isaac Weitzhandler, Jonathan R. McDaniel,

Ivan Spasojevic, Xinghai Li, Chao-Chieh Lin, Jen-Tsan Ashley Chi, Ashutosh Chilkoti.

Highly compacted biodegradable DNA nanoparticles capable of overcoming the mucus barrier for inhaled lung gene therapy. Proceedings of the National Academy of Sciences, Vol. 112, No. 28, August 2015. Panagiotis Mastorakos, Adriana L. da Silva, Jane Chisholm, Eric Song, Won Kyu Choi, Michael P. Boyle, Marcelo M. Morales, Justin Hanes, Jung Soo Suk.

Respiratory syncytial virus-like nanoparticle vaccination induces long-term protection without pulmonary disease by modulating cytokines and T-cells partially through alveolar macrophages. International Journal of Nanomedicine, July 2015, Vol. 10, pp. 4491 – 4505. Young-Tae Lee, Eun-Ju Ko, Hye Suk Hwang, Jong Seok Lee, Ki-Hye Kim, Young-Man Kwon, Sang-Moo Kang.

Conferences and Workshops

AAPS Workshop on Challenges in the Assessment of Similarity or Equivalence of (Non) Biological Complex Drug Products, 28 - 29 September 2015, Baltimore, MD
Nanomedicines
Generics

FDA/PQRI Conference on Advancing Product Quality, 5 – 7 October 2015, Bethesda, MD
Risk management and quality assurance

Product development
Emerging regulatory topics
Regulatory submission, assessment, and inspection
Panel co-chaired by Nanomedicines Alliance and FDA on “Current Challenges in the Characterization of Complex Drug Formulations Containing Nanomaterials”

The 5th International Conference on Manipulation, Manufacturing and Measurement on the Nanoscale, 5 – 9 October 2015, Changchun, China
Nanoscale imaging
Nanorobotics

ETP Nanomedicine Annual Event, 12 – 14 October 2015, Dublin, Ireland
Nanomedicinal success in FP7
Nanomedical ecosystem
Regenerative medicine and biomaterials

Translational Nanomedicine: New Solutions to Address Unmet Medical Needs, 15 – 17 October 2015, Arlington, VA
Preclinical and clinical applications

AAPS Workshop on Nanotechnology in Personalized Medicine, 25 October 2015, Orlando, FL
Cancer therapy
Biosensing
Bioimaging
Gene therapy

Applied Nanotechnology and Nanoscience International Conference, 5 – 7 November 2015, Paris France
Nanomedicine
Nanobiotechnology

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)

Infectious Diseases and Nanomedicines 2015, 15 – 18 December 2015, Kathmandu, Nepal
Cellular and Molecular Microbiology of Infectious Diseases

Epidemiology and Infectious Diseases
Surveillance
Microbiome in Health and Infectious Diseases
Immune Response against Infectious Pathogens
Antimicrobials, Vaccines and Alternatives

**10th World Meeting on Pharmaceutics,
Biopharmaceutics, and Pharmaceutical
Technology, 4 – 7 April 2016, Glasgow, United
Kingdom**

2D and 3D printing in drug delivery
Nanoparticles
Cellular drug transport

Reference Section

Nanobio- and Nanomedicine Companies

Listed alphabetically

Nano Organizations

National Center for Toxicological Research (NCTR)

National Nanotechnology Initiative (NNI)

Nano Science and Technology Consortium (NSTC)

Nano Science and Technology Institute (NSTI)

The Nanotechnology Institute (NTI)

Nano Journals

American Chemical Society -- Nano Letters

Institute of Physics – Nanotechnology

Journal of Nanoscience and Nanotechnology

NanoTrends - A Journal of Nanotechnology and its
Applications

BCC Research -- Nanotechnology Reports

Nanomedicine: Nanotechnology, Biology, and
Medicine

Nanomedicine

Nature Nanotechnology

Contact

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

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