



National Nanomanufacturing Network

Newsletter

Volume 4 Issue 4 - April 2011

The NNN Newsletter

Congressional Subcommittee Explores Impact and Economic Benefits of National Nanotechnology Initiative



This month, the House Science, Space, and Technology Subcommittee on Research and

Science Education held a hearing, entitled "Nanotechnology: Oversight of the National Nanotechnology Initiative and Priorities for the Future", to assess the impact of the federal government's investment in the National Nanotechnology Initiative (NNI). In doing so the subcommittee heard key testimony from industry sectors and government officials regarding aspects of the federal investment, including economic impact, jobs creation, global competitiveness, and environmental health and safety, providing guidance to the subcommittee regarding future nanotechnology research and development (R&D) priorities for U.S.

The NNI provides multi-agency coordination overseeing all federal nanotechnology research. The NNI supports the basic research and development of nanotechnology, which has resulted in U.S. leadership in the field, and is now looking to develop roadmaps in areas of critical national needs to maintain U.S. competitiveness. The NNI Supplement to the President's Fiscal Year 2012 Budget includes funding requests from 15 federal agencies investing in nanotechnology, with over a 200 million dollar increase from FY10 levels (+11%). Significant increases have been requested for environmental, health and safety (EHS), solar energy conversion, sustainable nanomanufacturing, and nanoelectronics. In times of budgetary uncertainty, Congress makes efforts to ensure that federal programs provide economic impact. With nanotechnology and nanomanufacturing having the potential to become the next industrial revolution, having significant economic and societal impact, the subcommittee heard testimony supporting key priorities.

[More...](#)

Regards,
Jeff Morse, Managing Director,
National Nanomanufacturing Network

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Upcoming Events

April 25 - 29, 2011

[MRS Spring Meeting 2011](#)

May 1 - 3, 2011

[Greener Nano 2011](#)

May 11 - 13, 2011

[Graphene: The Road to Applications](#)

May 16 - 18, 2011

[11th Annual Conference on Wood & Biofiber Plastic Composites](#)

May 17 - 19, 2011

[EASTEC 2011](#)

May 23 - 25, 2011

[4th European-Conference for Clinical Nanomedicine](#)

[View Full Calendar](#)

Upcoming Calls

Learn More about the  National Nanomanufacturing Network

GE Achieves Highest Publicly Reported Efficiency for Thin Film Solar, Earns New Orders and Unveils Plans to Build US Manufacturing Plant



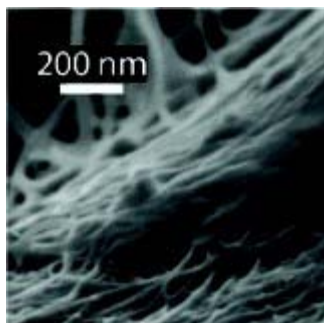
GE announced that a full-size, thin film solar panel developed by the company has been independently certified as the most efficient ever publicly reported milestone for the technology. GE intends

to manufacture the record-setting solar panels at a new U.S. factory that will be larger than any existing solar panel factory in the country today. When complete, the factory will highlight an expected \$600 million plus investment made by GE in solar technology and commercialization and will be complemented by the recently announced acquisition of power conversion company Converteam.

- More than 100 Megawatts of New Orders for Thin Film Solar Products
- GE to Build 400-Megawatt Manufacturing Facility, will be Larger than Any Existing US Solar Panel Plant Today
- Solar Strategy Complemented by Announced Acquisition of Power Conversion Technology Company Converteam
- GE Completes Acquisition of PrimeStar Solar, Inc.

[More....](#)

High Speed Water Sterilization Using One-Dimensional Nanostructures



materials to effectively inactivate bacteria in water.

Recently, Schoen et. al. investigated the incorporation of silver nanowires (AgNWs) and carbon nanotubes (CNTs) within a matrix of cotton, enabling a membrane with multiscale nanostructured

[DNA 17](#)

Submission Deadline May 2

[AVS 58th International Symposium and Exhibition](#)

Submission Deadline May 4

[2011 MRS Fall Meeting](#)

Submissions accepted May 21 - June 21

[View All Calls](#)



Recently Published

From Our Affiliates

Ultrasmall Structure Fabrication via a Facile Size Modification of Nanoimprinted Functional Silsesquioxane Polymers
[ACS Nano \(5\):923-931](#)

Mechanical properties of ultralow-dielectric-constant mesoporous amorphous silica structures: Effects of pore morphology and loading mode
[Applied Physics Letters \(98\):121902](#)

Synthetic Mimics of Antimicrobial Peptides from Triaryl Scaffolds
[J. Med. Chem., 54 \(7\), pp 2241-2254](#)

Atomistic Simulation and Measurement of pH Dependent Cancer Therapeutic Interactions with Nanodiamond Carrier
[Mol. Pharmaceutics, 8 \(2\), pp 368-374](#)

Time-dependent, protein-directed growth of gold nanoparticles within a single crystal of lysozyme

This strategy takes advantage of the chemical and mechanical robustness of cotton as the support, along with the large pore structure between cotton fibers (tens to hundreds of microns), which, much greater than the length scale of bacteria, prevents physical clogging from occurring. In this paper, a novel approach to synthesize a textile based membrane architecture incorporating nanomaterials to enable specific functionality within the membrane has been reported. The fabrication approach is both simple and scalable, and provides effective inactivation of bacterial elements in a gravity fed filtration system. [More....](#)

NanoBusiness Alliance Interview with William Moffitt



In this month's interview, we talk to William Moffitt,

President and Chief Executive Officer of Nanosphere. Mr. Moffitt became president and CEO of Nanosphere in 2004. Moffitt is a 30+ year veteran of the diagnostics and medical device industry, having spent the last 20 years developing novel technologies into products and solutions that have helped shape the industry and generate significant shareholder value. Prior to Nanosphere, he served as President and CEO of i-STAT Corporation, a developer, manufacturer and marketer of diagnostic products that pioneered the point-of-care blood analysis market. Moffitt led i-STAT from an early stage private company through commercialization, an IPO in 1992 and its acquisition by Abbott Laboratories in 2003. Prior to i-STAT, Moffitt held increasingly responsible executive positions from 1973 through 1989 with Baxter Healthcare Corporation, a \$7 billion manufacturer and distributor of healthcare products, and American Hospital Supply Corporation, a \$3.5 billion diversified manufacturer and distributor of healthcare products, which Baxter acquired in 1985. Mr. Moffitt earned a B.S. in zoology from Duke University. [More....](#)

[Read more on InterNano](#)

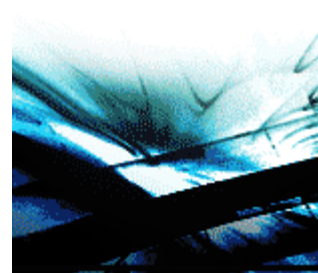
[Nature Nanotechnology \(6\):93-97](#)

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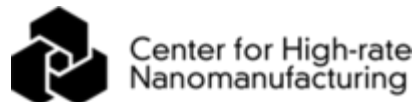


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