

NNI 2.0 - THE FUTURE OF USA NANOTECHNOLOGY

Luncheon/Webcast • June 2, 2016 • Penn Club

Free Webcast for ACS National Members – Register at www.cmeacs.org

Abstract

The National Nanotechnology Initiative (NNI) envisions a future in which the ability to control matter at the nanoscale leads to a revolution in industry that benefits society. Since 2000, Federal agencies participating in the NNI have invested over 20,000,000,000 dollars in various aspects of nanotechnology.

Nanotechnology is enabling revolutionary innovations for the future of electronics, computation, communications, and sensing. New nanoparticle-based composites and additives offer dramatic improvements in properties such as strength-to-weight ratios, manufacturing complexity, lubrication, and catalytic efficiency. Also, advances in nanoparticle-based, targeted therapies help to treat diseases like cancer.

But much remains to be done when it comes to transitioning advances in R&D to commercial applications. June 2 is your opportunity to share insights into industry's future prospects in order to refine the upcoming NNI 2.0 plan.



Speaker: Michael A. Meador, PhD, is Director of the National Nanotechnology Coordination Office (NNCO). He promotes the NNI goals of fostering cutting-edge nanotechnology R&D; advancing testing, characterization and fabrication; facilitating commercialization of nanotechnology-based products and promoting responsible development. He is on detail from the NASA Glenn Research Center where, since 1983 he has been involved in materials R&D including serving as the Chief of the Polymers Branch (1988 to 2011). From 2011 to 2014, he led a NASA-industry-university project to mature high payoff nanotechnologies for use in NASA missions under the Space Technology Mission Directorate's Game Changing Development Program. Meador received the NASA Equal Opportunity Employment Medal and the NASA Exceptional Service Medal for nanotechnology R&D. Dr. Meador is a Fellow of ACS, and Adjunct Faculty Member at Clemson University. He received a BA in Chemistry from Ithaca College and a PhD in Organic Chemistry from Michigan State University

Event Schedule

Location:

Penn Club
30 W 44th Street, NYC

Event Times: (ET)

11:15 am - 12:00 noon

Registration and

Networking

12 noon - 1 pm Luncheon

1 pm - 2 pm Talk - Webcast

Luncheon Fees

\$120 for non-members

\$90 for members

Check for Early-bird savings

Webcast : \$30. Free webcast

recording for ACS members

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NNI2.0 Continued



Honeywell

Speaker: Rajiv Banavali, PhD, is the Chief Technology Officer for the Advanced Materials business unit of Honeywell. Dr. Banavali and Honeywell have worked with a broad variety of nano-enabled products and research programs. Honeywell Fluorine Products is the world's largest producer of hydrofluoric acid and a supplier of BF₃ for synthetic oil; SF₆ for circuit breakers; and UF₆ for nuclear fuel. The business has developed new low-global-warming-potential Solstice® refrigerants, blowing agents, solvents and aerosols that have 99.9% lower global warming impact than previous generation of materials. This business is part of Honeywell Performance Materials and Technologies designer of high-purity, high-quality performance chemicals and materials and software-based systems to safely and efficiently operate industrial facilities.



IBM Research

Speaker: Qinghuang Lin, PhD, is a Research senior manager at IBM Watson Research Center in NY. A graduate from the University of Michigan—Ann Arbor, he is an IBM Master Inventor with over 80 granted US patents with additional more than 70 US patents pending. He is the editor or co-editor of 6 books and the author and co-author of over 60 technical papers. He is an Associate Editor of Journal of Micro/Nanolithography, MEMS, and MOEMS and served as a Guest Editor of Journal of Materials Research focus issue on self-assembly and directed assembly of advanced materials. In 2002, Dr. Lin, along with colleagues, received an IBM Research Division Achievement Award for the invention and implementation of 248 nm bilayer resist technology in manufacturing. In 2015, Dr. Lin, along with colleagues, received an IBM Research Division Outstanding Achievement Award for “Spin Torque Magnetic Random Access Memory (MRAM).” Dr. Lin is a Fellow of the American Chemical Society (ACS Fellow) and is the Chair of the American Chemical Society: Polymeric Materials Science and Engineering (PMSE) division.

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