

**MANCEF**  
www.mancef.org

Micro and Nanotechnology  
Commercialization  
Education Foundation ®

**INTERNATIONAL DELEGATION PROGRAM  
NORTH CAROLINA - COMS 2011**

WHERE SCIENCE IS BIG  
AND  
TECHNOLOGY MEANS BUSINESS



Delegation Program: September 1 - 2, 2011

Raleigh - Durham - Greensboro - Charlotte, North Carolina, USA

COMS 2011 Conference: August 28-31, 2011



COMMERCIALIZATION OF MICRO AND NANO SYSTEMS CONFERENCE (COMS)  
AUG 28 - AUG 31, 2011  
GRANDOVER RESORT & CONFERENCE CENTER  
GREENSBORO, NC, USA  
WWW.MANCEF.ORG/COMS2011  
COMS2011INFO@MANCEF.ORG

MORE INFORMATION ON THE INTERNATIONAL DELEGATION TOUR:

**COMS2011DELEGATIONS@MANCEF.ORG**

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The Micro and Nanotechnology Commercialization Education Foundation (MANCEF) is a global membership association focused on the commercialization of small technologies. As an educational non-profit, our goal is to facilitate connections and to educate those bringing emerging technologies to market.

MANCEF members are the top international players in the Micro-Nano Marketplace. We help create global relationships and alliances which accelerate the commercialization of small technologies.

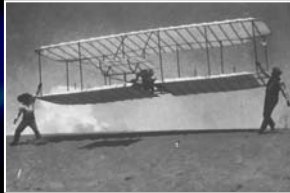
Join us today & make your commercialization goals a reality!

# NORTH CAROLINA

*The State on the cutting edge of micro and nanotech.*

North Carolina has at least 70 companies working with nanotechnology.

These companies range from small startups using nanotechnology as a core part of their manufacturing processes and services, to large firms using nanotechnology as part of their broader operations, including MEMSCAP, RTI International, Semiconductor Research Corporation, Umicore and Coventor.



North Carolina is the Launchpad of American aviation, with the 1st flight of the Wright brothers

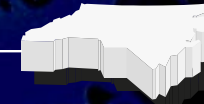
Today: +160 aerospace and aviation companies - 13,500 workers

Home to Boeing, General Dynamics, GE, L-3 Communications, Lockheed Martin, Northrop Grumman, Raytheon.



North Carolina is a true hub for information technology, including the world famous Research Triangle Park.

Home to 3,000 IT companies employing more than 100,000 workers. Examples are IBM, Cisco, Microsoft.



NC is among the largest auto parts manufacturers in the US: +1,000 companies - 140,000 workers

Companies include Honda, Caterpillar and many more.



Our biotech industry is the 3rd largest in the nation, with 520 life sciences companies and 56,000 workers.

Home to Baxter, Bayer, Biogen Idec, GlaxoSmithKline and Merck.



Ahead on the renewable energy highway:

+900 companies participate in the renewable energy supply chain.

The first state in the southeastern U.S. to initiate a Renewable Portfolio Standard.

# COMS 2011

**The premier global event on  
the commercialization of micro-nanosystems**

MANCEF's COMS conference brings over 500 global professionals from industry academia & government together to discuss opportunities and challenges in bringing new micro and nanotechnologies to industry and society.

Research in micro and nanotechnology that is close to commercialization is a keystone of COMS 2011. It is a unique opportunity to showcase your work for the MNT business community, including funding sources for commercialization such as venture capitalists.

This year COMS will take place in one of the United States most dynamic regions, North Carolina.

**AUG 28 - AUG 31, 2011**

**GRANDOVER RESORT & CONFERENCE CENTER  
GREENSBORO, NC**

[WWW.MANCEF.ORG/COMS2011](http://WWW.MANCEF.ORG/COMS2011)



## COMS 2011 TOPICS

Leveraging MNT as an Economic Development Tool  
Nano and Extractive Materials - Water, Forestry,  
Minerals - Metals, Polymers, Ceramics, Organics  
Industry, Government, Academic & International Collaboration  
Models  
Energy - Smart Grid, Oil, Gas, Wind, Ocean, Solar, Batteries,  
Fuel Cells, Biofuels  
Business Methods, Models & Intellectual Property Strategies  
Printed Electronics - Nano (Molecular) Electronics - Printable,  
Flexible, Integrated, Organic  
Investment, Finance & Funding for MNT - Angels, VC, etc  
MNT Education: Methods of Communication & Tools  
Nanobio & Nanomedicine - Convergence  
Nano Composites  
Nanobio in Products: Pitfalls and Successes in the Path to a  
Commercial Product  
MNT for Security, Defense, Aerospace - Unmanned Vehicles -  
Telecommunications, Photonics, Optics, Lasers  
Microfluidics  
Productivity in Nanomanufacturing - "Standards" specifically  
Trade/I.P./Regulatory/EHS  
Micro-Nano Manufacturing - Integration and Packaging,  
Production Processes & Facilities, Foundries  
BioMEMS, Biomedical & BioChip Devices  
Nanotechnology Environmental Health and Safety/Regulatory  
Issues  
Micro-Nano Manufacturing and Tools - Modeling and  
Simulation, Characterization, Metrology & Testing

**“ Outstanding conference! The right mix of  
technical and commercialization topics. ”**

*- Jim Stasiak, Principal Scientist, HP*

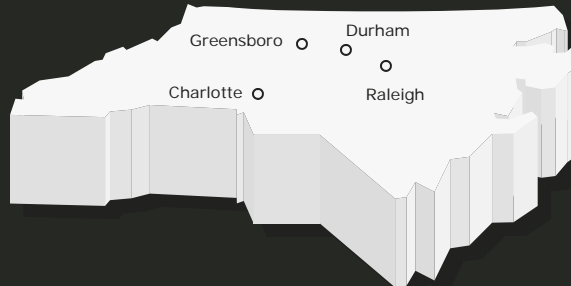
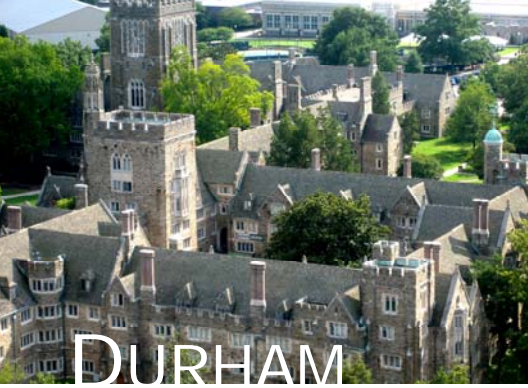


The International Delegation Program is a unique opportunity for international registrants to efficiently visit Southeast's micro and nanotechnology industry.

This year, the Program will focus on one of the US's most dynamic high-tech regions: the Research Triangle - Durham, Raleigh, Charlotte and Greensboro. This program is hosted by our local partners.

Only a limited number of delegates will be admitted to ensure a good interaction with local companies and organizations.

September 1-2, 2011



Durham is part of the Research Triangle, together with Raleigh and Chapel Hill.

The region is one of the hotbeds of high-tech research & development as well as entrepreneurship into successful industries, including RTI International, Semiconductor Research Corporation, COIN, Duke University, North Carolina University and the University of North Carolina at Chapel Hill.

The state of North Carolina has tremendous potential, not only in the Research Triangle, but equally so in the fast growing regions of Charlotte and Greensboro. That is why MANCEF chose to locate its 2011 COMS conference in Greensboro, home of global industries such as Novartis and Cessna. Charlotte, in the southern part of the state, is a great city that aligns its strategy towards a high-tech corridor with global reach. The establishment of the North Carolina Research Campus just north of the city is an ambitious example of this vision.

OUR PARTNERS



RTI International is one of the world's leading research institutes, dedicated to improving the human condition by turning knowledge into practice. The staff of more than 2,800 provides research and technical services to governments and businesses in more than 40 countries in the areas of health and pharmaceuticals, education and training, surveys and statistics, advanced technology, international development, economic and social policy, energy and the environment, and laboratory testing and chemical analysis.

[www.rti.org](http://www.rti.org)



COIN is a nonprofit, virtual center of innovation for nanobiotechnology and nanomedicine based in North Carolina. The organization is a premier source of networking opportunities, information, and tailored innovation services that address client needs and catalyze and advance commercialization of nanobiotechnology.

[www.nc-coin.org](http://www.nc-coin.org)

N.C.'s Department of Commerce is the state's advocate for economic, community and workforce development. The North Carolina Department of Commerce is the state's leading economic-development agency, working with local, regional, national and international companies. The department's mission is to improve the economic well-being and quality of life for all North Carolinians.

[www.nccommerce.com](http://www.nccommerce.com)

OUR PARTNERS



COMS 2011 Host

The Joint School of Nanoscience and Nanoengineering (JSNN), a collaborative project of North Carolina A&T State University and The University of North Carolina at Greensboro, was created to enable leading edge exploration and development of nanotechnology. The founding Dean, James G. Ryan, Ph.D. and the University Chancellors have created an exciting model to the benefit of students, faculty, equipment vendors, and partnering companies. The model is designed to explore the leading edge of nanotechnology and commercialize the research findings. It is a unique academic/corporate/equipment technology and business development model. The model is designed to accelerate the path to market through these cross collaborations. The partner companies are attracted by the ability to access a suite of tools that otherwise would be unaffordable and the ability to collaborate with world-class faculty. The JSNN will also train students to conduct basic and applied research, enhance the access of undergraduate and K-12 students to the fields of nanoscience and nanoengineering, and provide training for scientists and engineers already in the workforce.

The JSNN offers a Professional Science Master's in Nanoscience that includes Nanoscience and Business Administration courses, a Master of Science in Nanoengineering, and a rigorous, interdisciplinary Ph.D. in Nanoscience. The degree programs have been developed to meet the need for trained professionals in the emerging high technology industries using nanotechnology. A Ph.D. in Nanoengineering is currently in development.

[jsnn.ncat.usngg.edu](http://jsnn.ncat.usngg.edu)