Kick-Off Meeting

Towards Formation of a North Carolina Center for Nanotechnology (NCCN)

10:00-11:00 AM May 14, 2001
D106 Levine Science Research Center (LSRC) Building,
Research Drive, Duke University
Durham, NC

Meeting Organizer: John Reif, CS Dept, Duke University

Meeting Overview Slides Web URL: http://www.cs.duke.edu/~reif/NCCN/meeting1/NCCN.pdf
Meeting Web URL: http://www.cs.duke.edu/~reif/NCCN/meeting1/agenda.html
Distribution List URL: http://www.cs.duke.edu/~reif/NCCN/meeting1/distribution.html
NCCN REGISTRATION: Please fill in the lines below

Name:
Title:
Department Affiliation:
University:
Surface Address:

Phone number:
Email address:
Web Page:
Research interests related to nanotechnology (1 line please):

Number of graduate students in nanotechnology related areas:
Number of postdocs in nanotechnology related areas:

Email addresses of others in nanotechnology to be invited:
TOPIC of the NCCN Meeting: We will discuss the possibility of establishing a NC center in nanotechnology.

The Goal: To gain national prominence in nanotechnology, by leveraging the strengths in nanotechnology of NC universities as well as other local institutions.

The NCCN Concept:
Strategic Assets of an NCCN:
- state of the art instrumentation,
- offices and laboratory space for research in nanotechnology,
- technical staff highly trained in support technologies,
- educational facilities providing space for lecture series, and
- a highly visible presence, displaying new results and opportunities in nanotechnology.

Contributions of an NCCN:
Provide to local groups and institutions working in nanotechnology:
- research collaborations with NCCN groups,
- joint contract opportunities
- access to the facilities of NCCN, shared office spaces and laboratory space (depending on contract support).
- programs for student support,
- funds for technology transfer, etc.
Strategic Advantages to NC that would be provided by an NCCN

With such a NCCN facility, NC would have a much better shot at gaining national prominence in nanotechnology:

• The research in nanotechnology by NC institutes would be considerably enhanced.
• The pace of commercialization of NC research in nanotechnology would be considerably sped up.
• The members of NCCN would have a special advantage in obtaining competitive federal funding due to the major pre-existing infrastructure.
• The various institution’s recruitment efforts would be enhanced, since affiliation with a NCCN and its shared facilities would provide a large additional incentive in recruitment.
Key Issues to be Resolved and Established:

- The need for a NCCN
- The mechanism for initiating and funding a centralized NCCN facility
- The mechanism for sustaining and recapitalizing a centralized NCCN facility
- Organizational and access model for a NCCN
AGENDA of Kick-Off Meeting SESSION 1: 10:00-10:15 AM
Overview Talks on NC Research Projects in Nanotechnology

*Each speaker will overview research by members of their team and/or institution.*

*Speakers (Please keep to limit of 2 minutes per speaker):*


- “Nanoscale Transport and Directed Motion”, Herald Ade, Dept of Electrical and Comp. Engineering, NCSU

- Paul D. Franzon, “Molecular Electronics Research at NC State”
  - Dept of EECE, NCSU. [http://www.ece.ncsu.edu/erl/moelec/](http://www.ece.ncsu.edu/erl/moelec/)


- “An Overview of MCNC’s Interest in Nanotechnology”, Brian Stoner, MCNC. [www.mcnc.org](http://www.mcnc.org)

*Note: Please realize that this meeting cannot cover all such research projects within the short time available, but we need to be as inclusive as possible. There will also be a brief open discussion of further individuals and institutions to be involved.*
AGENDA of Kick-Off Meeting SESSION 2: 10:15-10:30 AM

Open Discussion of NC Infrastructure Needs in Nanotechnology

Existing and Needed Infrastructure:
• Instrumentation,
• Specialized Laboratories
• Collaborative Technology
• Funding avenues for research
• Location of the center
• Use of existing institutions to provide temporary space for a NCCN.
AGENDA of Kick-Off Meeting SESSION 3:  10:30-10:45 AM

Plans for NC Technology Transfer in Nanotechnology

*Speakers will overview (existing and future) transitions of nanoscience and nanotechnology research into commercial enterprises.*

*List of speakers:*(Please keep to limit of 2 minutes per speaker)

- Richard Superfine, Dept. of Physics, UNC
- Nick England, 3rdTech, Inc. nick@3rdtech.com
- Paul D. Franzon, Dept of EECE, NC State
- Richard Fair, ME Dept, Engineering School, Duke University
- Clay B. Thorp, Catalysta Ventures, RTP

*This will be followed by an open discussion of funding avenues for commercialization of Nanotechnology.*
AGENDA of Kick-Off Meeting SESSION 4: 10:45 –11:00 AM
Open Discussion of Future Plans for a NCCN

(1) Goals: Long Range & Immediate Goals
(2) Funding avenues for establishing a NCCN:
   e.g., state, federal, and via local institutions or companies
(3) Information Collection
   • What Information Needs to Be Collected ?
     - Individuals and Research Projects in NC working in Nanotechnology
     - Infrastructure Needs in Nanotechnology
     - A Strategic Plan for NCCN's Technology Transfer in NanoTechnology
   • How this Information is to be Collected
   • How this Information is to be Presented (as a Document and/or via the Web ?)
   • To whom is this Information to be presented ?
(3) Organization of NCCN
   • Flat versus hierarchical organization
   • Teaming and team leadership
   • Assignment of tasks: (a) information collection,
     (b) document preparation,
     (c) workshop organization,
     (d) liaison with other organizations
(4) Scheduling of Next Meetings