

Managing Nanotechnology

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“NS&E Centers and Industry Partnerships”
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Industrial Research Institute

- 200 R&D leaders, including national labs
- Focus on the innovation process and management
- Partner with Universities, such as, Center for Innovation Management Systems at NC State.
- Working Group identified Nanotechnology as an “Explosive” Technology
- With NNI, developed methods to accelerate innovation and commercialization



Fostering Nanotechnology Innovation Through Emerging Nanoscience Workshops

Alden S. Bean, CIMS/NCSU, Rich Chapas, IRI

- For NNI Center research faculty and their industrial partners
TOGETHER
- Promotes mutual understanding of 'Common Ground'
- Creates a common language for exploring different pathways---
 - for advancing science
 - for building businesses
 - for mutual benefit
- Builds Faculty knowledge of commercial needs and opportunities
- Enriches Industry appreciation for unique S&T capabilities
- Shortens concept-to-market cycle time
- Produces Useful new ideas for collaboration right away
- Promotes lasting alliances



Fostering Nanotechnology Innovation Through Emerging Nanoscience Workshops

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- Developed in Partnership with the Industrial Research Institute
- Supported by a 'Partnership for Innovation Grant' from the NSF
- Tested with NNI Centers & affiliates from:
 - **Carnegie Mellon, Georgia Tech, Lehigh, Michigan State,**
 - **North Carolina State, Northeastern, Penn State, Purdue,**
 - **UMass at Lowell, Univ. of New Hampshire, and Univ. of Pittsburgh**
- 5 separate workshops; 177 individual participants; 44 companies
- Arranged directly through NNI Centers or Regional Consortia
- Modular format customized to the needs and interest of the Center
- Typically 2 days in length, 30-50 participants, equal split



Conclusions

- Workshops at NNI Centers improve technology transfer
- Manufacturing technology is essential and requires even more focused teaming
- Continued dialog between university and industrial scientists is critical: new methods and funding are needed
- Publications in RTM





Thank you

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