From: David Bond [mailto:dmbsrs@rit.edu] **Sent:** Tuesday, September 20, 2011 3:16 PM

To: amtech

Subject: AMTech Comments

- Q1. Should AMTech consortia focus on developments within a single existing or prospective industry, or should its focus be on broader system developments that must be supplied by multiple industries?

 A1. The consortia should not focus on particular industries, but should focus on no more than 2 or 3 specific foundational enabling technologies in order to have significant impact. The consortia should identify precompetitive industry clusters that have strong ripple effects or economic multipliers.
- Q2. Who should be eligible to participate as a member of an AMTech consortium? For example, U.S. companies. i.e., large, medium, and/or small; institutions of higher education; Federal agencies; state, local, and tribal governments; and non-profit organizations?
- A2. All the above. Each group has distinct advantages in creating business opportunities.
- Q3. Should AMTech place restrictions on or limit consortium membership? A3.
- Q4. Who should be eligible to receive research funding from an AMTech consortium? For example, U.S. companies i.e., large, medium, and/or small; institutions of higher education; Federal agencies; state, local, and tribal governments; and non-profit organizations?
- A4. The funding mechanism(s) must be transparent and accountability must be maintained. The SBIR/STTR model is effective and should be considered for the AmTech consortia. Direct funding to companies that stand to profit should be limited and carefully monitored.
- Q5. What criteria should be used in evaluating proposals for AMTech funding?
- A5. Proposals should maintain or enhance sustainable manufacturing leadership for the US.
- Q6. What types of activities are suitable for consortia funding?
- A6. Basic and applied research and development in manufacturing processes and materials.
- Q7. Should conditions be placed on research awards to ensure funded activities are directed toward assisting manufacturing in the U.S.?
- A7. Yes.
- Q8. What are ways to facilitate the involvement of small businesses in AMTech consortia?
- A8. Small businesses should be represented at every level and share in funding, technology and results.
- Q9. What are best practices for facilitating the widest dissemination and adoption of knowledge and technology through consortia?
- A9. Annual meetings, publication of shared results, non-exclusive availability of technology.
- Q10. While it is expected that the research efforts of AMTech consortia (including participants from the Federal, academic, and private industry sectors) will take place largely at the pre- competitive stage in the development of technologies, the generation of intellectual property is possible, and even likely. What types of intellectual property arrangements would promote active engagement of industry in consortia that include the funding of university-based research and ensure that consortia efforts are realized by U.S. manufacturers?
- A10. Participants receive non-exclusive royalty-free use of results.
- Q11. Would planning grants provide sufficient incentive for industry to develop roadmaps and initiate the formation of consortia? If not, what other incentives should be considered?
- A11. No. The incentive already exists.
- Q12. Should each member of an AMTech consortium be required to provide cost sharing? If so, what percentage of cost sharing should be provided?

- A12. For-profit members should provide cost sharing.
- Q13. What criteria should be used in evaluating research proposals submitted to an AMTech consortium?
- A13. These should be developed by the members in each consortium using the Heilmeier catechism.
- Q14. What management models are best suited for industry-led consortia?
- A14. NSF Engineering Research Centers and Industry/University Cooperative Research Centers are the best suited existing models.
- Q15. Should the evaluation criteria include the assessment of leadership and managerial skills?
- A15. Yes. Applicants should have a track record.
- Q16. Should limitations be placed on the duration of consortia?
- A16. Five year renewable for an additional five years.
- Q17. How should an AMTech consortium's performance and impact be evaluated? What are appropriate measures of success?
- A17. Use the NSF STAR metrics model.
- Q18. What are the problems of measuring real-time performance of individual research awards issued by an industry-led consortium? What are appropriate measures of success?
- A18. This should be addressed in individual research proposals.
- Q19. How should the NIST AMTech program be evaluated?

A19.

- Q20. What are lessons learned from other successful and unsuccessful industry-led consortia?
- A20. The UIDP open innovation model encourages idea development and dissemination.
- Q21. How can AMTech do the most with available resources? Are there approaches that will best leverage the Federal investment?
- A21. Cost share from industry. Broad university participation.
- Q22. How should AMTech interact with other Federal programs or agencies?
- A22. AmTech should have advisory boards with technical experts from Federal agencies and labs

David Bond

Director, Sponsored Research Services Rochester Institute of Technology University Service Center, 87-2479 141 Lomb Memorial Drive Rochester, New York 14623 phone: 585-475-7987

fax: 585-475-7990 david.bond@rit.edu

CONFIDENTIALITY NOTE: The information transmitted, including attachments, is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and destroy any copies of this information.