The Advanced Manufacturing Technology Consortia (AMTech) Program
and
2014 Federal Funding Opportunity

AMTech Informational Webinars
August 7 & 14, 2014

Margaret Phillips
Associate Director for Competitions

Ben Vickery
MEP Associate for AMTech

Advanced Manufacturing Office
National Institute of Standards and Technology
U.S. Department of Commerce
Gaithersburg, MD
Overview

**Both Dates**
- An Overview of AMTech and the 2014 Funding Opportunity

**August 7\textsuperscript{th}**
- AMTech in the Context of Advanced Manufacturing and NIST
- Expectations and Outcomes
- AMTech Evaluation Criteria and Performance Reporting
- Evaluation, Selection and Award Announcements

**August 14\textsuperscript{th}**
- Responding to the FY 2014 Solicitation
- Preparing a Complete Application (Proposal)
- Budget and Administrative Documentation
- Grants.gov

**Both Dates**
- Competition Resources and Next Steps
What is AMTech?

The Advanced Manufacturing Technology Consortia (AMTech) Program

Launched by NIST in FY 2013

- To incentivize the formation of and provide resources to industry-driven consortia
  - To support basic and applied research
  - On long-term, pre-competitive and enabling technology development
- For the U.S. manufacturing industry
- $15M annual program

AMTech-supported consortia will strengthen the capacity of U.S. industry and the nation to compete in global markets
• FY 2014 AMTech Planning Awards will fund eligible applicants to create new or strengthen existing driven technology consortia

• AMTech supported consortia will:
  ▪ Identify and prioritize long-term, pre-competitive industrial research needs;
  ▪ Enable technology development;
  ▪ Create the infrastructure necessary for more efficient transfer of technology;
  ▪ Represent a broad range of involved firms across stages of the value chain.

• When fully implemented, NIST envisions AMTech to offer funding in two broad areas: Planning Awards and Project Awards
2013 AMTech Competition Results

(www.nist.gov/amo/fundedawards.cfm)

• Nineteen (19) Planning Awards, totaling $9 million
  • 82 unique applications received
  • Applicants: 37 Academia / 42 Not-for-Profit /1 State Gov’t / 2 For-Profit

• Consortia Characteristics
  11 New
  8 Existing
  10 Academia
  9 Not-for-Profit

• Crosscutting Technologies* (# of efforts):

<table>
<thead>
<tr>
<th>Additive Manufacturing (1)</th>
<th>Advanced Forming &amp; Joining Technologies (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing &amp; Testing Equipment (7)</td>
<td>Advanced Materials Design, Synthesis &amp; Processing (2)</td>
</tr>
<tr>
<td>Advancing Sensing, Measurement &amp; Process Control (1)</td>
<td>Biomanufacturing &amp; Bioinformatics (1)</td>
</tr>
<tr>
<td>Flexible Electronics Manufacturing (1)</td>
<td>Sustainable Manufacturing (2)</td>
</tr>
<tr>
<td></td>
<td>Visualization, Informatics &amp; Digital Manufacturing Technologies (2)</td>
</tr>
</tbody>
</table>

* Taken from Advanced Manufacturing Partnership (AMP)
For FY 2014

• Applications (proposals) for Planning Awards only

Funding Level & Instrument

• Total funding available: approx. $5.6 M
• Award size: approx. $250 k - $500 k
• Grant or Cooperative Agreement

Key Dates

• Solicitation released: July 30, 2014
• Complementary webinars: August 7 & 14, 2014
• Required Pre-Application due: September 5, 2014
• Pre-Applicants notified: September 24, 2014 (on or about)
• Full Application due: October 31, 2014
• Award Announcement: Q2, CY2015
Partnerships and Eligibility

- Collaborative partnerships that include broad participation by companies of all sizes, universities and government agencies to form an industry-driven consortium are sought.
- Eligible applicants may be any U.S. organization, located within the United States, excluding commercial organizations and federal entities.
- An eligible applicant may work individually or include others effectively forming a team or consortium. Eligible subrecipients are the same types of organizations eligible to be applicants plus commercial organizations.
- Commercial organizations may participate in teams as subrecipients, contractors or unfunded roles.

Competition Resources

- Visit the AMTech Website at http://www.nist.gov/amo/
- Direct Questions to amtech@nist.gov
Overview for Today

Both Dates
• An Overview of AMTech and the 2014 Funding Opportunity

August 7th
• AMTech in the Context of Advanced Manufacturing and NIST
• Expectations and Outcomes
• AMTech Evaluation Criteria and Performance Reporting
• Evaluation, Selection and Award Announcements

August 14th
• Responding to the FY 2014 Solicitation
• Preparing a Complete Application (Proposal)
• Budget and Administrative Documentation
• Grants.gov

Both Dates
• Competition Resources and Next Steps
• Required Pre-Application due September 5, 2014 via grants.gov

• Contents:
  • SF-424
  • Abbreviated Proposal/Technical Narrative (4 pp.)

  ▪ Considerations
    • Review of abbreviated technical narrative against Evaluation Criteria
    • Reflective of broad-based industry need
    • Complementary to NIST’s advanced manufacturing programs
    • Complements, not duplicates current AMTech award portfolio and other Federal projects

• Response back to applicants by September 24, 2014

• Only those Pre-Applicants invited to propose will proceed with Full Applications
Full Application Content

- SF-424, 424A, 424B, CD-511, SF-LLL
- Technical Proposal
- Budget Narrative
- Indirect Cost Rate Agreement
- Resumes of Key Personnel
- Table of Funded Participants and Unfunded Collaborators
- Required Letters of Commitment
- Letters of Interest

20 page limit, items in italics excluded from page limitation
The 2014 AMTech Funding Opportunity Evaluation Criteria

<table>
<thead>
<tr>
<th>Section</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Identifying and Addressing Significant Technical Challenges with Substantive National Impacts</td>
<td>0-40</td>
</tr>
<tr>
<td>B. Consortium and/or Road-mapping Development Plan</td>
<td>0-40</td>
</tr>
<tr>
<td>C. Resource Availability and Qualifications</td>
<td>0-20</td>
</tr>
</tbody>
</table>
Executive Summary
Table of Contents
Discussion Against Criteria
  • Identifying and Addressing Significant Challenges with Substantive National Impact
    • Technical challenges may be in any area of advanced manufacturing
    • Must require solution that includes development of highly innovative, transformational technologies that are broadly deployable
    • Present scope and vision, goals, objectives and outcomes; challenges, proposed advances, and impacts to be realized
      – Common to an industry or sector
      – Demonstrate innovation
• Discussion Against Criteria (cont.)
  • Consortium and/or Roadmapping Development Plan
    • Plan for the entire life cycle
    • Participation by the full value chain (including SMEs)
    • Discuss methods used to select, assess and organize projects
    • How will stakeholders will be involved?
    • Outline processes to be used to gain consensus and disseminate results
    • Discuss progress monitoring and key milestones
    • Teaming and partnerships are encouraged
    • Describe sustainability planning
- Discussion Against Criteria (cont.)
  - Resource Availability and Qualifications
    - Describe resources and budget and demonstrate cost effectiveness and appropriateness to project goals and outcomes
    - Discuss proposed management/operational structure
    - Provide qualifications of key personnel and participating organizations

- Proposal review will evaluate the technical proposal narrative against the evaluation criteria – important for applicants to assess the narrative for completeness
Budget Narrative

- Required for applicant
- Consistent with the technical narrative
- Detailed breakdown of each cost category on the SF-424A
  - Personnel
  - Fringe Benefits
  - Equipment
  - Travel
  - Supplies
  - Contracts/Subawards
  - Other Direct Costs
- Describes the necessity and basis for each element of cost
- Indirect Costs
  - Provide approved IDC Agreement if available
  - If no approved rate, establishment will be part of post-award requirements
• Administrative Requirements
  • Institutions of Higher learning, Non-profits, and Commercial Organizations: 15 CFR Part 14
  • State and Local Governments: 15 CFR Part 24

• Cost Principles
  • Commercial entities: 48 CFR Part 31
  • Institutions of Higher learning: 2 CFR Subtitle A, Chapter II, Part 220 (OMB Circular A-21)
  • Non-profits: 2 CFR Subtitle A, Chapter II, Part 230 (OMB Circular A-122)
  • State and local Governments: 2 CFR Subtitle A, Chapter II, Part 225 (OMB Circular A-87)

• Audit Requirements
  • A-133 Compliance Supplement, as applicable
The “OMNI” Circular

What is it?
A circular that combines the Uniform Administrative Requirements, Cost Principles, and Audit requirements for Non-Profits, Institutions of Higher Learning, and State and Local Governments into one document rather than 8 different circulars.

Why was it done?
To streamline the requirements, and to improve consistency in implementation for both recipients and government administrators of financial assistance awards.

Where to go to learn more?
2 CFR Part 200
http://www.whitehouse.gov/omb/grants_docs
• Required: Letters of Commitment
  • From each known proposed subrecipient and/or contractor organization (all funded team members)
  • Key personnel

• Optional: Letters of Interest
  • From interested third parties
    • Indicates a willingness to help accelerate establishment or strengthening of a consortium
    • May vouch for proposer’s knowledge, skills, and abilities to conduct the proposed work
    • May indicate an interest in participating as an unfunded collaborator
Team can consist of:

- Applicant (required)
- Subrecipient(s) (optional, as deemed appropriate)
- Contractor(s) (optional, as deemed appropriate)
- Unfunded Collaborators (optional, as deemed appropriate)

Eligibility for subrecipients, contractors and collaborators is broader than for applicant.
Participant Types

• Subrecipients - Receive funds to perform significant project-related tasks
  • Can be any eligible U.S. organization, including commercial organizations, located in the United States, such as non-profit organizations, accredited institutes of higher education, and state, tribal, and local governments

• Contractors/Vendors - Provide supporting work, services, or materials to a project recipient for a fee; appear as contractor in applicant or subrecipient budget
  • Can be any eligible U.S. organization, including commercial organizations and federal entities, located in the United States, such as non-profit organizations, accredited institutes of higher education, and state, tribal, and local governments

• Informal Collaborators – Provide support to the project without receiving any Federal funding; are not included any budget documentation
  • Can be any eligible U.S. organization, including commercial organizations and federal entities, located in the United States, such as non-profit organizations, accredited institutes of higher education, and state, tribal, and local governments
### Subrecipient
- Performs substantive portion of the programmatic work
- Involved in the design and conduct of the project
- Usually on cost-reimbursement
- Flow-through of OMB/CFR and award requirements
- No fee or profit can be charged on the grant for subrecipients

### Vendor (Contractor)
- Provides the goods and services within normal business operations
- Provides similar goods or services to many different purchasers
- Operates in a competitive environment
- Not subject to Federal programmatic compliance requirements
- Profit can be charged

The primary distinction between sub-recipient and vendor is the performance of programmatic work. A grantee can enter into a sub-recipient relationship using “contract” mechanism.
Application Page Limits and Exclusions

- Page limit: 20 pages
- Includes: Technical proposal, including all figures, graphs, images and pictures
- Excludes:
  - Cover page
  - Required forms
  - Resumes
  - Letters
  - Budget Narrative
  - Table of Participants and Collaborators
  - Bibliographies and Tables of Abbreviations
  - Human and Animal Subject Documentation (if applicable)
Electronic submission using Grants.gov is required for AMTech Pre-Applications and Full Applications

- Announcement 2014-NIST-AMTECH-01
- Begin Grants.gov registration early!
- Proposers are strongly encouraged to start their Grants.gov registration process at least four weeks prior to the proposal submission due date.
- New businesses w/o an Employer Identification Number (EIN) should allow at least two additional weeks to obtain the number and register.
- A DUNS number and current registration in the System for Award Management (SAM) are required
- Submission must be by an Authorized Organization Representative
- Waiting until the submission deadline is risky and NOT recommended!
- Be mindful of electronic file naming conventions
- Successful submission notification takes several hours. Initial receipt notification is NOT notification of acceptance.
• Applicants may be contacted during the application review process
• Additional information requests during evaluation may include requests for:
  • Corrections to forms
  • Clarifications to budget items
• Important that complete PI and contact information be provided as part of the SF424
  • Turnaround time for information requests typically short
• Contact information also used to provide notifications to applicants and to offer debriefings to unsuccessful applicants
Protection of Proprietary Information

• Proposal information is only shared with reviewers and competition personnel
  • All Federal government employees/contractors
  • Confidentiality and Nondisclosure agreements signed
• Mark all proposals appropriately
Weaknesses to Avoid

• Outside of the solicitation scope
• Insufficient detail and/or unsupported assertions regarding key requirements
• Does not address necessary aspects of the evaluation criteria
• Does not differentiate current proposal from existing AMTech awards
• Incomplete proposal/Missing documents
• Failure to submit by the proposal deadline via grants.gov
• Ineligible applicant
For FY 2014

• Applications/proposals for *Planning Awards* only

Funding Level & Instrument

• Total funding available: approx. $5.6 M
• Award size: approx. $250 k - $500 k
• Grant or Cooperative Agreement

Key Dates

• Solicitation released: July 30, 2014
• Complementary webinars: August 7 & 14, 2014
• Required Pre-Application due: September 5, 2014
• Pre-Applicants notified: September 24, 2014 (on or about)
• Full Application due: October 31, 2014
• Award Announcement: Q2, CY2015
Questions
Wrap up and Thank you

• Visit the AMTech website at: www.nist.gov/amo
  ✓ View FAQs and webinar recordings and slides
  ✓ Join AMTech’s LinkedIn Group
• Email questions to: amtech@nist.gov
• Key dates to remember:
  ✓ September 5, 2014 – Required Pre-Application through grants.gov (only)
  ✓ September 24, 2014 (on or about) – Pre-Applicants selection notification
  ✓ October 31, 2014 - Full Application due through Grants.gov (only)
• Complete a brief AMTech webinar survey at the conclusion of today’s event. Thank you!