

2010 TIP COMPETITION FOCUSES ON MANUFACTURING TECHNOLOGIES

NIST TIP Materials Processing Program
Thursday April 15, 2010

The U.S. Commerce Department's National Institute of Standards and Technology (NIST) today announced a new competition for high-risk, high-reward research funding under the Technology Innovation Program (TIP). The new TIP competition offers cost-shared funding for innovative research on "Manufacturing and Biomanufacturing: Materials Advances and Critical Processes."

Approximately \$25 million is available for first-year funding for an expected 25 new TIP projects. The goal of the effort is to inspire revolutionary materials advances leading to new products with advanced features and improved characteristics that will enter the market more quickly.

New materials have the potential to open whole new markets for novel or dramatically improved manufactured products but, as TIP staff noted in a recent white paper describing the justification and scope of the competition, a major challenge for manufacturers is efficiently moving new materials currently in the lab into production and the market. Improvements in critical manufacturing processes that reduce costs, save time, increase quality or reduce waste can dramatically improve the competitiveness of process-based industries, including biomanufacturing—the sector that produces vaccines and other biopharmaceuticals—chemical production and fuel producers, among others.

TIP promotes technological innovation by providing funding support to challenging, high-risk research projects that address critical national needs. The merit-based, competitive program can fund R&D projects by single small or medium-sized businesses or by joint ventures that also may include institutions of higher education, nonprofit research organizations and national laboratories. TIP awards are limited to no more than \$3 million total over three years for a single company project and no more than \$9 million total over five years for a joint venture.

The 2010 TIP competition is open to research proposals in three areas:

- process scale-up, integration and design for materials advances—addressing how new materials are moved from the laboratory to full production;
- predictive modeling for materials advances and materials processing—using the power of modern analysis, modeling and computation to streamline the design and production scale-up of new materials by more accurately predicting their performance; and
- critical process advances—novel production technologies that dramatically improve the processing of new materials or resolve important bottlenecks and inefficiencies in the production of existing materials.

The due date for submission of proposals is 11:59 p.m. Eastern time, July 15, 2010. Proposals may be submitted electronically through Grants.gov (search for Catalog of Federal Domestic Assistance (CFDA) program 11.613 or Funding Opportunity Number TIP-2010-B01) or on paper to National Institute of Standards and Technology, Technology Innovation Program, 100 Bureau Drive, Stop 4750, Gaithersburg, MD 20899-4750.

Additional sources of information on this competition include:

- the full Federal Funding Opportunity (FFO) announcement, available at Grants.gov or the TIP Web site at http://www.nist.gov/tip/cur_comp/index.cfm;
- the Federal Register notice of "availability of funds" for the 2010 TIP competition, available from the TIP Web site at http://www.nist.gov/tip/cur_comp/index.cfm

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- the TIP White Paper “Manufacturing and Biomanufacturing: Materials Advances and Critical Processes,” available on the TIP Web site at http://www.nist.gov/tip/cur_comp/index.cfm;
- the 2010 TIP Proposal Preparation Kit available at http://www.nist.gov/tip/cur_comp/index.cfm and
- additional information on the Technology Innovation Program at www.nist.gov/tip.

NIST will hold three public meetings or “Proposers’ Conferences” for prospective TIP proposers and other interested parties to provide general information regarding TIP and the competition process, including eligibility and cost-sharing requirements, evaluation and award criteria, the selection process, and the general characteristics of a competitive TIP proposal. Proprietary technical discussions about specific project ideas will not be discussed.

The three meetings will be held:

- April 28, 2010, 9 a.m. - 1 p.m. Eastern time, at the NIST facility in Gaithersburg, Md. Preregistration is required for this meeting. Attendees must register by 5 p.m. Eastern time on April 26, 2010. Register on-line at http://www.nist.gov/tip/proposers_conf_4_2010.cfm. This meeting will also be webcast; watch for specific details on the TIP Web site <http://www.nist.gov/tip>.
- May 4, 2010, 1 p.m. - 5 p.m. Pacific time, at the Embassy Suites Hotel Los Angeles International Airport- South, 1440 Imperial Avenue, El Segundo, Calif. No preregistration is required for this meeting.
- May 6, 2010, 9 a.m. - 1 p.m. Eastern time at the Detroit Marriott Renaissance Center, Renaissance Drive North, Detroit, Mich. No preregistration is required for this meeting.

As a non-regulatory agency, NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology in ways that enhance economic security and improve our quality of life.

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