

KEY FINDINGS OF MANA COMMISSIONED STUDY

“GETTING TO THE FUTURE: A STRATEGIC ROADMAP FOR ADVANCING NANOTECHNOLOGY IN THE MID-ATLANTIC REGION”

The study, developed by the Battelle Technology Partnership Practice for the Mid-Atlantic Nanotechnology Alliance (MANA®), is the culmination of a year-long process to identify the tri-state region’s nanotechnology strengths by examining university and industry resources in addition to economic development infrastructure.

The research distinguishes opportunity areas best primed for commercialization in the nanotechnology arena within the Mid-Atlantic Region. The MANA region and the scope of this project are defined to encompass New Jersey, Delaware and Eastern Pennsylvania.

MANA was founded as a collaborative effort by the Ben Franklin Technology Partners of Southeastern Pennsylvania, the New Jersey Commission on Science and Technology, and the Delaware Technology Park. Launched in the fall of 2004 with support from the U.S. Department of Commerce Economic Development Administration, MANA represents the nation’s first multi-state nanotechnology initiative.

Battelle is a global leader in technology development and the largest nonprofit R&D organization in the U.S. The Technology Partnership Practice serves as Battelle’s technology-based, economic developing consulting organization.

Key Findings of the MANA Study

- The Mid-Atlantic region is well positioned to become a global leader in prototyping and commercializing discoveries for applications in the nanotechnology-related energy, biomedical and optoelectronics markets. Industry analysts estimate that the worldwide nanotechnology business could reach \$12.5 trillion by 2015.
- The region is already a national leader in the nanotechnology field: ranking #2 among all states in nano-related patents; #3 in National Science Foundation (NSF) nano-related grants; and #3 in National Institute of Health (NIH) nano-related grants. Additionally, there are currently more than 100 companies in the region engaged in nanotechnology research, product development and business planning activities.
- Getting to the future first in nanotechnology is particularly critical for the Mid-Atlantic region, which is home to many large and specialized industries — from specialty chemicals to pharmaceuticals to industrial electronics — which are expected to face significant impact from nanotechnology.
- To meet the demands of the new “ecosystem” for nanotechnology commercialization and to emerge as a major world center in a wide arrange of applications for the nanotechnology market, the region must form strategic alliances and collaborations of universities, industry, government laboratories, and state and local economic agencies that take advantage of the region’s core competencies in nanotechnology.
- There are four specific strategic nanotechnology-related opportunities that should be aggressively pursued by the Mid-Atlantic region: rapid proto-typing to demonstrate commercial value of nanotechnology innovations; identifying unique approaches to nano-enabled energy applications; integrating the region’s efforts to continue its leadership in optoelectronics; and, growing the region’s bio-nano research capabilities for the pharmaceutical, biotechnology and medical device industries.
- MANA can play a pivotal role in establishing the region as a global hub for expanded research, development, application, and commercialization of nanotechnology by: highlighting emerging opportunities and building partnerships needed to advance nanotechnology; attracting and securing federal, state and private investments to accelerate nanotechnology-related product commercialization; and marketing the region’s nanotechnology strengths and capabilities.

