

**Sustainable Manufacturing Advances in
Research and Technology (SMART) Coordination Network**

Roadmap Workshop on Sustainable Manufacturing

**Kingsgate Marriott, Cincinnati, OH
August 15-16, 2013**



Workshop Goal

The workshop seeks to bring together the manufacturing community to develop a comprehensive “roadmap” – a coordinated research and development agenda – for sustainable manufacturing.

The premise of the project is that: (1) the U.S. manufacturing sector is greatly challenged as global competition has moved away from large-scale cheap labor to advanced manufacturing techniques; (2) energy and environmental issues, such as the availability and cost of petroleum and greenhouse gas constraints, heighten the pressures; (3) in academia, issues such as engineering sustainability, advanced manufacturing theory, and alternative energy and biofuels have become active research areas, and (4) the awareness of related work and the coordination and collaboration of ongoing work is inadequate.

The workshop will focus on critical research and education areas, including (1) sustainable manufacturing fundamentals, (2) sustainable system design and integration, (3) sustainable operation, system management, and cyber-infrastructure, (4) energy sustainability, and (5) sustainable engineering education. It is expected to develop consensus for a national agenda that will define key challenges, establish a common vision, capture goals for realizing the vision, and give direction to research and development investment by industries, academia, and government. After the workshop, a document will be produced and be made available to all participating organizations.