

SMLC Report Released on High Priority Research Areas in Smart Manufacturing

By Tom Edgar



The Smart Manufacturing Leadership Coalition (SMLC) released its report documenting results from the SMLC-NSF Workshop: High Priority Research Areas on Integrated Sensor, Control and Platform Modeling for Smart Manufacturing.

In partnership with the National Science Foundation (NSF) and Georgia Tech, the workshop was hosted at the Georgia Tech Manufacturing Institute on February

23-24, 2015. A diverse group of experts and perspectives across industry, academia and government were brought together to take a closer look at **Advanced**, **Sensing**, **Control**, **and Platforms for Manufacturing (ASCPM)** research opportunity areas.

As defined in the recent AMP 2.0 workgroup reports that supported the PCAST/AMP 2.0 report¹, technologically, *Smart Manufacturing* encompasses ASCPM while *Digital Manufacturing* encompasses **Visualization, Informatics, and Digital Manufacturing Technologies (VIDM)**. Both ASCPM and VIDM were presented as comprehensive technology priorities in the report. These respective areas reflect technology differences (due to different drivers), overlaps, and complementary aspects depending on the layer and method of technology deployment.

Experts in Smart Manufacturing and Digital Manufacturing across industry sectors and academic disciplines actively participated in breakout sessions during the workshop. The objectives were to build a common understanding and use of terminology and to then delineate research areas and opportunities with greater precision. An important outcome of the workshop report included insights on how these interlinked advanced cyber technologies are appropriately balanced and integrated for continuous, batch, and discrete industry applications with a view toward next generation manufacturing technology trends. For more information about Smart Manufacturing Leadership Coalition, Inc., visit: www.smartmanufacturingcoalition.org

¹ In October 2014, the President's Council of Advisors on Science and Technology (PCAST) released the report of the Advanced Manufacturing Partnership (AMP) 2.0 Committee entitled, "Accelerating U.S. Advanced Manufacturing". The report motivated next generation advanced manufacturing focusing on enabling innovation,

securing the talent pipeline, and improving the business climate for U.S. growth and competitiveness.