

LIFT, APLU, and NCMS Create Expert Educator Team to Align Higher Education Curricula with Manufacturing Workforce Needs

FEBRUARY 22, 2017

The initiative will engage educators and manufacturing scientists to ensure instruction aligns to industry needs for a skilled workforce.

Lightweight Innovations For Tomorrow (LIFT), APLU, and the National Center for Manufacturing Sciences (NCMS) named six educators to its Expert Educator Team (EET). The EET will collaborate with LIFT to identify how colleges and universities can modify their curricula and related industry certifications to meet the knowledge, skills, and abilities workers will need for jobs deploying the new lightweighting technologies, materials, and processes being developed by LIFT.

The six expert educators were selected because of their significant knowledge of manufacturing technologies and experience within the manufacturing industry.

The Expert Educator Team includes:

- Fazleena Badurdeen, director of graduate studies in manufacturing systems engineering, University of Kentucky
- Amy Clarke, associate professor and site director, Center for Advanced Non-Ferrous Structural Alloys, Colorado School of Mines
- Chad Duty, associate professor, Department of Mechanical, Aerospace, and Biomedical Engineering, University of Tennessee Knoxville
- Muhammad Jahan, assistant professor, Miami (Ohio) University
- Gene Liao, professor and director electric-drive vehicle engineering and alternative energy technology, Wayne State University
- Kelly Zelesnik, dean, engineering, business, and information technologies, Lorain County Community College

In addition, the team will be led by Jim Woodell, vice president for economic development and community engagement at APLU, and Rebecca Taylor, senior vice president at NCMS.

The EET will begin its work at a kickoff meeting in Detroit with LIFT's technology project leaders. The teams will review several technology projects underway; identify the knowledge, skills and abilities these new technologies will require in both the design and production workforces, and begin to determine where gaps in curricula exist. Closing these gaps will provide students the right knowledge and skills needed for jobs working with new technologies. In addition to identifying those in-demand skills, the team will work to develop recommendations for effective technology-aligned education strategies and will review the LIFT technology portfolio to recommend additional education and workforce development initiatives.

"This initiative aims to catalyze participation in the critical manufacturing sector by fully realizing the role higher education institutions can play in defining education and workforce strategies," Woodell said.

NCMS will co-lead the EET and provide input based on experience as the largest cross-industry collaborative research and development consortium in North America, innovating in commercial, defense, robotics and sustainable manufacturing.

About APLU



The Association of Public and Land-grant Universities (APLU) is a research, policy, and advocacy organization representing 235 public research universities, land-grant institutions, state university systems, and affiliated organizations. Founded in 1887, APLU is North America's oldest higher education association with member institutions in all 50 states, the District of Columbia, four U.S. territories, Canada, and Mexico. Annually, member campuses enroll 4.7 million undergraduates and 1.3 million graduate students, award 1.1 million degrees, employ 1.3 million faculty and staff, and conduct \$41 billion in university-based research.

About LIFT



LIFT is a Detroit-based, public-private partnership committed to the development and deployment of advanced lightweight metal manufacturing technologies, and implementing education and training initiatives to better prepare the workforce today and in the future. LIFT is one of the founding institutes of Manufacturing USA, and is funded in part by the Department of Defense with management through the Office of Naval Research. Visit www.lift.technology to learn more.

About NCMS



*The **National Center for Manufacturing Sciences (NCMS)** is the largest cross industry collaborative Research & Development consortium in North America, is dedicated to driving innovation in cutting-edge technologies and commercial, defense, robotics and environmentally sustainable manufacturing. NCMS is experienced in the formation and management of complex, multi-partner collaborative R&D programs, is backed by corporate members representing virtually every manufacturing sector.*

For more information on NCMS, visit <http://www.ncms.org/>

Media Contact: Director Membership, Communication Pam Hurt pamh@ncms.org (248) 867-3525