ASME CONGRESSIONAL BRIEFING & ICE CREAM SOCIAL

Advanced Manufacturing Communities:

Encouraging Innovation and Building the Advanced Manufacturing Economy of the Future

Convened in Conjunction with the House Manufacturing Caucus



Date: **Thursday, July 14** Location: **B318 Rayburn House Office Building** Program Time: **2:15-3:15 PM**

Welcome:

J Robert (Bob) Sims, Eminent Fellow, Becht Engineering Co., Inc.; ASME President 2014-2015.

Opening Remarks: (Invited)

Congressman Tim Ryan, Member of Congress, House Manufacturing Caucus Co-Chair, D-OH.

Congressman Tom Reed, Member of Congress, House Manufacturing Caucus Co-Chair, R-NY.

Panelists:

Nicholas M. Donofrio, IBM Fellow Emeritus; IBM Executive Vice President Innovation and Technology (Ret.); Recent Chair of the National Academy of Engineering's Study Committee on Making Value for America: Embracing the Future of Manufacturing, Technology, and Work.

Nam P. Suh, Former President of Korea Advanced Institute of Science and Technology (KAIST); Former Director of the Park Center for Complex Systems (formerly the Manufacturing Institute) and the Head of the Department of Mechanical Engineering at MIT; Received the ASME Medal for Distinguished Mechanical Engineering Achievements and nine honorary degrees.

Deborah Wince-Smith, President and CEO of the United States Council on Competitiveness; Former Assistant Secretary for Technology Policy in the United States Department of Commerce.

Tom Kurfess, Professor and HUSCO/Ramirez Distinguished Chair in Fluid Power and Motion Control, Mechanical Engineering, Georgia Tech; Former Assistant Director for Advanced Manufacturing at the Office of Science and Technology Policy in the Executive Office of the President of the United States of America; Co-Chair of the ASME Manufacturing Public Policy Task Force.

Steve Schmid, Professor of Aerospace and Mechanical Engineering, The University of Notre Dame; Former Assistant Director for Research Partnerships in the Advanced Manufacturing National Program Office at the National Institute of Standards and Technology (NIST); Co-Chair of the ASME Manufacturing Public Policy Task Force. lce cream will begin to be served at 2:00 PM

Past 2016 Manufacturing Briefings:

2/11: Advanced Manufacturing (Sponsored by ASME)

3/16: Additive Manufacturing and 3D Printing (joint with Maker Caucus, Sponsored by CMU & America Makes)

4/11: Hiring STEM Professionals (joint with STEM Education Caucus)

4/20: The Miscellaneous Tariff Bill Process and HR 4923 – American Manufacturing Competitiveness Act of 2016

4/27: Digital Design and Manufacturing (joint with Maker Caucus, Sponsored by PennState University and DMDII)

5/10: Exploring the Nexus of Food and Advanced Manufacturing for American Competitiveness, Food Safety, and Global Security (Sponsored by ASME, University of Nebraska-Lincoln, College of Engineering)

5/25: Pre-College Engineering Education (Sponsored by House Manufacturing Caucus and Maker Caucus)

Briefing Overview:

The notion that America needs to get back the manufacturing jobs it lost since the recession does not quite match the grand future we see for advanced manufacturing in the United States. Most of the manufacturing job loss that occurred in the U.S. in the past decade has been in low-tech/low-education manufacturing. To bring manufacturing *back* to the U.S., we must look to the future.

According to Brookings, "Globally, manufacturing now accounts for approximately 16 percent of GDP and 14 percent of employment. While the industrial workforce in the United States is up from 11.4 million to 12.3 million, employment is still stuck at historical lows (not seen since the 1940s) ... Interestingly, this dynamic now appears to be changing. Manufacturing is converging (or colliding?) with other industries including software design, virtual and augmented reality, and cloud computing, to name a few."

It is clear that the outdated manufacturing methods of the past cannot be the bedrock for the future of advanced manufacturing in the United States. It is the new, innovative solutions our engineers are working towards today that will ensure manufacturing job creation will occur here in the United States. These solutions can only be realized with the support of public-private partnerships that encourage the formation of manufacturing communities: places where universities, companies, and local governments work together to promote manufacturing education and innovation. Manufacturing communities will work to drive education and training, which will then create a comprehensive innovation ecosystem and skills-pipeline that can only exist in these areas where modern manufacturing is being touted and pursued.

This is a widely attended public event.

Space is limited. RSVP at http://bit.ly/1YpiUPi (case sensitive).



The American Society of Mechanical Engineers (ASME)