

**Committee on Energy and Commerce**  
**U.S. House of Representatives**  
Witness Disclosure Requirement - "Truth in Testimony"  
Required by House Rule XI, Clause 2(g)(5)

<b>1. Your Name: Thomas R. Kurfess</b>		
<b>2. Your Title: Professor and HUSCO/Ramirez Distinguished Chair in Fluid Power and Motion Control</b>		
<b>3. The Entity(ies) You are Representing: Georgia Institute of Technology</b>		
<b>4. Are you testifying on behalf of the Federal, or a State or local government entity?</b>	<b>Yes</b>	<b>No X</b>
<b>5. Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2015. Only grants, contracts, or payments related to the subject matter of the hearing must be listed.</b> NSF Contract CMMI-1646013 NSF Contract IIP-1631803		
<b>6. Please attach your curriculum vitae to your completed disclosure form.</b>		

Signature: 

Date: 16 January 2017

**Thomas R. Kurfess, P.E.**  
HUSCO Ramirez Distinguished Chair in Fluid Power and Motion Control and Professor  
George W. Woodruff School of Mechanical Engineering  
Georgia Institute of Technology  
Atlanta, Georgia USA

**Education:**

- M.I.T., Cambridge, MA Mechanical Engineering, S.B. (1986)
- M.I.T., Cambridge, MA Mechanical Engineering, S.M. (1987)
- M.I.T., Cambridge, MA Electrical Engineering and Computer Science, S.M. (1988)
- M.I.T., Cambridge, MA Mechanical Engineering, Ph.D. (1989)

**Appointments:**

- 2012-Present, HUSCO Ramirez Distinguished Chair in Fluid Power and Motion Control and Professor, Woodruff School of Mechanical Engineering, GA Tech, Atlanta, GA.
- 2012-2013, Assistant Director for Advanced Manufacturing, Office of Science and Technology Policy, Executive Office of the President of the United States of America, Washington, DC.
- 2005-2012, Professor and BMW Chair of Manufacturing Integration, Department of Mechanical Engineering, Clemson University, Clemson, SC.
- 2000-2005, Professor, Woodruff School of Mechanical Engineering, GA Tech, Atlanta, GA.
- 1995-1999, Special Consultant to the Government of Malaysia, United Nations Development Program.
- 1993-2000, Associate Professor, Woodruff School of Mechanical Eng., GA Tech, Atlanta, GA.
- 1993, Associate Professor of Mech. Eng. and Engineering and Public Policy, Carnegie Mellon University (CMU), Pittsburgh, PA.
- 1992-93, Summer Faculty LLNL, in the Precision Engineering Program, Livermore, CA.
- 1992-1998, participating guest in the Precision Engineering Program at the Lawrence Livermore National Laboratory (LLNL), Livermore, CA.
- 1989-93, Assistant Professor of Mech. Eng. and Engineering and Public Policy, CMU, Pittsburgh, PA.
- 1985-1989, Draper Research Fellow, Robotics and Assembly Systems Div., C. S. Draper Laboratory
- 1979-1984, Machinist, North Manufacturing and Eng., Inc.

**Major Board Positions**

- President – the Society of Manufacturing Engineers (SME), 2018.
- Treasurer – the Society of Manufacturing Engineers (SME), 2015.
- Board of Directors – National Center for Defense Manufacturing & Machining (NCDMM), 2013 – present.
- Board of Trustees – MTConnect Institute, 2013 – present.
- Member Technical Advisory Board, NEMAK S.A. de C.V., 2012 – 2015.
- Board of Directors – the Society of Manufacturing Engineers (SME), 2009 – present.
- Board of Directors (Security Officer) – International TechneGroup, Incorporated, 2009 – present.
- Board of Directors – National Center for Manufacturing Sciences (NCMS), 2009 – 2012, 2013 – present.
- Member Technical Advisory Board, Metalsa S.A. de C.V., 2010 – 2013.
- Chair, South Carolina Centers of Economic Excellence (COEE), Council of Chairs, 2010 – 2011.
- Vice-Chair, South Carolina Centers of Economic Excellence (COEE), Council of Chairs, 2009 – 2010.
- President for the North American Manufacturing Research Institute of SME, 2007 – 2008.
- Secretary for the North American Manufacturing Research Institute of SME, 2005 – 2006.
- Board of Directors North American Manufacturing Research Institute of SME, 2003 – 2010.
- Executive Committee, International Symposium on Flexible Automation, 2008 – present.

**Students Advised**

- Over 30 PhD Students
- Over 50 Master's Students

## **Honors and Awards**

- ASME Swanson Federal Fellow, 2012
- SME Education Award, 2010.
- Fellow of the American Association for the Advancement of Science, 2008.
- Clemson University – Frank A. Burtner Award for Excellence in Advising, 2007.
- Fellow of the Society of Manufacturing Engineers, 2006.
- The Association for Manufacturing Technology, Charles F. Carter Jr., Advancing Manufacturing Award, 2005.
- Fellow of the American Society of Mechanical Engineers, 2004.
- The American Society of Mechanical Engineers’ Gustus L. Larson Memorial Award, 2002.
- Georgia Institute of Technology – Outstanding Faculty Leadership for the Development of Graduate Research Assistants Award, 2002.
- The American Society of Mechanical Engineers’ Blackall Machine Tool and Gage Award, 2001.
- Georgia Institute of Technology – “Class of 1940 W. Howard Ector’s Outstanding Teacher Award,” 2000.
- Society of Manufacturing Engineers Philip R. Marsilius Outstanding Young Manufacturing Engineer Award, 1996.
- American Society of Mechanical Engineers’ Pi Tau Sigma Gold Medal Award, 1995.
- Best Paper Award, International Symposium for Automotive Technology and Automation Conference, Stuttgart, Germany, 1995.
- National Science Foundation Presidential Faculty Fellow, one of 15 awarded in engineering in the U. S., 1993.
- George Tallman Ladd Award for Excellence in Research at the Carnegie Institute of Technology (College of Engineering), Carnegie Mellon University, 1992.
- National Science Foundation Young Investigator Award, 1992.
- Brown & Sharpe Outstanding Metrology Grant Recipient of 1991.
- Stephen Lee Award Department of Engineering and Public Policy, 1990.

## **Publications**

- 1 Book Edited, 13 Chapters published in books
- 3 Patents
- Over 140 Archival Journal Publications
- Over 150 Refereed Conference Proceedings
- Over 200 Major Keynote / Invited Presentations

## **Selected Lectures or Seminars**

- The National Academies, Committee on Science, Technology, and Law Policy and Global Affairs Division, Keynote Address entitled, “Policy Considerations for Additive Manufacturing,” Washington, DC, May 2013.
- The George C. Marshall Program Keynote Presentation to the Government and industry leaders of Austria, Vienna, entitled, “The American Agenda for Advanced Manufacturing,” Vienna, Austria, September, 2013.
- Cambridge University, The Babbage Lecture entitled, “The Digital Future of Manufacturing, Policy and Technology Opportunities for American Innovation,” Cambridge, UK, May 2014.
- Japan International Machine Tool Fair / 16th Annual International Machine Tools Engineers’ Conference, Opening Keynote Address entitled, “The Future of Digital Manufacturing,” Tokyo, Japan, October 2014.
- Plenary address, American Society of Mechanical Engineers – Pressure Vessels & Piping Conference, talk entitled, “High Performance Computing and Big Data the Parents of the Digital Twin,” Waikoloa, HI, July, 2017.
- University of Wisconsin-Madison, Lindbergh Lecture entitled, “Digital Volumetric Processing Ushering in the Age of the Digital Twin for Manufacturing,” Madison, WI, September 2017.