

## Curriculum Vitae

### **VAHID MOTEVALLI, Ph.D., P.E.**

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Dr. Motevalli joined Tennessee Technological University as Professor of Mechanical Engineering and Associate Dean for Research and Innovation in the College of Engineering in August of 2013. He is also serving as the Interim Director of the Center for Manufacturing Research. He came to TTU from Purdue University where he served as Founding Director of Center for Technology Development and prior to that Head of Mechanical Engineering Technology Department. Dr. Motevalli has nearly 30 years of teaching, research and administrative experience in academia, government and industry with diverse research expertise in combustion, fire safety, aviation safety and security and transportation safety. His professional experience outside academia includes working at national and government laboratories (NIST, NRL), government (US Congress as ASME Congressional Fellow) and consulting.



Before moving to Purdue, he briefly served as a Professor of Engineering and Associate Provost for Graduate Studies and Research at the Dubai Aerospace Enterprise University (DAEU closed in fall of 2008). Prior to that position, he was at the George Washington University in a variety of capacities including Director of the Aviation Institute from 2004-2008, co-Director of the Institute (2002-04) and Director of the Aviation Safety and Security Certificate Program (1998-2008) in addition to being an Associate Professor of Engineering from 2004-2009. He was also selected as a Senior Homeland Security Fellow of the GW Homeland Security Policy Institute for the 2009 calendar year. While at GW he directed the International Aviation Safety and Security Summit program (2001-2005) which developed a leadership program for ministers and Directors General of civil aviation for more than 100 countries of the world. This program was accomplished with \$9 million funding from FAA and supported by the DOT Secretary's office. The program focus was on providing executive level training and technical information and assistance to ministers, Director Generals of civil aviation and other high-level foreign government officials on oversight responsibilities and requirements in aviation safety and security based on the International Civil Aviation Organization (ICAO) Standards and Recommended Practices. As Project Director, Dr. Motevalli worked with US and Foreign government officials, Department of State, TSA and aviation industry. Dr. Motevalli worked closely with the Gore Commission staff (President's Commission on Aviation Safety and Security in 21st Century) in 1996-97. He has published papers on the various aspects of aviation safety and security. In the broader transportation area, Dr. Motevalli developed the technical plan for the proposal to house the NTSB Academy at GW Campus in Virginia (a \$26 million building) which holds the reconstructed TWA 800 airplane. His research has included aircraft evacuation injury evaluation, emerging aviation safety and security issues, Finite Element modeling of aircraft engine containment, aircraft cabin safety, aircraft finite element modeling, aviation safety oversight standards, hybrid-electric vehicle research with emphasis on safety of fuel cell, fuel reformers, alternative fuel use, evaluation of airbag models and pedestrian safety. He has over 100 technical publications in addition to reports, presentations and invited talks and has directed over 35 graduate students. Prior to his positions at GW, Dr. Motevalli was a tenured Associate Professor of Mechanical Engineering at the Worcester Polytechnic Institute. He has also participated in a number of consulting projects including Business Process Re-Engineering for the Ethiopian Airport Enterprise, development of civil aviation laws and regulations for Afghanistan, advising Department of Homeland Security on transportation security issues, international aviation security training quality assurance and a number of other projects in transportation and fire safety. He is currently serving as a member of the National Academies Transportation Research Board Committee on Aviation Security and Emergency Preparedness and the Checkpoint of the Future Expert Group, an international aviation security initiative launched by IATA.

**Education:** **Ph.D. Mechanical Engineering**, 1989, University of Maryland, College Park.  
**M.S. Mechanical Engineering**, 1985, University of Maryland, College Park.  
**B.S. Mechanical Engineering**, 1983, University of Maryland, College Park.

**Registration** Professional Engineer, State of Maryland, obtained 1996.