

MECHANICAL & AEROSPACE ENGINEERING COLLOQUIUM SERIES

Spring 2018 Program

Wednesday – January 24, 2018 3:30pm

Easton Hub Auditorium

In the Fiber Optics Building

Refreshments & Social Hour at 4:30pm

The Engineering Science of Protecting Business Value

DR. LOUIS GRITZO

FM GLOBAL, VP OF RESEARCH

Abstract: Companies face an increasing number of threats to their business value, stability and growth. The risk from natural hazards, fires, explosions, equipment breakdown, and cyber threats are increasing due to the evolution of business processes, expansion, and in some cases a changing climate. The ability to assess and reduce this risk poses considerable scientific and engineering challenges. Advances in test techniques, physical modeling, numerical tools, open data, and analytics are being applied within and across engineering disciplines to make progress understanding, quantifying, and developing innovative, reliable and cost-effective solutions across a spectrum of areas. These challenges, the opportunities to meet them, and the potential for the future research and engineering contributions will be presented.

Bio: Dr. Louis Grizzo is vice president and manager of research with FM Global, one of the world's largest commercial property insurers. He oversees FM Global's team of scientists, with expertise in fire, explosions, natural hazards (windstorms, flood, and earthquakes) and risk and reliability, who seek to understand property hazards and identify solutions that to prevent loss at client facilities. Grizzo also oversees activities at FM Global's US\$125-million, 1,600 acre, Research Campus in West Glocester, RI USA, the world's largest center for property loss prevention research as well as FM Global's International Codes and Standards activities working to improve risk in key markets. Prior to joining FM Global in 2006, Grizzo was manager of fire science and technology at Sandia National Laboratories in Albuquerque, NM, USA and was a member of its Advanced Concepts Group think tank. He currently serves on the Governing Board of the Global Earthquake Model, as Chair of the Board of Directors of the Industrial Research Institute, and on Advisory Committees for several universities. He has served as chair of the American Society of Mechanical Engineers Heat Transfer Division Executive Committee and on the Research Advisory Committee for the National Fire Protection Association. In 2015, he served as an invited panelist in two sessions at the UN World Conference on Disaster Risk Management in Sendai, Japan. Grizzo has a Ph.D. in mechanical engineering, with a minor in applied mathematics, from Texas Tech University, USA.

