



## Ali Mosleh

### PSAM12 Speaker Bio

## Degradation Modeling and Algorithm for On-line System Health Management using Dynamic Hybrid Bayesian Network

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**Short Statement:** one of the authors

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### BIOGRAPHY

Dr. Ali Mosleh is Distinguished Professor and holder of the Evelyn Knight Chair in Engineering at the University of California in Los Angeles. Prior to that he was the Nicole J. Kim Eminent Professor Chair in Engineering and the Director of the Center for Risk and Reliability at the University of Maryland. He was elected to the US National Academy of Engineering in 2010, and is a Fellow of the Society for Risk Analysis, and the American Nuclear Society, recipient of several scientific achievement awards, and consultant and technical advisor to numerous national and international organizations, including appointment by President George W. Bush to the U.S. Nuclear Waste Technical Review Board, a position in which he continued to serve in the administration of President Obama. He conducts research on methods for probabilistic risk analysis and reliability of complex systems and has made many contributions in diverse fields of theory and application. These include risk and reliability of hybrid systems of hardware, human and software; complex systems prognostics and health monitoring with limited information; dynamic systems reliability; common cause failure analysis; accident sequence precursor methodology; Bayesian methods of inference with uncertain evidence; reliability growth prediction; methods for software reliability and cyber security; cognitive models for human performance in complex systems, and models of the influence of organizational factors on system reliability and safety. On these topics he holds several patents, and has edited, authored or co-authored over 450 publications including books, guidebooks, and technical papers. In 2013 he received the American Nuclear Society Tommy Thompson Award for his numerous contributions to improvement of reactor safety. Dr. Mosleh has led many major studies on risk and safety of complex systems such as space missions, nuclear power plants, commercial aviation, communication networks, and healthcare systems. He has chaired or organized numerous international technical conferences and is on the editorial board of several technical journals.

