



## Science of Signatures Advanced Studies Scholars Program 2014



**Speaker:** Michael Todd, Ph.D., Professor and Vice Chair Department of Structural Engineering, University of California, San Diego

**Title:** Faculty Life at a Research University: What to Expect and How to Survive

**Abstract:** In this presentation I will cover the basics of developing a proposal, common mistakes to avoid, and techniques for increasing your odds of winning.

**Bio:** Michael Todd received his B.S.E. (1992), M.S. (1993), and Ph.D. (1996) from Duke University's Department of Mechanical Engineering and Materials Science, where he was an NSF Graduate Research Fellow. In 1996, he began as an A.S.E.E. post-doctoral fellow, then a staff research engineer (1998), and finally Section Head (2000) at the United States Naval Research Laboratory in the Fiber Optic Smart Structures Section. He joined the Structural Engineering Department at the University of California San Diego in 2003, where he currently serves as Professor and Vice Chair. To date, he has published over 85 journal papers, five book chapters, over 300 conference papers and proceedings, and has 4 patents. His main research areas are in applying nonlinear time series techniques (such as chaotic interrogation) to structural health monitoring problems, stochastic modeling/uncertainty propagation for structural health monitoring applications, building UAV-enabled RFID sensing systems for structural assessment, developing real-time shape reconstruction strategies for highly flexible structural systems, designing and testing fiber optic measurement systems, and developing noise propagation models for fiber optic measurement systems. Prof. Todd won the 1999 Alan Berman NRL Publication Award, the 2003 and 2004 NRL Patent Award, was a 2004-2005 UC San Diego Hellman Fellow, was an invited speaker at the 2003 National Academy of Engineering Japan-America Frontiers of Engineering Symposium where he was runner-up for the Galbraith Distinguished Lectureship, was nominated for the 2005 SEM Durelli Award, was named to 2005

Academic Keys 'Who's Who in Engineering Education,' was an invited speaker for the 2005 SOM National Building Science and Design Research Symposium in New York, and was a 2004 William J. Von Leibig Center for Entrepreneurism and Technology Advancement fellowship winner. He won the 2005 Structural Health Monitoring Person-of-the-Year Award, presented at Stanford University in September 2005, and he was recently named a 2009 Benjamin F. Meaker Visiting Fellow at the University of Bristol (UK). He serves on the editorial board of *Structural Health Monitoring: An International Journal*.