



# Lichtenstein Distinguished Lecture

College of Engineering

Department of Civil & Environmental Engineering & Geodetic Science



## **Dr. John M. Kulicki**

Chairman and CEO

Modjeski and Masters, Inc.

A graduate of Lafayette College and Lehigh University, Dr. Kulicki has over thirty-five years of experience in virtually all aspects of bridge analysis and design. He joined Modjeski and Masters in 1974. Dr. Kulicki led a 50-member team of experts in the development of the AASHTO LRFD Bridge Design Specifications. He is the author of the AASHTO *"Guide Specifications for Load Factor Design of Trusses."* He was named one of ENR's "Men Who Made Marks" in 1991. In 2002 he received a "Life Time Achievement Award" from the American Institute of Steel Construction. In 2005, he received the "Bridge Design Award" from the Bridge Engineering Association, and the Transportation Research Board's Roy Crum Award. He was elected to the National Academy of Engineering in 2006.

Host: Hojjat Adeli (phone: 614-292-7929)

## **A Tale of Bridge Engineering and Public Process or The Unstoppable Force and the Immovable Object**

A consulting firm was awarded a commission based on an advertisement for bridge design services which spoke to a minimum span of 1000 feet with the width unstated as dual structures were considered possible. About a year later a design concept for a cable stayed bridge with a 2000 foot main span and a width of 222 feet carrying 12 design lanes was accepted by the owners. How did the originally advertised bridge grow to be the widest cable stayed bridge in the world and the longest in the Western Hemisphere----all supported from two single pylon backward tilting towers? What combination of natural, engineering, aesthetic, economic, societal and political factors combined to produce this outcome? Are engineers being educated for leadership roles in this environment? This presentation addresses these issues through a case study. This presentation will also review other recent designs by Modjeski and Masters for which factors other than simple engineering efficiency were major contributors to the final selection of bridge type and appearance. Finally, the presentation will contain a few observations on the increasing use of highly computerized design processes.



**Friday, Oct. 16, 2009; 3:30 P.M.**

**410 Hitchcock Hall**

**2070 Neil Avenue**

**The Ohio State University**

**Columbus OH 43210**