



PETER A. WEISMANTLE



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Spring 2017 Khan Distinguished Lecture Series

The Fazlur Rahman Khan Distinguished Lecture Series honors Dr. Fazlur Rahman Khan's legacy of excellence in structural engineering and architecture

Initiated and Organized by **PROFESSOR DAN M. FRANGOPOL**

The Fazlur Rahman Khan Endowed Chair of Structural Engineering and Architecture
Department of Civil and Environmental Engineering, ATLSS Engineering Research Center,
Lehigh University

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PETER A. WEISMANTLE

Director of Supertall Building Technology, Adrian Smith + Gordon Gill Architecture, Chicago, IL

"Architectural Technical Design of the New Generation of Supertall Buildings"

Friday, April 21, 2017 – 4:30 pm

Location (New for 2016!): Whitaker Lab 303, Lehigh University, 5 E. Packer Avenue, Bethlehem, PA

<http://www.lehigh.edu/frkseries>

In step with the abounding vitality of the time, structural engineer **Fazlur Rahman Khan** (1929-1982) ushered in a renaissance in skyscraper construction during the second half of the 20th century. Fazlur Khan was a pragmatic visionary: the series of progressive ideas that he brought forth for efficient high-rise construction in the 1960s and '70s were validated in his own work, notably his efficient designs for Chicago's 100-story John Hancock Center and 110-story Sears Tower -- the tallest building in the United States since its completion in 1974.



Fazlur Rahman Khan

Lehigh endowed a chair in structural engineering and architecture and has established this lecture series in Khan's honor. It is organized by **Professor Dan M. Frangopol**, the university's first holder of the Fazlur Rahman Khan Endowed Chair of Structural Engineering and Architecture, and sponsored by the Departments of Civil & Environmental Engineering, and Art, Architecture & Design.

Peter A. Weismantle, Director of Supertall Building Technology at Adrian Smith + Gordon Gill Architecture (AS+GG) in Chicago, is responsible for overseeing the technical development of the firm's supertall projects from concept to completion. His current projects include Greenland Center, a 636 meter tall project in Wuhan, China; Dongcun Center, a 468 meter tall tower in Chengdu, China and the Jeddah Tower (formerly Kingdom Tower), a project in Jeddah, Saudi Arabia that, when completed, will be the first building in the world to be more than 1000 meters in height.

Before joining AS+GG in 2008, Peter was an Associate Partner in the Chicago office of Skidmore, Owings & Merrill LLP, where he began his career in 1977 and served as senior technical architect on several supertall towers, including Shanghai's 88-story Jin Mao Tower and the 162-story Burj Khalifa which at 828 meters is currently the world's tallest building.

Mr. Weismantle graduated from Lehigh University with a BA in Fine Arts and received his Masters of Architecture from the University of Pennsylvania.

Architectural Technical Design of the New Generation of Supertall Buildings. Immediately after the events of September 11, 2001; few would have predicted that we would still be building tall buildings, let alone, very tall buildings. However, in the 15 years that have followed, we have entered what can truly be called the "Era of the Supertall Building". The reasons for this begins with an understanding of the unprecedented trends of globalization, urbanization and sustainability that are the recent factors driving this trend and returns to the factors of economics, ambition and ego that have traditionally driven humanity to reach for new heights.

Based on his experience on ground breaking structures such as the current world's tallest building, Burj Khalifa and the next world's tallest, Jeddah Tower; Mr. Weismantle will discuss approaches that the architectural design professional takes in investigating the special nature of these supertall structures and in developing the enhanced aspects of protection that they require.

FAZLUR RAHMAN KHAN (1929 - 1982) One of the foremost structural engineers of the 20th century, Fazlur Khan epitomized both structural engineering achievement and creative collaborative effort between architect and engineer. Only when architectural design is grounded in structural realities, he believed — thus celebrating architecture's nature as a constructive art, rooted in the earth — can "the resulting aesthetics ... have a transcendental value and quality." His ideas for these sky-scraping towers offered more than economic construction and iconic architectural images; they gave people the opportunity to work and live "in the sky." Hancock Center residents thrive on the wide expanse of sky and lake before them, the stunning quiet in the heart of the city, and the intimacy with nature at such heights: the rising sun, the moon and stars, the migrating flocks of birds. Fazlur Khan was always clear about the purpose of architecture. His characteristic statement to an editor in 1971, having just been selected Construction's Man of the Year by *Engineering News-Record*, is commemorated in a plaque in Onterie Center (446 E. Ontario, Chicago): "**The technical man must not be lost in his own technology. He must be able to appreciate life; and life is art, drama, music, and most importantly, people.**"



1 PDH will be awarded to eligible attendees for each lecture

Please contact the Khan Chair office at 610-758-6123 or Email: infrk@lehigh.edu with any questions.