



PETER MARTI

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.



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Spring 2015 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 MARTI

Professor of Structural Engineering, ETH Zurich, Zurich Switzerland

"Science and Art of Structural Engineering"

Friday, April 17, 2015 – 4:30 pm

Location: Sinclair Lab Auditorium, Lehigh University, 7 Asa Drive, Bethlehem, PA

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

Peter Marti. After his studies in civil engineering at the Swiss Federal Institute of Technology (ETH) in Zurich, Dr. Peter Marti was a lecturer at the ETH (1980-1982), associate professor of structural engineering at the University of Toronto (1982-1987), and chief technical officer of VSL International (1987-1990). From 1990 to his retirement in 2014 he was professor of structural engineering at the ETH, lecturing and researching in the areas of theory of structures and structural concrete. He was chairman of various technical committees, including ACI-ASCE Joint Committee 445 "Shear and Torsion", fib Commission 4 "Modeling of Structural Behavior and Design" and the Swiss Structural Concrete Code Committee SIA 162, and he founded the Society for the Art of Civil Engineering. As a consulting engineer, reviewer and jury member for competitions he has been responsible for many challenging building, bridge and tunnel projects.

Science and Art of Structural Engineering: The talk reviews the historical background and current practice of structural engineering. Key developments in material and construction technology are highlighted and the related evolution of scientific knowledge is illustrated. Future challenges and implications for code development and education are addressed.

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."**



**** New for 2015 ****

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.