



SPONSORED BY: THE DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING and DEPARTMENT OF ART ARCHITECTURE





2023 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

dan.frangopol@lehigh.edu, www.lehigh.edu/~dmf206

GUY NORDENSON

Guy Nordenson and Associates, Partner Structural Engineers LLP, New York, NY

Professor of Architecture and Structural Engineering School of Architecture Princeton University, Princeton, NJ

"Working Structures"

Friday, March 31, 2023 – 4:30 pm

Location: Whitaker Lab 303, Lehigh University, 5 E. Packer Avenue, Bethlehem, PA

Lecture will also be live streamed, (must REGISTER HERE for live stream link)

http://www.lehigh.edu/frkseries

Guy Nordenson is a structural engineer and professor of architecture at Princeton. He was the engineer for the National Museum of African American History and Culture in Washington DC, the International African American Museum, and Emmanuel Nine Memorial, both in Charleston SC and oversaw the design and engineering of David Hammons' Day's End sculpture in the Hudson River. Nordenson is the author of books on climate adaptation and engineering design. He was a Commissioner of the NYC Public Design Commission (2006-2016) and a member of the NYC Panel on Climate Change. He is a fellow of the American Academy of Arts and Sciences and member of the National Academy of Engineering.

Working Structures. What is the role of the structural engineer in her and his collaborations with architects and artists? Fazlur Khan and Joseph Colaco collaborated with William Hartmann on the 1967 Chicago Picasso. How do we characterize that role as compared to the collaborations on Khan's more famous works? What are the critical concepts that can account for the creative contributions of the different participants in key works of architecture? And what civic roles can engineers play in addressing the pressing needs of cities both in the climate crisis but also in the case of transformative events such as 9-11? This talk will review these questions from the perspective of the speaker's participation in recent projects with architects and artists and also efforts to address the challenges of coastal resilience.

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 (minimum webinar participation time of 55 minutes is required)

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

GUY NORDENSON

In step with the abounding vitality of the time, structural engineer Fazlur Rahman Khan (1929-1982) ushered renaissance in а in construction skyscraper during the second half of the 20th century. Fazlur Khan was a pragmatic visionary: the series of progressive ideas that he brought forth efficient high-rise for 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 110story 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.