The Paul M. Chung Distinguished Lecture Series was established in 1994. This series is dedicated to the service of Professor Paul M. Chung, former dean of the College of Engineering

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The Paul M. Chung Distinguished Lecture Series

The College of Engineering at the University of Illinois at Chicago invites you to the 2016 Paul M. Chung Distinguished Lecture Series

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Nanotechnology, High Performance Concrete and Sustainability

Surendra P. Shah, NAE, PH.D.
Walter P. Murphy Emeritus Professor of Civil and Environmental Engineering, Northwestern University

Thursday, September 8, 2016
3:00 p.m. - Lecture, 1043 ERF
4:15 p.m. – Reception, CME Atrium, ERF
Engineering Research Facility, 842 W. Taylor St.

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Rev. 8/22/16

Surendra P. Shah
NAE, PH.D.

Walter P. Murphy Emeritus Professor of Civil and Environmental Engineering, Northwestern University

Professor Surendra P. Shah is a Walter P. Murphy Emeritus Professor of Civil Engineering and was the founding director of the pioneering NSF Science and Technology Center for Advanced Cement-Based Materials. His current research interests include: fracture, fiber-reinforced composites, nondestructive evaluation, transport properties, processing, rheology, nano-technology, and use of solid waste materials. He has co-authored two books, edited more than 20 books and published more than 500 journal articles. He is past editor of RILEM's journal, Materials and Structures.

Professor Shah is a member of the US National Academy of Engineering, the Chinese Academy of Engineering and the Indian Academy of Engineering, and is the only civil engineer who is a member of these three academies.. Besides teaching at Northwestern University, Professor Shah has taught at the University of Illinois Chicago and served as a visiting professor at MIT, University of Sydney, Denmark Technical University, University of Singapore, Darmstadt University, Laboratoire Central des Ponts et Chaussees, Paris, and University of Houston.

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Nanotechnology, High Performance Concrete and Sustainability

About the Lecture:

Super tall buildings such as the one kilometer high Kingdom Tower are constructed with concrete as a structural material. Such tall buildings are made with so-called high performance concrete, which can have strength five times that of conventional concrete. The development of high strength concrete is a result of our understanding of particle packing, rheology and microstructure engineering. Concrete is a critical material for infrastructure; the worldwide consumption of concrete is about two tons for every living human being. However, its continuing use will require improving its sustainability. Nanotechnology is playing an increasing role in making concrete more sustainable. .