Concrete Industry Board Morning Educational Seminar
Wednesday, 2/22/17 9AM - 12PM Doors open at 8:30AM

Location: New York Athletic Club, 59th & 7th Avenue – 180 Central Park South

Topic: 90 Minutes to Discharge a Concrete Truck
Is This an Outdated Requirement?

Most specifications require a ready mix truck to discharge the concrete within 90 minutes after the cement had been mixed with water. This requirement is given in ASTM C-94, the standard for ready mix concrete. This standard has existed for over 30 years. Concrete technology has changed significantly over these years. The cement of today is not the cement we had 30 years ago. Today, we have admixtures that can delay the cement hydration process for hours, and we have admixtures that can extend the desired slump life of a concrete mix.

The issue of how much time should be allowed to discharge a truck is not a simple answer, like 90 minutes. This seminar will present:

- The latest in concrete technology to extend the working time for a concrete mix;
- Test data on plastic and hardened concrete that was not discharged in 90 minutes;
- What others are specifying as a required time or criteria to discharge concrete.

Cas Bognacki will be the seminar moderator. There will be three presenters. They are:
Dr. Mohamed Mahgoub, Dr. Charles Nmai, PE, M.ASCE, Henry Prenger

BIOGRAPHY
Cas Bognacki, P.E., is the Chief of Materials Engineering at The Port Authority of NY & NJ. He is a Fellow of the American Concrete Institute (ACI), a voting member of ACI Committees 121, 132, 211, 212, 214 and 304, and past president of the NJ Chapter of ACI and the Concrete Industry Board.

PRESENTATION
Cas Bognacki will present The Port Authority of NY & NJ’s requirements for accepting and placing concrete that exceeds 90 minutes of time in the truck prior to discharge and test results on this concrete. Cas will also present the PA’s experience with the use of hydration control admixtures.

BIOGRAPHY
Dr. Mohamed Mahgoub is an Associate Professor and Director of the Concrete Industry Management Program at the New Jersey Institute of Technology.
Dr. Mahgoub is a professional engineer who has served as a member in several concrete-industry related organizations such as the American Society of Civil Engineers (ASCE), Precast/Prestressed Concrete Institute (PCI), International Concrete Repair Institute (ICRI), and the American Concrete Institute (ACI). Dr. Mahgoub is the current Chairman of ACI, Committee 535 - Concrete with Recycled Materials.

PRESENTATION
Dr Mahgoub will present the field testing he and his staff conducted on concrete that was not discharged from a concrete truck for up to 180 minutes. The test results will be presented on the plastic and hardened properties of the concrete. This research was funded by the NJ Chapter of ACI and the Concrete Industry Management Program at NJIT.

BIOGRAPHY
Dr. Charles Nmai, PE, M.ASCE, is Manager of Engineering Services in the Admixture Systems group of BASF. He is responsible for providing technical leadership and strategic guidance in the marketing of admixtures and high-performance concrete technologies. A Fellow of ACI and a member of the Institute’s Board of Direction from 2003 and 2006, Dr. Nmai is also an Honorary Member of ASTM International Committee C09 and immediate past-chair of Subcommittee C09.23 on Chemical Admixtures.

PRESENTATION
Dr. Nmai will present two admixtures that can extend the workability of concrete beyond the 90 minutes, a hydration-control, and a workability retaining admixture.

BIOGRAPHY
Henry Prenger has had a long career in the concrete industry. Starting in construction, he became the concrete engineer for the State of Maryland. He worked through various cement companies to the position of Technical Services Director for Lafarge Cement and currently works as a Lafarge Holcim engineer. Henry works on various committees in both ASTM and ACI and is the subcommittee chair for materials for ACI 301, “Specifications for Structural Concrete”.

PRESENTATION
Cement performance is driven, to a large extent, by customer demand. The construction industry has driven cement companies to manufacture faster setting cements that achieve earlier strength gain. These changes have given less working time for concrete delivered to a construction site, in particular, the summer season. The speaker will describe the needs that have driven these changes, how this has changed construction practices, and will discuss the path forward for cementitious materials.