Chemical Admixtures for Concrete

FHWA/ACI
One-day seminar
Arden Hills, MN
March 4, 2010

Location ►
MN/DOT Training Center and Conference Center
1900 West County Road I
Shoreview, MN 55126

Registration: 7:45 a.m.
Workshop: 8:00 a.m. - 5:00 p.m.

Continuing Education
Attendees receive 0.75 CEUs (7.5 PDHs).

On-line registration is required:
www.dot.state.mn.us/materials/admixtures

For questions, contact:
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U.S. Department of Transportation
Federal Highway Administration

American Concrete Institute®
Advancing concrete knowledge

Seminar Overview
This seminar, presented under a cooperative agreement between the Federal Highway Administration (FHWA) and the American Concrete Institute (ACI), will refresh and extend the practitioners’ knowledge and understanding of chemical admixtures used in concrete. The two presenters listed below will clearly explain the benefits and limitations of chemical admixtures in concrete for pavements, bridges, and other transportation-related structures. This information will help designers understand the positive and negative effects of various types of admixtures and help construction personnel identify and prepare for possible issues in the field. In addition, a local representative will provide an overview of the particular practices and issues that are most common in the geographic area.

Who Should Attend
The variety of topics covered make this seminar beneficial to a broad range of attendees including DOT engineers, civil engineers, material testing technicians, specifiers, project superintendents, construction supervisors, QA/QC managers, inspectors, contactors, and concrete producers.

Topics to be covered
- Introduction to Chemical Admixtures
- Air Entrainment of Concrete
- Water Reduction and Set Controlling Admixtures
- Durability Enhancing Admixtures
- Special Admixtures: Viscosity-Modifying and Rheology-Controlling
- Compatibility Issues Between Chemical Admixtures and Other Concreting Materials
- Admixtures for High-Performance Concrete

Free Resource Materials
- ACI 212.3R Chemical Admixtures for Concrete
- ACI 212.4R Guide for the Use of High-Range Water-Reducing Admixtures (Superplasticizers) in Concrete
- ACI 305R Hot Weather Concreting
- ACI 305.1 Specification for Hot Weather Concreting
- ACI 306R Cold Weather Concreting
- ACI 306.1 Standard Specification for Cold Weather Concreting
- ACI Education Bulletin E4 – Chemical Admixtures for Concrete
- PCA Design and Control of Concrete Mixtures – 14th Edition (Chapter 6)
- Glossary of Terms (from ACI’s Web site)

Presenters

Jon I. Mullarky, PE, FACI, is a long-time ACI member. He has been a Director of the Institute, served on many committees, and is a recipient of ACI’s Henry L. Kennedy Award. His professional career has included service as an officer in the Navy Civil Engineer Corps, a staff member at the National Ready Mixed Concrete Association, and a consultant to the Federal Highway Administration. Over his 30-year career, he has authored many research reports and technical publications for NRMCA, ACI, and FHWA. A civil engineering graduate from Iowa State University, he received his MS from The Ohio State University and has also developed and presented many concrete technology courses.

Paul J. Tikalsky, PhD, PE, FACI, is the Chair and Professor of Civil and Environmental Engineering at the University of Utah, specializing in durability of concrete structures; evaluation, design, and performance of construction materials; and use of natural and industrial pozzolans. He received his BS in civil and environmental engineering at the University of Wisconsin at Madison and his MS and PhD in structural engineering at the University of Texas at Austin. He directs concrete research at the University of Utah’s Infrastructure Materials Evaluation Laboratory and serves on FHWA’s High-Performance Concrete Implementation Task Force and its Concrete Pavement Oversight Group.