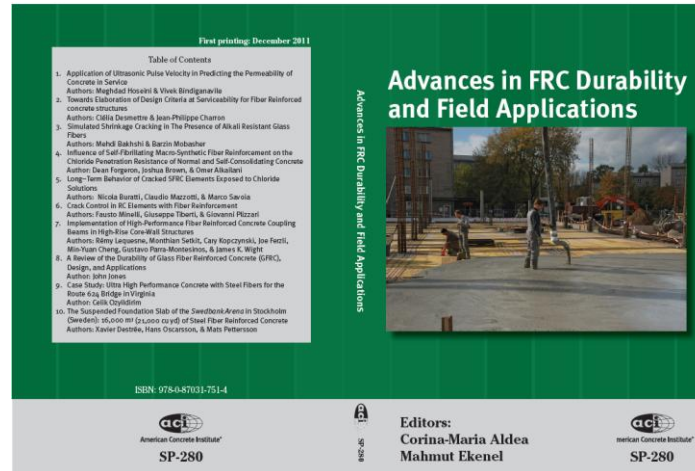


Dr. Ekenel Serves as Co-editor for New ACI Symposium Publication



ICC Evaluation Service (ICC-ES) engineer Mahmut Ekenel, Ph.D., P.E., was one of the editors of a recently published ACI Symposium Publication titled: *Advances in FRC Durability and Field Applications* (SP-280). This publication contains 10 technical papers. The topics of the papers cover durability aspects of fiber-reinforced concrete (FRC) ranging from permeability to shrinkage cracking, long-term behavior in aggressive environment, as well as applications of fiber-reinforced concrete for coupling beams, beams for bridges, panels and suspended foundation slabs. The papers included in this publication have been peer reviewed by international experts in the field according to the guidelines established by the American Concrete Institute (ACI).

Concrete cracking is of paramount concern, insofar as cracking may severely affect the durability and serviceability of concrete structures. Fiber reinforcement is the most effective way to increase the resistance of concrete to cracking and thereby improve its physical properties and durability. Several different fiber types and materials have been successfully used in producing fiber-reinforced concrete. However, FRC durability and field applications are still under investigation to further our knowledge of the use of fibers in concrete. This ACI Symposium Publication (SP-280) is therefore expected to be extremely useful.

ICC-ES has three approved criteria in regard to fiber reinforced concrete: AC32 (Concrete with Synthetic Fibers), AC208 (Steel Fibers in Concrete) and AC217 (Concrete with Virgin Cellulose Fibers). ICC-ES has published 13 evaluation reports (ESRs) under these criteria. A fourth criteria (AC383) is under consideration for use of steel and synthetic fibers as structural reinforcement. Interested parties are welcome to contribute to the development of AC383. The scope of the ICC-ES criteria for synthetic and virgin cellulose fibers (AC32 and AC217) states that “. . . fibers are added to concrete to reduce plastic shrinkage cracking of reinforced concrete and structural plain concrete and/or to reduce shrinkage and temperature cracking in structural plain concrete slabs on grade.” The scope of the ICC-ES criteria for steel fibers (AC208) states that “this criteria applies to steel fibers used as an alternative to the shrinkage and temperature reinforcement specified in . . . ACI 318 (IBC and IRC) . . . for plain concrete footings, for plain concrete slabs supported directly on the ground and for concrete over composite steel decks.”

Reference: *Advances in FRC Durability and Field Applications* (ACI SP-280); Editors: Corina-Maria Aldea and Mahmut Ekenel, First Printing: December 2011.