

Calls for Papers

The Concrete Industry in the Era of AI

Meeting: Technical session on “The Concrete Industry in the Era of AI,” at the ACI Concrete Convention, March 28-April 1, 2021, Baltimore, MD; sponsored by Joint ACI-TMS Committee 216, Fire Resistance and Fire Protection of Structures; and ACI Committees 444, Structural Health Monitoring and Instrumentation, and 544, Fiber Reinforced Concrete.

Solicited: Presentations and papers are invited for the technical session and a symposium publication (SP) on the merits of using artificial intelligence (AI) in the concrete industry. Special focus will be on the performance of concrete materials at ambient and elevated temperatures and showcasing the substantial potential of using AI to improve design of concrete structures under traditional and fire conditions. Objectives of the session and SP include: 1) introducing AI and automation to the concrete industry; 2) discussing proper methods of leveraging AI for various applications such as durability, fire resistance, and chemical exposure; 3) highlighting case studies on successful AI applications in the areas of concrete material and structural design, such as optimizing concrete mixtures and developing post-fire assessment methods; and 4) jump-starting research and development efforts to adopt AI as a means of analysis/assessment.

Requirements: 1) presentation/paper title; 2) author/speaker name(s), title, organization, mailing address, telephone number, fax, and e-mail; and 3) abstract of 300 words. The submitted conference papers are expected to be six to eight pages following ACI guidelines and format.

Deadlines: Abstracts are due by October 15, 2020; final papers are due by December 20, 2020.

Send to: M.Z. Naser, Clemson University, e-mail: mznaser@clemson.edu.