

Novel Concrete Materials to Enhance Durability of Transportation Infrastructure



Wednesday July 11th, 2018 | 1:00 – 2:00 PM (EST)



Free registration: <https://goo.gl/vVWhGf>



<http://transet.lsu.edu/webinars/>

Self-Healing Microcapsules as Concrete Aggregates for Corrosion Inhibition in Reinforced Concrete

Self-healing microcapsules are materials that can be used to control and mitigate damage evolution processes in electrochemical systems, such as reinforced concrete. The advantage of these microcapsules is that they can be added during the mixing process or following the drying process in concrete structures and work on preventing corrosion with no need for maintenance or repair. This research studies the performance of different corrosion inhibitors at various microcapsule concentrations in reinforced concrete infrastructure.



Dr. Homero Castaneda
Texas A&M University

Evaluating the Use of Recycled and Sustainable Materials in Self-Consolidating Concrete for Underground Infrastructure Applications

The main objective of this study is to investigate the effect of fiber-reinforcement on fresh and hardened properties of the Self-Consolidating Concrete (SCC). The improved mechanical properties of the fiber-reinforced SCC make it an alternative solution for pre-cast sections for transportation infrastructure applications compared to the conventional concrete.



Dr. Mehran Mazari
California State University - LA

Use of ECC in Shear Keys, Closure Pours, and Culvert Repairs

ECC (engineered cementitious composite) is used in shear keys, closure pours, and culvert repairs for crack control and low permeability. VDOT has used ECC in the field successfully, and the ongoing work will be presented.



Dr. Celik Ozyildirim
Virginia DOT

Upon request, 1 PHD electronic certificate will be issued at the cost of \$10. Please contact Learn@mines.edu after taking the webinar.