



Optimization of Concrete Aggregates for Highway Applications

Dinner Meeting Notice for ACI-Wisconsin

Delafield Brewhaus
Delafield, WI

Thursday

November 16, 2017

Cocktails: 5:30pm

Dinner: 6:00pm

Program: 7:00pm

ACI-WI member \$25

Non-members \$30

Students \$15

Credit Cards Accepted
Online and at the door.
Cash and Checks payable
to ACI-WI also accepted.

Register Today!

Please send reservations to:

Adam Heinlein

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608.575.9155

Registration Deadline:

11/14/17 @ Noon

Research has demonstrated that the optimization of concrete mixture proportions can be achieved by the use and proper selection of optimal aggregate blends and result in 12% to 35% reduction of cement content and also more than 50% enhancement of performance.

The discussion will focus on materials characterization and properties, the optimization concept and methods, and aggregate optimization with regard to:

- ◆ aggregate optimization methods,
- ◆ aggregate packing methods,
- ◆ best blend for concrete mixtures,
- ◆ experimental packing v. theoretical models, and
- ◆ aggregate packing method v. other optimization methods.

M.Reza Moini is a graduate student at Purdue University, currently working towards his Ph.D. in additive manufacturing of advanced construction materials. His research area is in processing and design of construction material, mixture optimization, concrete aggregate, rheology, and 3D printing of architected materials.

M.Reza Moini received his B.Sc. in Civil and Environmental Engineering from Qom University - Iran in 2009, conducting research on concrete workability, and seismic performance of buildings. In 2015, he earned his M.Sc. degree from the University of Wisconsin-Milwaukee and completed numerous DOT research projects towards development of sustainable construction materials. Reza is the secretary of ACI subcommittee 211-0M aggregate packing in concrete, and voting member of ACI 241 and 552 committees. Prior attending Purdue for his Ph.D on 3D printing infrastructure materials, he worked at Collins Engineers as structural engineer and as a part of the structural engineering team in Wisconsin Zoo Interchange project.