



Bi-Monthly Progress Report:

Project Number and Title: 2.3: Measuring Adhesion Between Binders and Aggregates Using Particle Probe Scanning Force Microscopy at Low Temperatures

Research Area: Thrust 3 Use New Materials and Systems to Build Longer-lasting Bridges and Accelerate Construction

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Reporting Period: 06.01.2019 to 07.31.2019

Date: July 28, 2019

Overview:

We started the research design of the particle probes, including building microcantilever and microspheres.

We are exploring different types of epoxies to attach the particle probes. We are also preparing several control binder substrates. We are in the process of creating the particle probes and substrates.

Planned Activities:

1. Prepare the microspheres
2. Modify the micro-cantilevers
3. Finish the substrates
4. Fabricating the cantilevers