

University of Pittsburgh (UPitt)

Pittsburgh, Pennsylvania, USA

Updated November 2007



University of Pittsburgh

Center for Sustainable Transportation Infrastructure (CSTI)



Program description

Founded in 1787, the University of Pittsburgh (UPitt) is one of the oldest institutions of higher education in the United States. While slightly over 30,000 students are enrolled at the University of Pittsburgh, the Department of Civil and Environmental Engineering (CEE) consist of approximately 260 undergraduate (Jr. and Sr.) and just over 70 graduate students.

Within the Department of CEE, additional support for research in the areas of concrete and concrete pavements is provided by the Center for Sustainable Transportation Infrastructure (CSTI). The primary areas of focus related to concrete pavement and concrete materials research at UPitt include sustainable materials and pavements, pavement instrumentation, concrete material characterization, as well as analysis, design and rehabilitation of concrete pavements

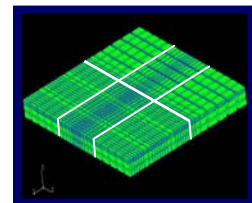
Faculty and selected projects

Dr. Julie Vandebossche (jmv@engr.pitt.edu) (ISCP member)

- Ultra-Thin and Thin Whitetopping Instrumentation and Design
- Enhancement of strength development for concrete containing slag
- Characterization of early-age and long-term response of a JPCP to applied and environmental loads

Dr. Amir Koubaa (akoubaa@engr.pitt.edu)

- Concrete durability
- Pavement response analysis



Facilities

Facilities for conducting research in this area include the Pavement Mechanics and Materials Laboratory (PMML). The PMML is an all encompassing laboratory equipped to perform a full range of tasks including the casting, curing and testing of everything from concrete specimens to be analyzed at the microscopic level to full-scale pavements. The 2,700 ft² facility features the latest equipment in both destructive and non-destructive testing of portland cement concrete. Housed within the lab are two environmentally controlled rooms. The 1,007 ft³ room can be adjusted to replicate a wide range of environmental conditions for curing portland cement concrete test specimens while the 630 ft³ room is maintained at a constant temperature and humidity for determining drying-shrinkage. A10-ton crane for moving large-scale specimens and test components is also available.

Links

Center for Sustainable Transportation Infrastructure (CSTI) <http://www.pitt.edu>
Virtual tour of PMML facilities <http://www.pitt.edu/~jmv7/Laboratory%20Tour.htm>
Department of Civil and Environmental Engineering <http://www.engr.pitt.edu/civil>