

## Michigan Technological University

Houghton, Michigan, USA

### University Transportation Center for Materials in Sustainable Transportation Infrastructure (MiSTI)

### Michigan Tech Transportation Institute (MTTI)

Updated November 2007



### Program description



Located in the beautiful Upper Peninsula of the state of Michigan, Michigan Technological University's Department of Civil and Environmental Engineering provides undergraduate and graduate education in a variety of areas. To complement research efforts in this department, the Michigan Tech Transportation Institute (MTTI) provides an umbrella for researchers across campus to come together in an effort to advance the broad area of transportation. The University Transportation Center for Materials in Sustainable Transportation Infrastructure (MiSTI) is also an extremely active program promoting the development of sustainability in the concrete pavements.

### Faculty and selected projects

Dr. Jake Hiller ([jhiller@mtu.edu](mailto:jhiller@mtu.edu)) (ISCP member)

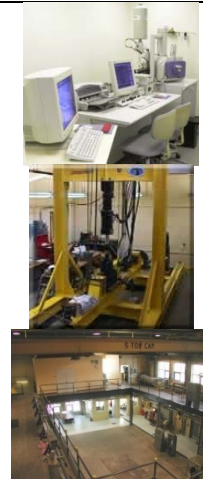
- Characterizing alternative fatigue cracking mechanisms in PCC pavements
- Recycled concrete in transportation infrastructure

Dr. Larry Sutter ([lsutter@mtu.edu](mailto:lsutter@mtu.edu))

- Determining of air void system in hardened PCC
- Coal fly ash specifications for PCC
- Long term effects of magnesium chloride on pavement and structural PCC

Dr. Tom Van Dam ([tvandam@mtu.edu](mailto:tvandam@mtu.edu)) (ISCP member)

- Evaluation of concrete pavements with material-related distress
- Concrete mixes and pavement construction for deicing facilities
- Fly ash road stabilization



### Facilities

Extensive experience and facilities exist for characterization of materials and pavements from the micro to macro levels. Michigan Tech is equipped with world-renown microstructural characterization facilities and expertise. The AMRL-accredited Benedict Laboratory provides 15,000 ft<sup>2</sup> and a high bay area devoted to concrete research and is well equipped to handle concrete material and pavement research of all scales.

### Links

*Materials in Sustainable Transportation Infrastructure (MiSTI)*

*Michigan Tech Transportation Institute (MTTI)*

*Michigan Tech Concrete Initiative*

*Department of Civil and Environmental Engineering*

<http://www.misti.mtu.edu>

<http://www.mtti.mtu.edu>

<http://www.concrete.mtu.edu>

<http://www.cee.mtu.edu>