

# Civil Engineering Graduate Seminar

## SPEAKER

**Dr. Eshan V. Dave**

Assistant Professor of Civil Engineering  
University of Minnesota - Duluth



Eshan Dave is assistant professor in the Department of Civil Engineering at the University of Minnesota – Duluth (UMD). Prior to joining UMD in August 2010, Eshan was Post-Doctoral Research Associate at the University of Illinois at Urbana-Champaign (UIUC). He obtained his Masters and Ph.D. degrees from UIUC in Civil Engineering in 2003 and 2009, respectively.

Eshan's research interests include numerical modeling of asphalt concrete, reflective and thermal cracking distresses in pavements, recycling of asphalt materials, and effect of moisture on asphalt behavior. Eshan is a member of TRB, RILEM, ASTM and Association of Asphalt Paving Technologists. He is also actively involved in development of undergraduate and graduate pavement and infrastructure materials programs in civil engineering at UMD.

## Low Temperature Fracture Evaluation of Asphalt Mixtures using Mechanical Testing and Acoustic Emissions Techniques

The seminar will focus on low temperature fracture evaluation of nine mixtures studied through an ongoing USDOT pooled find study. A variety of variables, including: type of binder modification, presence of recycled asphalt pavement (RAP), and low temperature binder grade are studied to assess their fracture behavior in light of two new fracture testing techniques. Laboratory evaluation was done using the disk-shaped compact tension (ASTM D7313) test and by acoustic emissions (AE) technique to characterize low temperature cracking behavior of the asphalt mixtures.

### Time & Venue

**March 24, 2011**

**642 Dow Building**

**4-5 pm**

**Public welcome**

**MichiganTech**