



# 2008 - 2009

*December Meeting Notice*

## Minnesota Geotechnical Society

### Predicting Heaving in Frost-Susceptible Soils

**Dr. Radoslaw L. Michalowski, Ph.D., University of Michigan, Ann Arbor**

Frost-susceptible soils are characterized by their sensitivity to freezing, manifested in heaving of the ground surface. This process is driven by water transport into the frozen fringe, leading to nucleation and growth of ice lenses. A model will be presented, with the fundamental function describing the growth of porosity as the ice segregates in the freezing soil. Calibration and validation indicated that the model predicts frost heave with a good level of accuracy. Simulation of freezing of a retaining wall with frost-susceptible backfill will be presented, to illustrate engineering implementation of the model.

**Date:** Wednesday, December 10, 2008

**Location:** Rose Vine Hall (downstairs at Grumpy's Bar & Grill)  
2801 Snelling Ave. N., Roseville, MN

**Time: 6:00** Social Hour, Sponsored by Braun Intertec, Inc

**7:00** Dinner & Dessert: Salad, Rolls, Coffee/Soda and a choice of:

1. 10-Ounce Top Sirloin - Char-grilled and topped with bleu cheese garlic butter. Served with white cheddar mashed potatoes and a sauteed vegetable medley
2. Feta Cheese and Sun-Dried Tomato Stuffed Walleye - Served over white cheddar mashed potatoes with a drizzle of lemon thyme butter sauce.
3. Seared Chicken Parmesan - Tender chicken breast crusted with aged Parmesan cheese and rapidly seared until golden brown. Served over white cheddar mashed potatoes and a sautéed vegetable medley.
4. Manicotti – Fresh Pasta tubes filled with ricotta, mozzarella and parmesan cheeses. Baked in marinara sauce and finished with melted mozzarella.

**8:00** Presentation – Dr. Radoslaw L. Michalowski, Ph.D. – University of Michigan, Ann Arbor  
(One professional development hour toward continuing education requirements for Professional Engineers is available).

**Cost:** \$25.00 members, \$30.00 non-members, and \$5.00 Full-time students, payable to MGS at the door.

**Reservations:** Requested by 12 Noon, Friday, December 5, 2008.

Please register via the website at <http://www.mngeotechnicalsociety.com/eventsmpls.asp>

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