

# Minnesota Association of Professional Soil Scientists

## 2009 MAPSS Summer Workshop

### Understanding and Measuring Water Movement through Soils

August 6-7, 2009  
9:00 am – 4:00 pm

*Attend 1 day or both days*  
**Limited seating so register now!**

Northland Arboretum  
14250 Conservation Drive  
Baxter, MN

Come learn from the best about water movement through soils. Dr. Aziz Amoozegar from North Carolina State and Dr. Satish Gupta from the University of Minnesota will lead a 2-day classroom and field workshop

for those who want to gain a better understanding of water movement through soils.

Water movement through soils is important to the understanding of septic systems, irrigation of crops, spray irrigation of wastewater, drip irrigation, and land application of municipal and industrial wastes.

What is saturated and unsaturated flow and how do you measure it? What is saturated hydraulic conductivity (K<sub>sat</sub>)? What is an amoozometer and what does it measure? How do you use an amoozometer and other flow measuring devices in the field? You should attend this workshop if these questions are of interest to you.

Join the team of soil scientists for both classroom and field training in water movement through soils.

**Continuing Education Credits: 10.0**

#### Lodging Information

20 rooms are available at a reduced rate of \$70.00 plus tax by **July 15, 2009** at

Country Inn & Suites  
15058 Dellwood Drive  
Brainerd, MN  
(218) 828-2161

## Topics & Speakers

Dr. Aziz Amoozegar is a Professor in Soil Physics from North Carolina State.

Dr. Satish Gupta is a Professor in Soil Physics from the University of Minnesota.

### *Thursday, August 6, 2009\**

**Morning** – principles of water movement through soils

**Afternoon** – methods to determine water movement through soils

### *Friday, August 7, 2009\**

**Morning** – practice in the field measuring water movement

**Afternoon** – calculations and wrap-up of field calculations and examples

*\*Rain may alter this schedule*

**Certificates of Attendance  
available at the end of the  
workshop**

Lunch will be served at the Northland Arboretum. The cost of lunch is included in the registration. Coffee and rolls will be available in the morning.

# Registration Form

## Complete and mail this form.

Please register by July 30, 2009 to avoid a late registration fee and to help MAPSS plan for space, materials, and food at the workshop. Thank you.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Zipcode \_\_\_\_\_  
Telephone \_\_\_\_\_  
email \_\_\_\_\_

### Workshop fee

member (1 day) \$ 70.00 \_\_\_\_\_  
member (2 day) \$ 95.00 \_\_\_\_\_

non-member (1 day) \$ 120.00 \_\_\_\_\_  
non-member (2 day) \$ 160.00 \_\_\_\_\_

student (1 day) \$ 25.00 \_\_\_\_\_  
student (2 day) \$ 45.00 \_\_\_\_\_

late fee (per day) after 7/30/2009  
\$10.00/day \_\_\_\_\_

total enclosed \$ \_\_\_\_\_

**Check which day(s) you will be attending**  
**Thursday** \_\_\_\_\_ **Friday** \_\_\_\_\_

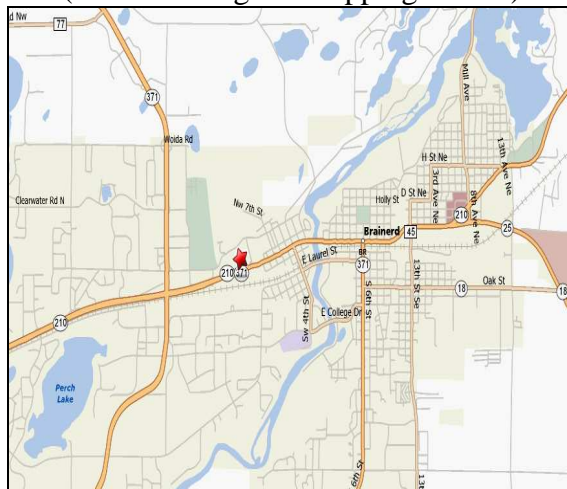
**Make checks payable to MAPSS and send it, along with a completed registration form to:**

**MAPSS 2009 Summer Workshop**  
c/o Spectrum Research, Inc.  
4915 E. Superior St., Suite 100  
Duluth, MN 55804

**Northland Arboretum**  
**14250 Conservation Drive**  
**Baxter, MN**

**218-829-8770**

(behind Westgate Shopping Center)



# Minnesota Association of Professional Soil Scientists

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4915 East Superior Street, Suite 100  
Duluth, Minnesota 55804-2452  
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email [mnssoils@aol.com](mailto:mnssoils@aol.com)

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Understanding and Measuring Water  
Movement through Soils

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