## Speaking of Engineering...

## Have you ever wondered...



Dr. Ken Snelgrove

## How engineering can help predict floods and droughts?

Extreme engineering Dr. Ken Snelgrove

The ability to predict and forecast the rate of the rise of rivers has important implications for many Canadians. We are all too aware of the devastation caused by flooding in places such

as southern Manitoba in 1997, the Saguenay region of Quebec in 1996 and closer to home, Bishop's Falls in 1983, Badger in 2003 and Stephenville this past September. While floods capture our attention, it is, in fact, drought that has a greater economic impact in our country and of lesser prominence but greater relevance to our day-to-day lives are the quantities of stream flow necessary for pollution abatement, water supply, transportation and recreation. The ability to model these flows and associated soil moisture is an important component of effective water resource management. This requires sophisticated computer programs that simulate evaporation, snow melt and frozen ground. These programs, or models, are becoming increasingly inter-woven into the same systems that predict weather and warming associated with climate change.

Join Dr. Ken Snelgrove as he talks about research currently underway at Memorial on stream flow within weather prediction models and climate forecasts, translating the impact of tomorrows thunder storm into flood warnings and global climate change into effective management of our future water resources.

## Thursday, November 17, 2005

7:30 p.m. S.J. Carew Building Room EN2006 Reception to follow

sponsored by









◆ DISTINGUISHED TEACHERS ◆ OUTSTANDING RESEARCHERS ◆ ENTERPRISING GRADUATES

DM 007-663-10-05-50