

Department of Civil and Environmental Engineering University of Windsor, Windsor, Ontario Canada

Doctoral and Post-Doctoral Fellowships

We are inviting applications from recent Masters and Doctorates with strong academic background and writing skills (reflected in terms of publications) to pursue Doctoral and Post-Doctoral research in the following areas:

1. Watershed Modeling (Hydrology and Non-Point Source pollutants)
 - GIS based watershed modeling to develop an understanding of surface-groundwater interaction processes
 - Develop and apply new tools for SWAT based studies
 - Improve our understanding of the non-point source pollutant loading processes and develop methodologies for designing Best Management Practices
2. Climate-Change impact studies
 - Able to extract climate change scenarios from various climate models and develop an understanding on the hydrological regime
 - Develop and/or apply new algorithms to assess the uncertainty in hydrological modeling
 - Develop adaptive water management schemes to cope up with the climate change conditions.
3. Mathematical modeling of coupled flow-heat-contaminant transport in groundwater systems
 - Finite volume, finite element or finite-difference based numerical simulation model development of contaminant and/heat transport in groundwater
 - Modeling of salt-water intrusion into the groundwater
 - Effect of heterogeneity on contaminant transport and flow instabilities

All these positions require strong programming skills. Other nice-to-have skills include parallel programming, software interface development. Strong experience in any of the standard models such as coupled models (GSFLOW, HYDROGEOSPHERE); watershed models (SWAT, AnnAGNPS or similar); groundwater models (MODFLOW, MT3D and RT3D, SEAWAT or similar) and optimization tools (ANNs, Genetic Algorithms, etc.) is expected.

Interested students may please forward their CV, abstract of Doctoral dissertation, publication record to the following address:

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