

**Geodesy and Geomatics Engineering  
Graduate Seminar and Student Technical Conference**

*Dineen Auditorium-C13  
Wednesday March 25<sup>th</sup>, 2009*

**09:20      Opening Remarks**

**Session 1    Geographic Engineering and Ocean Mapping**

**Chair        Landon Urquhart**

09:25      The Effect of Sound Velocity Profile Acquisition Rate on Echosounder Accuracy  
*Lee Chaulk*

09:40      Marine Geophysical Data Collection and International Cooperation in the  
Arctic Region with respect to UNCLOS  
*Arthur Cooke*

09:55      Run Aground: Designing a System for the Inspection of Positions of Floating  
Navigational Aids  
*Kevin Levy*

**10:10      Coffee Break**

**Session 2    Land Management**

**Chair:        Nyaladzani Nkhwanana**

10:45      What a Land Surveyor Should Know about Environmental Management  
*Brandon Crouse*

- 11:00 Marine Cadastre: Evaluation of Current Status and Existing or Proposed Projects.  
*George P. Wilcox*
- 11:15 Applying Seabed Ground Overlays in Google Maps  
*Randell Hollett*
- 11:30 The Determination of Horizontal and Vertical Accuracies of LIDAR Data Used for Flood Mapping of the Lower Saint John River.  
*Harsil Jani*
- 11:45 Comparison of Computed Flood Maps with 2008 Flood Imagery.  
*Aloysius Kam*
- 12:00 An Analysis of Canada's Northern Sovereignty  
*Bradley G. Middlemiss*
- 12:15 Lunch**
- Session 3 Surveying**
- Chair Krista Amolins**
- 1:15 Testing Electronic Tacheometers [Total Stations]  
*James Dorland*
- 01:30 Governing the Use of GPS in Cadastral Surveying in Western Canada  
*Marc Steeves*
- 01:45 Achieving High Precision Results using a Robotic Total Station with Automatic Target Recognition  
*Ryan Schuler*

02:00 Investigating the Tellurometer MA200 High Precision Electro-Optical Distance  
Measurement System

*Robert W. Love*

**02:15 Coffee Break**

**Session 4 GPS/Geodesy**

**Chair James Mtamakaya**

02:30 Improving the Methods of Deformation Monitoring for Small  
Surveying Firms.

*Tyson Altenhoff*

02:45 Deformation Monitoring in Open Pit Mining Using Geomatics  
Technology

*Dikopo Rantolo*

03:00 Sea Level Change in the South Pacific Region

*Adam Stephen*

**03:15 Closing Remarks**

*Dineen Auditorium-C13*  
*Thursday March 26<sup>th</sup>, 2009*

**Graduate students**

**11:30**            **Opening Remarks**

**Chair:**           **James Mtamakaya**

11:40            Finding procedures for assessing the quality  
of external bathymetric data

*Rui Pinto da Silva*

12:00            Application of Spherical Harmonics for Modelling Horizontal  
Tropospheric Gradients

*Landon Urquhart*

12:20            Assessing Alternative Technologies for Use of Volunteered Geographic  
Information in Authoritative Databases

*Botshelo Sabone*

**12:40-01:35**    **Lunch Break**

**Chair:**           **Nyaladzani Nkhwanana**

01:35            Mast Tracking Capability of EM3002D Multibeam using Water  
Column Imaging

*Auke van der Werf*

01:55            Towards Building a Geo-Service Broker.

*Kealeboga K. Moreri*

02:15 The Impact of Ocean Observation Systems in Marine research and Information Management

*Titus Tienaah*

02:25 Using a Web-Based Geographic Information System as a Social Networking Tool

*Krista Amolins*

02:55 GPS Positioning Enhancement Based on Different Weighting Scheme to Solve an I11-conditioned Case in Parameter Estimation Process.

*Yong-Won Ahn*

03:15 **Short Break**

### **CIG Paper Competition**

**Chair: James Mtamakaya**

03:25 An Evaluation of the Tandem-X Mission Height Requirements.

*Evan Green*

03:40 Defining the Limits of the Continental Shelf under the United Nations Convention on the Law of the Sea

*Timothy Crowell*

03:55 Capabilities, Limitations and Achievable Accuracies of Terrestrial 3D laser Scanning

*Ewan Scott*

04:10 Testing Horizontal and Vertical Accuracies of the Nova Scotia 1:10 000 Digital Topographic Mapping

*Jody V. Isenor*

04:25 Options for Land Administration Chosen by Selected First Nations in British Columbia.

*Roberta E. Holtner*

**04:40 Graduate Awards Presentation**

**04:55 CIG Paper Competition Award Presentation**

**05:10 Reception (room C-122)**