

**Nova Scotia Community College -AGRG-COGS Conference
Sensors High and Low: Measuring the Reality of our World**

Jan 23, 24, 2019

Centre of Geographic Science, Lawrencetown, NS – Audio Visual Room

Wed. Jan 23

Airborne & Marine Sensors supporting Major Project

9:00-9:15 Wayne St Amour, NSCC COGS Principal - Welcome

9:15-9:30 Al Joseph – NSCC Director of Applied Research - Welcome

9:30-10:00 Tim Webster, Applied Geomatics Research Group - NSCC – Airborne bathymetric lidar improvements: mapping the seafloor at 4 times the resolution and the supporting in-situ sensors

10:00-10:45 **Keynote**, Shawn Slade, Leica Geosystems – Modern Day Geospatial Industry: More than just Aerial Imaging

10:45-11:15 Health Break – Gymnasium with Exhibitors

11:15-11:45 Paul Illsley – COGS-NSCC - Development and applications of compact LIDAR and Hyperspectral sensors for use on UAV platforms

11:45-12:15 Nathan Crowell, AGRG-NSCC and Sara Beanlands, Steve Garcin, Boreas Heritage, Heather LeBlanc, Mapannapolis - Merging UAV data with subsurface ground penetrating radar for archeological investigations

12:15-1:15 Lunch – Gymnasium with Exhibitors

1:15-2:00 – **Keynote**, Derek Law, ESRI - Understanding Web GIS and displaying Sensor data in ArcGIS Client Apps

2:00-2:30 – Pete Dietert – Flight Simulator, 404 Squadron, Department of National Defence - The CP-140 Aurora: The Aircraft, it's Sensors, and its Simulators

2:30-3:00 – Edward Glover, Nova Scotia Power Inc. - Integrating Technology into Utility Vegetation Management

3:00-3:15 Health Break – Gymnasium with Exhibitors

3:15-3:45 – Jim Hanlon, Centre for Ocean Ventures & Entrepreneurship (COVE) - Physical to Chemical to Biological Sensing of the Ocean – Trends for the Future of Ocean Measurement

3:45-4:15 – Sue Molloy, GLAS Ocean – Marine data collection for the development of generic electric power systems

4:30-6:30 Cash Bar – Lunn's Mill Beer Co. – Gymnasium with Exhibitors

6:30 Catered Supper & Cash Bar – Gymnasium with Exhibitors

7:30-8:15 **Keynote**, Diane Ingraham - Stantec Consulting Ltd. - Sensor Data Crushes Heartburn on Major Projects

Thurs. Jan 24

Marine Sensors, Internet of Things (IoT), Data Visualization and Agriculture Sensors

9:00-9:15 Michael Purcell – COGS Geomatics Chair-NSCC – Recap of Day one events and announcements

9:15-9:45 Jill Ejdrygiewicz, Applied Oceans Research Group, NSCC - Testing the application of synthetic aperture sonar for seafloor habitat mapping

9:45-10:15 Grégoire Ledoux – CIDCO - Centre interdisciplinaire de développement en cartographie des océans – Using multibeam echosounding sensors for the establishment of artificial lobster reefs and their compliance verification

10:15-10:45 Andrew Lowery, Fundy Ocean Research Center for Energy (FORCE) – Enabling Subsea Improvements in the Bay of Fundy

10:45-11:00 Health Break – Gymnasium with Exhibitors

11:00-11:30 Ana Luisa Alfaro, Global Spatial Technology Solutions Inc. - Development of a space-based monitoring system for ocean-going vessels and its applications

11:30-12:15 **Keynote**, Jodie Fisher, North American Business Unit, IBM Watson IoT - Industry transformations through sensor, AI and IoT.

12:15-1:15 Lunch – Gymnasium with Exhibitors

1:15-1:45 Scott Eckstein – Hanatech IoT Inc. – Internet of Things – Technology Trends and Predictions

1:45-2:15 David Colter, St. Marys University, Beacon Labs, Digital Cinema Labs – Possible Future for Augmented Reality (AR) and Virtual Reality (VR) and the Impact of Sensors

2:15-2:45 Corey Lunman, Hoskins Scientific Ltd. - Introduction to the latest wireless field monitoring systems

2:45-3:00 Health Break – Gymnasium with Exhibitors

3:00-3:30 David Colville, COGS-NSCC – Southwest Nova weather station network, present and future applications (tentative title)

3:30-4:00 AGRG-NSCC – Off the shelf multispectral & thermal sensors for drones – processing techniques & applications

4:00 Closing remarks Tim Webster – AGRG-NSCC, Michael Purcell – COGS-NSCC