

## 2012/13 PROGRAMME: TECHNICAL PRESENTATION

**SPEAKER:** Nick Sion, PEng., CEng., MIMechE

**DATE:** Tuesday, January 15, 2013 (Dinner will be served at 6:30 pm; Lecture starts at 7:30 pm.)

**WHERE:** Kinectrics Facility, 800 Kipling Avenue, Toronto ON M8Z 6C4

**DIRECTIONS:** See map overleaf

**REGISTRATION:** Contact Tony Hamilton at [tony.hamilton@kinectrics.com](mailto:tony.hamilton@kinectrics.com) or (647) 938-2431, by December 28, 2012

### OUR SPEAKER



Nick Sion graduated from the University of London (UK) in Engineering Physics plus an Advanced Math degree from Battersea College (part of the University of London that is now known as the University of Surrey). Postgraduate studies were done at Birmingham University on airborne radars; most of which were classified.

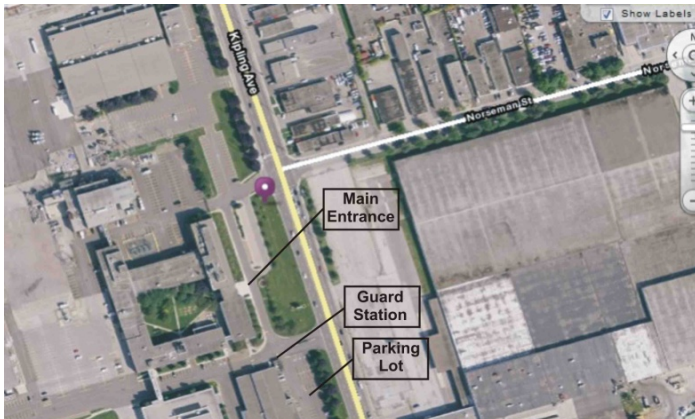
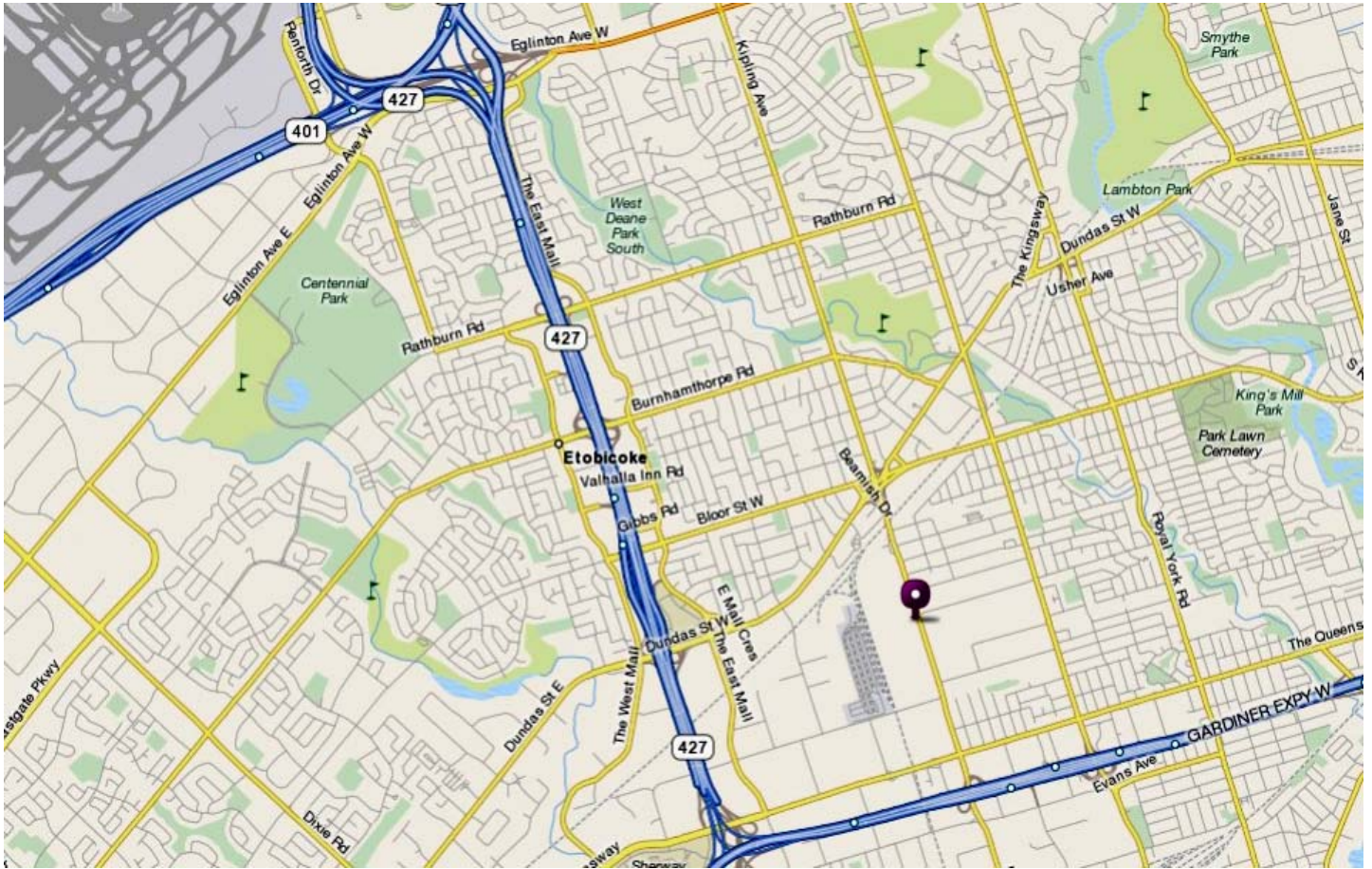
His first job was at the Royal Aircraft Establishment, calibrating a supersonic wind tunnel. Since then Nick has held positions in the aerospace and nuclear industries. Currently he is involved in the radiation protection of astronauts on prolonged space missions.

### Hazards and Countermeasures In Space Missions

Since the Mars Science Laboratory (Curiosity) landed on Mars, there is increasing interest as to whether humans can travel to our neighbouring planet. This presentation will outline the known hazards in outer space missions and draw attention to the issues of incessant radiation, microgravity effects, shielding inadequacy, and the psychological effects of a long lonely journey. The presentation will also outline the countermeasures for each, and the most up-to-date research currently being conducted.



## DIRECTIONS:



The entrance to the Kinectrics facility is on the west side of Kipling Avenue and is not too far south from the Kipling subway station (about 10 min walk). There is free parking directly in front of the main entrance but it is limited to about 12 spaces. There is plenty of additional parking directly east and south of the guard station, located south of the main building entrance.

Check out our Website at [imeche-ccb.org](http://imeche-ccb.org)