# KEGS Foundation Announcement

## Geophysical Short Course

# Integrated Interpretation of AEM Surveys

**Presented by**

## Dr. James Macnae, RMIT, Australia

**Inaugural Collett Distinguished Visiting Lecturer**

## University of Toronto

## Earth Sciences Centre, Room ES2093

## Thursday, March 7, 2019, 8:30am to 12 pm

**Advance registration strongly advised:**

**Professionals: Early bird $90; regular $100; at door $120**

**Veterans & retirees: $20 discount**

**Students: $20 (refundable)**

**Details & Registration: www.kegsfoundation.org**

**Lunch: Pizza & refreshments - sponsored by Abitibi Geophysics**

**Arranged by the KEGS Foundation**

**with the support of KEGS & UofT**

**Advancing geophysical education since 1999**

**www.kegsfoundation.org** ***** **www.kegsonline.org**

# GEOPHYSICAL SHORT COURSE

## Integrated Interpretation of AEM Surveys:

### Determination and Use of Appropriate Geophysical Models

Presented by

**Dr. James Macnae, RMIT, Melbourne, Australia**

**Inaugural Collett Distinguished Visiting Lecturer in Geophysics**

**Thursday, March 7, 8:30 am – 12 pm**

**University of Toronto, Earth Sciences Centre, 22 Russell Street, Room ES2093**

**Organized by the KEGS Foundation with the support of KEGS & U of T**

**Registration: Advance registration strongly advised – Venue capacity limited**

**Please register online using PayPal; See tab at top www.kegsfoundation.org**

**Professionals:** **Early Bird: $90 (< Feb. 10)**
**Regular Advance: $100 (< Mar. 2)**
**Late: $120 (Cash/cheque only at the door, subject to availability)**
**Veterans (> 70) and Retirees: $20 discount**
**$50 charitable tax receipt for all of the above**

**Students: Please register in advance ($20); refundable at end of course**

**Miscellaneous: Coffee and light snacks provided at mid-morning coffee break**

**Lunch (pizza and refreshments) generously sponsored by Abitibi Geophysics**

**Convenient access via TTC * Parking: university garage off Huron Street**

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# Course Outline

## Integrated interpretation of airborne electromagnetic surveys: Determination and use of appropriate geophysical models

Presenter: Prof. James Macnae (RMIT University, Melbourne, Australia),
Inaugural Len and Genice Collett Distinguished Visiting Lecturer in Geophysics.

**Content**: This half-day course will cover:

1) The basics of geophysical electromagnetics (EM), time and frequency-domain
2) Airborne EM systems, trade-offs and recent advances
3) The physical limits of conductivity resolution with AEM
4) Detectable geology: Earth conductivity variations
5) Consideration of computed geophysical models, direct and inverse
    a. Stitched 1D for quasi-layered environments
    b. 2D and 2½D
    c. 3D, parametric and voxelated
6) Case histories: Using computed AEM models to guide geological interpretation: Successes, limitations and failures
7) Where might AEM be in 10 years?

**For Dr. Macnae's biography and publications, please consult:**

www.rmit.edu.au/contact/staff-contacts/academic-staff/m/macnae-professor-james

wiki.seg.org/wiki/James_Macnae

www.researchgate.net/profile/James_Macnae