EGRU

JAMES COOK UNIVERSITY AUSTRALIA

A Better Understanding of Exploration Geochemistry

A one-day workshop presented by

Dr Carl Brauhart, MAIG MSEG
Principal Consultant
CSA Global

Wednesday 27th June 2018, and
Thursday 28th June 2018 (subject to demand)

JCU Townsville

COURSE LEADER

Dr Carl Brauhart is an exploration geologist with over 25 years experience in gold and base metal exploration. He has a particular interest in exploration and ore deposit geochemistry. Carl has a close association with the Centre for Exploration Targeting at UWA, where he is the lead researcher on the OSNACA Project (an ore deposit geochemistry research project).

This one-day course is designed to help exploration geologists better understand the issues they face when dealing with geochemical data.

Delegates will be exposed to practical exercises using ioGAS software to work on real-world data sets.

The course has been presented numerous times in Perth and is being made available in north Queensland through EGRU and courtesy of CSA Global.

LEARNING OUTCOMES

Delegates completing this course will have a solid grounding in ten important skills in Exploration Geochemistry, and will be able to:

- Validate data and recognise the limitations of that data.
- Use X-Y plots to explore data, validate results of more advanced investigations and link to spatially defined anomalies.
- Identify element associations in their data using Principal Component Analysis.
- Recognise that element associations are scale dependent.
- Break false correlations in data using Centred Log Ratios.
- Understand the advantages of using probability plots over histograms.
- Construct a log additive index that highlights an anomalous metal association.
- Use alteration geochemistry to better understand the mineralogy of a hydrothermal alteration system.
- Discriminate different rock types using immobile element ratios.
- Apply immobile-incompatible element ratios to define separate magma series (or sediment packages).

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ioGAS SKILLS

In this one day course delegates will be shown:

- Data importing and validation
- Attribute Manager
- Probability Plots
- Histograms
- X-Y Graphs
- Triangular Diagrams
- Attribute Maps
- Ranked Variable Maps
- Custom Spider Plots
- Writing New Calculations
- Using Mineral Composition and Volcanic Rock Classification diagrams
- CLR Transform
- Principal Component Analysis

REGISTRATION FEES

One-Day Workshop

EGRU MEMBERS: $550 (incl GST)

NON MEMBERS: $770 (incl GST)

Registration fees include:

- Course notes
- Practical exercises and demonstrations using ioGAS
- Data package including trainingdatasets, PCA template, Custom Spiderplot and course slideshow
- Free use of software during the course
- Lunch, morning & afternoon tea

Delegates will need to bring a laptop with Windows 7 or higher, and will be asked to download the workshop data package and install ioGAS prior to the workshop.

PLEASE NOTE

- Delegate numbers for the workshop are limited.
- A second one-day workshop on Thursday 28th June will only be offered if there is sufficient demand.
- EGRU reserves the right to cancel the workshop(s) if minimum numbers are not registered by Wednesday 30th May 2018.
- There will be a full refund of registration fees for cancellations on or before 30th May. Fees will not be refunded after this date but registration can be transferred to an alternative delegate.

For further information contact Judy Botting: egru@jcu.edu.au

Register for the EGRU workshop online: https://www.jcu.edu.au/economic-geology-research-centre-egru/professional-development/exploration-geochemistry-workshop

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