

Introduction to Applied Geochemistry for Exploration & ioGAS Software Training



3-DAY PROFESSIONAL TRAINING COURSE
22-24 June 2026, Abidjan Côte d'Ivoire



This three-day, industry-focused course provides a hands-on introduction to applied geochemistry for mineral exploration. It is centred on multi-element assay data from whole rock samples and the ioGAS software platform, with a strong emphasis on maximising the value of your assay data and its exploration industry applications.

Participants will learn how to extract meaningful geological insights from geochemical datasets, identify exploration targets, and integrate geochemical information with other datasets such as hyperspectral data and geological observations.

The course combines conceptual learning with hands-on practical exercises using ioGAS to help participants develop workflows that can be directly applied to their exploration projects. By the end of the course, participants will understand what is needed before starting to interpret multi-element data, the types of multi-element data from a lab perspective as well as 'go-to' tools for interpretation to turn geochemical data into exploration intelligence to develop more robust, evidence-based targeting strategies.

A key component of the course is two practical training sessions using the ioGAS geochemical data analysis platform. Both of these practicals are HANDS-ON (A computer or laptop is required. An ioGAS training license for the duration of the course will be provided). All levels of ioGAS users are welcome, no ioGAS expertise is necessary. Bring your own data set to work on for practical 2.

Why Attend

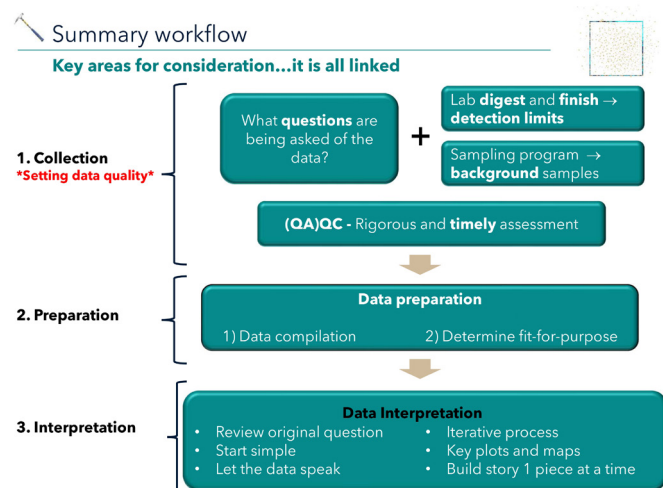
Participants will gain practical skills to:

- Improve the interpretation and reliability of multi-element assay datasets
- Identify and avoid common problems in historical multi-element assay data
- Integrate geochemical data with geological understanding
- Use ioGAS to visualise and interpret exploration datasets
- Identify geochemical anomalies and prioritise exploration targets
- Apply practical workflows that accelerate exploration decision-making

Who Should Attend

This course is designed for:

- Exploration geologists
- Geochemists
- Resource geologists
- Data geoscientists working with exploration datasets
- Early-career geoscientists seeking practical multi-element assay interpretation skills
- Experienced geologists wanting to enhance their use of multi-element data in targeting



What You Will Learn

Participants will benefit most if they have some familiarity with mineral exploration and geological datasets. All levels of ioGAS users are welcome, no prior experience is necessary.

Participants will develop practical knowledge and skills in:

Applied Exploration Geochemistry

- The role of multi-element data in exploration targeting
- Understanding multi-element geochemistry
- Interpreting geochemical signatures and pathfinder elements
- Recognising geological signals within geochemical datasets to build robust targets

Data Quality and Historical Data

- Introduction to evaluating historical geochemical data
- Identifying spurious or unreliable data
- Understanding detection limits and assay reliability
- Best practices for data preparation and compilation

Hyperspectral Data Integration

- Introduction to hyperspectral data
- Differences between hyperspectral and multi-element datasets
- Overview of interpreting spectral parameters and mineral indicators
- Overview of integrating hyperspectral data into exploration workflows

Data Preparation and Workflow

- Preparing geochemical data for interpretation
- What standardised applied geochemical data exports need to contain and compilation cautions.
- Recommended workflows before beginning interpretation

Geochemical Targeting

- Recognising geochemical anomalies
- Using pathfinder elements effectively
- Introduction to identifying rock compositions litho-geochemistry and alteration signatures
- Introduction to practical strategies for exploration targeting
- Developing targeting products from geochemical data

Hands-On Training with ioGAS

A key component of the course is two practical training sessions using the ioGAS geochemical data analysis platform. Both of these practicals are HANDS-ON (A computer or laptop is required. An ioGAS training license for the duration of the course will be provided).

Practical 1. Introduction to using ioGAS - Using multi-element assay data and “Go-to” interpretation tools. No prior ioGAS experience is necessary.

Practical 2. Working with your data (or a provided data set if you are unable to bring a data set). Practice everything you’ve just learned in real time with assistance from the course facilitator, on your project.

Participants will practice:

- ioGAS workflows and software interface
- Data import and validation
- Attribute management and dataset organisation
- Univariate and multivariate analysis
- Geochemical visualisation techniques
- Creation of key plots and targeting maps for exploration
- How to quickly and effectively make a series of key geochemical plots and maps commonly used for exploration targeting.

Key Skills Participants Will Gain

By the end of the course, participants will be able to:

- Apply exploration geochemistry concepts to real datasets
- Recognise and correct common issues in geochemical data
- Build efficient ioGAS workflows for data analysis
- Generate meaningful plots and maps for exploration targeting
- Understand lithogeochemistry and alteration signals
- How best to integrate geochemical, hyperspectral and logging data sets
- Identify geochemically anomalous areas that assist in building and discriminating exploration targets

Participants will also gain a range of practical tips and interpretation strategies drawn from real exploration industry experience.

Course Leader: Dr Heidi Pass (Director and Principal - Elemental Insight Consulting)



Dr Pass is a geologist and exploration geochemist with 25+ years of experience who specialises in the interpretation of multi-element datasets and the integration of geochemistry with other foundational data sets. Through Elemental Insight, she works with exploration, mining and technologies companies to deliver practical, innovative solutions connecting geoscience with technology and strategic business decisions. For more information, please see Heidi's LinkedIn page or reach her on heidi@elementalinsight.com.au

Date

22 to 24 June 2026 - 3 days

Time

8:30am to 5:00pm

Location

Abidjan, Côte d'Ivoire.

Language:

English

Registration Fees:

US\$ 1,850 per attendee. The fee includes morning & afternoon tea and lunches and a hardcopy of the course manual. Payment must be completed before the start of the training. Any applicable country withholding taxes will be added to ensure the net amount received is USD 1,850.

👉 Special Early Bird

US\$ 1,650 for registration completed and paid by 30 April 2026.

Registration deadline

15 May 2026

Certificate of participation

Participants will receive a certificate of participation upon completion.

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22 to 24 June 2026 - Abidjan, Côte d'Ivoire

Registration deadline 15 May 2026

Please complete this form and email it to: Corinne.Debat@agate-project.org

Company Information

Company

Address

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Entity to invoice

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Administrative Email contact

Participants

Total number of Participants

Attendee details (First name, surname, role, position, title) + email

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Attendee details (First name, surname, role, position, title) + email

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Attendee details (First name, surname, role, position, title) + email

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Attendee details (First name, surname, role, position, title) + email

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Fees and Currency

	US\$	
Base registration Fee	1,850	
Early Bird	1,650	

Withholding Tax if applicable	%
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The organisers reserve the right to cancel the training if the minimum requirement of participants is not met.