AGATE PROJECT
Knowledge, Skills, Networks in Earth and Planetary Science

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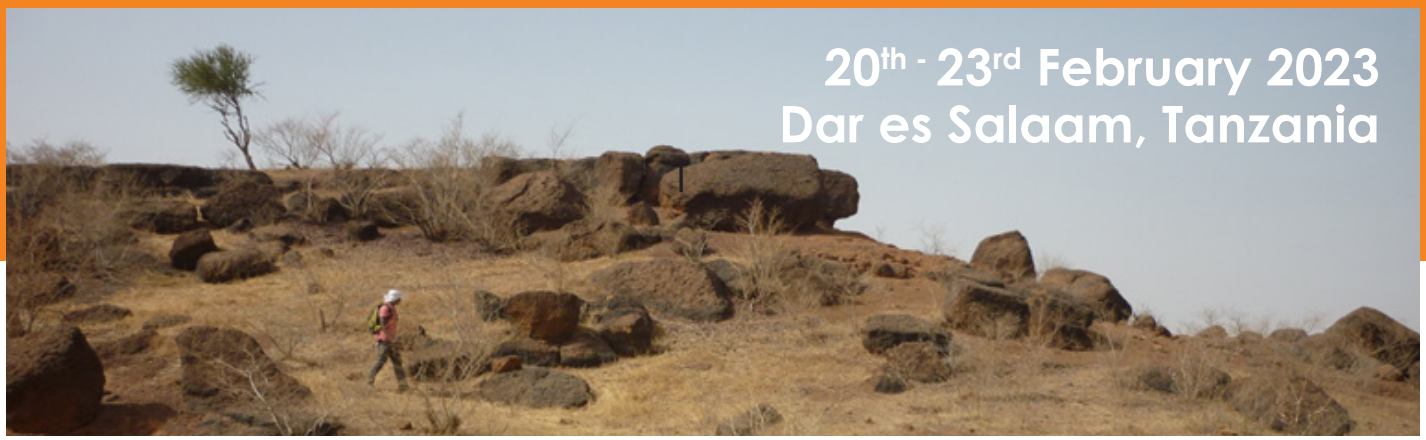
Mineral Exploration in and through the Regolith
Agate/EAXI Training



This 4-day course will provide an in-depth review of our knowledge on weathering processes that lead to the concentration of mineral deposits and the latest developments and interpretations applied to exploration through regolith covers. This course is aimed at geologists wishing to learn the principles and techniques necessary to plan and execute exploratory work in weathered terranes.

The greatest potential for further discoveries lies in and beneath areas of significant weathered and/or transported covers. Regolith deposits have a long and complex genesis, and this results in numerous problems related to the application of exploration techniques, correct interpretation of exploration results and the evaluation and exploitation of these resources.

This training course, organised by Dr Mario Iglesias (Univ. Politecnica de Madrid) who has extensive experience in Research and Minerals Industry projects in Exploration on different types of mineral deposits, especially in lateritic gold, is aimed at those professionals who would like to acquire the knowledge needed to explore concealed ore deposits though the cover and unlock the economic potential of the regolith itself.

Participants will be trained on many case studies from West Africa and Australia where lateritic deposits have been evaluated and exploited for decades and which can be adapted to exploration programs in the Eastern Africa region.

Programme

Day	Activity	Course Element
Day 1	Lectures	1. Introduction: definition of regolith and constraints of mineral exploration though cover 2. Metallogeny of lateritic deposits 3. Weathering profile characterisation: Residual vs. Transported
	Practical exercices	Recognition of lateritic profiles in the field // Mineralogical and Petrological characterisation
Day 2	Lectures	4. Regolith landscape evolution through time 5. Commodities in Regolith. Potential for Au, Al, Sc, Ni, Co, REE and PGE 6. Remote Sensing and Geophysics: useful tools for Exploration in and through the regolith
	Practical exercices	Case Studies from Western Australia: Geophysics / Gold-bearing paleochannels beneath sedimentary covers in Yilgarn craton Regolith and landform mapping in West Africa
Day 3	Lectures	7. Geochemical and mechanical dispersion in supergenic environments: Interpretation of anomalies 8. Sampling lateritic material: Techniques and QA/QC protocols 9. Geochemical analysis. Representativeness: an unsolvable issue? Beyond Fire Assays: Bulk and ultrafine analysis
	Practical exercices	Tanzanian case Study
Day 4	Lectures	10. Gold in laterites: new perspectives for "marginal" deposits 11. Resource Evaluation of lateritic gold deposits
	Practical exercices	Case Study: Looking for gold in Congo Craton weathered greenstone-belts // General review and resolution of queries

* Some practical training will use PC's provided by attendees.

All relevant data will be provided, although attendees should have access to their own GIS software if possible, if not they will be provided with QGIS.

Information

All the attendees will have the opportunity to participate in collaborative interpretation of case studies

Course Content: Lectures & Hands On Exercises

Course Leader: Mario Iglesias

Exploration Geologist and Doctor in Mining Engineering. Dr Mario Iglesias has a extensive experience in mineral exploration and mapping in weathered terranes in Brazil, Western and Central Africa and Australia. Currently works on lateritic gold deposits as a visiting Scientist for the Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Registration Fees

For the full 4 days of training, including training materials.

US$1,800 per attendee

Language

English

Duration

4 days, 3 hours/day lectures + 3 hours/day lab excercises.

Time

Dar es Salaam, Tanzania
9 am to 5 pm

Registration

Register and pay online on the Agate website, or using the form on the next page.

Certificate of Attendance

Upon completion, participants will receive a certificate of attendance

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AGATE/WAXI Mineral Exploration in and through the Regolith Course

20-23 February 2023

Either complete this form or register online: https://agate-project.org/training-courses/short-courses/

Company .....

Address .....

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Phone .....

Administrative Email contact .....

Attendee's Name 1.....

Attendee's Name 2.....

Attendee's Name 3.....

Attendee's Name 4.....

Total Registration Fees .....

US$1,800 per participant

Email: Corinne.Debat@agate-project.org

On confirmation of your places, we will ask you to transfer the registration fee to a bank account to be announced.