





Sediment-hosted base metal sulphides and iron ore deposits

WAXI/Agate Project Training

4 November to 8 November 2024 Accra, Ghana



This course covers the geology and evolution of sedimentary basins, mineral deposits within them, paleoenvironmental conditions affecting ore formation and preservation, mineralization during burial and diagenesis, and ore systems resulting from metamorphism and deformation.

This course is designed for geoscientists, particularly those interested in economic geology or metallogenic processes, especially deposits hosted in sedimentary rocks.

All attendees are urged to bring their own regional datasets because they will be instructed on case studies using regional data.

The training course is organised by Prince O. Amponsah (UG), Samuel Nunoo (UG), Abigail E. Ayikwei (UG), Daniel Kwayisi (UG), who together have over twenty years of experience in mineral exploration and prospectivity in several terrains globally and locally.

Attendees' Data Sets

All participants will have the chance to take part in group interpretations of their individual data sets. In order for the audience to comprehend the regional or local context of the data, attendees who wish to provide datasets for discussion should prepare a 5-slide introduction to their area of interest.

Both processing and interpretation procedures can be carried out if digital data are accessible.

All lectures will be face-to-face

Programme

All field exercises will be in person under the supervision of the WAXI team

| Day | Date | Course Element | Lecturer |
|------------------------|--------------------------------------|---|----------|
| Day 1 9am to 4pm | Monday 4 Nov Lectures Case studies | Introduction and classification of sedimentary ore deposits Clastic sedimentation Chemical sedimentation Weathering Solution remobilization Discussion of various models of sediment formation and mineralisation. | DK & AEA |
| Day 2 9am to 4pm | Tuesday 5 Nov Lectures Case studies | 2. Deposit related to chemical sedimentation Sedimentary base-metal deposits Sulphide mineralization Base metal sequestration processes Base metal sources, transport, and incorporation in sulphides. Probing for base metals via SEM-EDS, EPMA, PIXE | POA & SN |
| Day 3 9am to 4pm | Wednesday 6 Nov Lectures | 3. Geological field mapping strategies in sedimentary terranes • Sedimentary iron deposits • Oolitic iron ores • Siderite deposits • Banded iron formation • Algoma type BIF • Superior type BIF | All |
| | Case study | Examining the Shieni Iron deposit of Ghana | All |
| Day 4 9am to 4pm | Thursday 7 Nov Lectures | 4. Sedimentary manganese deposits Phosphate deposits Evaporites Manganese nodules Deposits related to weathering Bauxite deposites Nickel laterite deposits Residual manganese deposits | All |
| Day 5 9am to 4pm | Friday 8 Nov Case Studies | 5a. Practical examination of samples from selected deposits Jiguanshan Mo deposit Sijiaying (BIF) Fe deposit Oti Fe deposit Nsuta and Mankwadze Mn deposit Obanda Cu deposit 5b. Practical examination of samples from Birimian-Tarkwaian deposits Bibiani domain Ateiku deposit Asankragua domain | All |

Information

Course Leaders Prince Ofori Amponsah (coordinator), Samuel Nunoo, Abigail Ayikwei, Daniel Kwayisi.

Prince Ofori Amponsah

Senior Lecturer and a lead consultant at the University of Ghana and Azumah Resources Limited respectively and has over fourteen (14) years of experience in field and practical based structural geology and metallogeny.

Samuel Nunoo

Senior Lecturer at the University of Ghana and has over ten (10) years of experience in field and

practical based structural geology and metallogeny.

Abigail Ayikwei

Lecturer at the University of Ghana and has over ten (10) years of experience in geophysical field work, interpretation, and modelling of 2D and 3D geophysical data. Abigail has worked in the Birimian terrain of Ghana and is actively involved in the lithostructural modelling and the search for base metals in the Voltaian sedimentary basin.

Daniel Kwayisi

Senior Lecturer at the university of Ghana, Daniel Kwayisi has about ten (10) years' experience in geological field work and mineral exploration. Daniel has carried out extensive research into the Precambrian geology of Ghana and actively involved in base metal and industrial mineral exploration.

Date: 4 to 8 November 2024

Duration: 5 days

Time: 09:00 am - 05:00 pm Accra Time - Face to Face training

Venue: Institute of Statistical Social and Economic Research (ISSER), Seminar room, University of Ghana, Accra and one day field excursion Eastern region of Ghana.

Language: English

Registration fees: For the full 5 days of training, including training materials, lunch, morning and afternoon tea.

WAXI Sponsors US\$1,750 per attendee - Non-WAXI sponsors AU\$1,900 per attendee. Invoice of currency AU\$.

Registation dealine: 20 October 2024

Certificate of Participation:

Particpants will receive their certificate at the end of the training course.



Sediment-hosted base metal sulphides and iron ore deposits 4th November to 8th November 2024 Complete and return this form before the 20th October 2024

| Company |
|---|
| Entity to invoice: |
| Address |
| |
| Phone |
| Administrative Email contact |
| Attendee's 1 First Name Surname |
| Email: |
| Attendee's 2 First Name Surname |
| Email: |
| Attendee's 3 First Name Surname |
| Email: |
| Attendee's 4 First Name Surname |
| Email: |
| Total Registration Fees |
| WAXI Sponsors US\$1,750 per attendee, Non-WAXI sponsors AU\$1,900 per attendee, Invoice of currency: AU\$ |

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. Registration valid only when the invoice is paid in full