Orogenic Gold in Africa and Worldwide

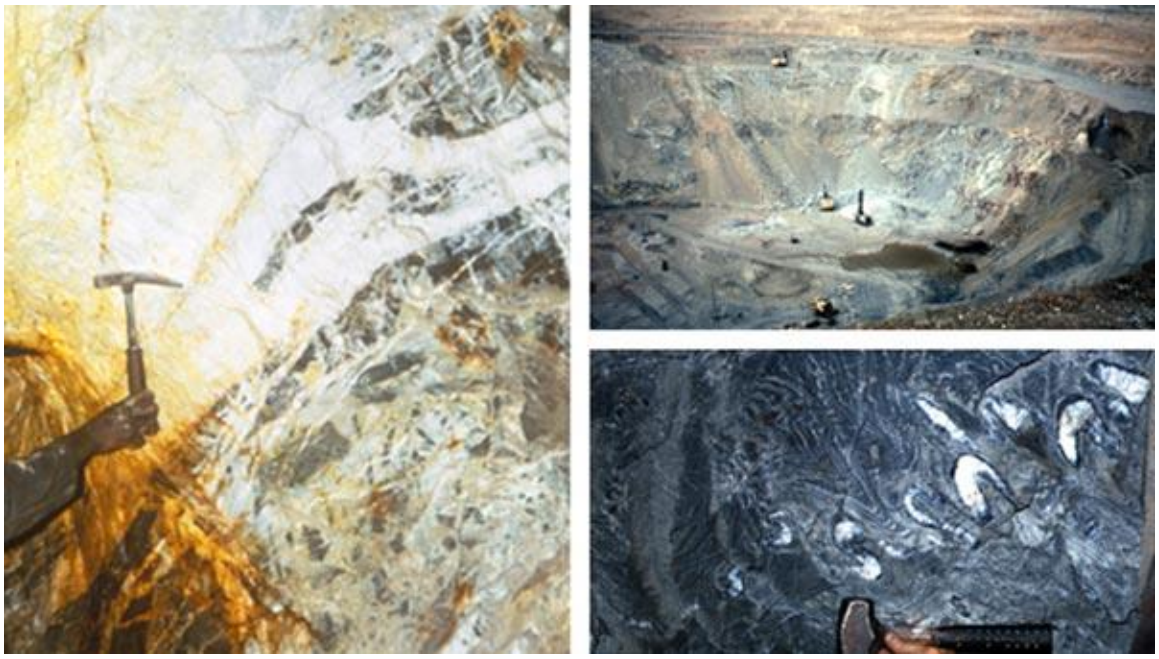
[Link to Registration]

Date: February 10-11, 2025
Time: 8:00am - 5:30pm CAT (UTC+2)
Location: THE HUB, University of Zimbabwe, Harare, Zimbabwe
Format: Two-day in-person short course consisting of dynamic lectures and opportunities for participant Q&A interaction.
Presenters: Richard Goldfarb, Bob Foster, and Caitlin Jones
Attendee Maximum: 50

30% of spaces are reserved for students and offered at a discounted rate.

Course Overview

This two-day course will focus on the geology of and exploration for orogenic gold deposits, the most widespread type of gold deposit globally. Leading experts will provide descriptions of the most important Precambrian and Phanerozoic examples of orogenic gold ores formed in the world's young accretionary orogens and old cratonic greenstone belts. They will discuss topics including tectonic and structural controls, geological characteristics, geochemical and geophysical signatures, geochronological relationships, and exploration strategies. A large component of the program will be the detailed evaluation of gold metallogenesis and recent exploration successes throughout Africa.



A large component of the program will be the detailed evaluation of gold metallogenesis and recent exploration successes throughout Africa.

Richard Goldfarb will focus on the general geology, alteration, mineralogy, geochemistry, and genesis of this family of deposits. He will discuss their distribution in the Phanerozoic and features of these younger deposits that relate to a better understanding of the Precambrian gold provinces. Overlapping features with the intrusion-related and Carlintype deposits will be evaluated to better understand the formation and different exploration criteria for each of these.

Bob Foster and Lynnette Greyling will provide detailed descriptions of the Archean, Paleoproterozoic, and Neoproterozoic gold provinces and their ores across the entirety of the African continent. These will include details of the major deposits of the Zimbabwe, Congo, and West African cratons. Important insights to the complexities of the Kaapvaal Craton and the gold-endowed Barberton Greenstone Belt will be detailed by Caitlin Jones. The growing recognition of the importance of Neoproterozoic/Pan-African terranes will also be addressed, focusing on the world's largest accretionary arc complex in North Africa and on the recent exploration successes in Namibia that have led to the country becoming a significant gold producer.

The course is aimed at geoscientists from both industry and academia, as well as students of economic geology who desire a comprehensive understanding of modern concepts on the geology of orogenic gold deposits. Lunches and coffee breaks will be provided each day, including a "Sundowner" gathering on the evening of Monday, February 10.

Course Agenda

Monday, February 10

- **Morning**
  - Introduction: Geology of Gold Deposits and Economics of Orogenic Gold
  - Orogenic Gold I: Geology and Exploration Criteria
  - Orogenic Gold II: Mineralogy and Alteration
  - Orogenic Gold III: Ore Fluids and Genesis
- **Afternoon**
  - Orogenic Gold IV: Lessons from Alaska
  - Mesozoic Orogenic Gold
  - Paleozoic Orogenic Gold
  - Precambrian Orogenic Gold and Geological Time
  - Confusion with Intrusion-Related and Carlin-like Gold Systems
- End-of-Day Braai (BBQ) and Drinks
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Tuesday, February 11

- **Morning**
  - Africa: Terranes and Gold Production
  - Archean Gold I: Zimbabwe Craton
  - Archean Gold II: Kaapvaal Craton and Barberton Greenstone Belt
  - Archean Gold III: Congo Craton: Tanzania and DRC
- **Afternoon**

- Archean Gold IV: Reguibat: Tasiast and Kenema-Man: Sierra Leone and Liberia
- Paleoproterozoic Gold I: Ghana ± Burkina Faso
- Paleoproterozoic Gold II: Cote d'Ivoire
- Paleoproterozoic Gold III: Kédougou-Kéniéba Inlier: Senegal and Mali
- Neoproterozoic Gold I: Tuareg Shield
- Neoproterozoic Gold II: Arabian-Nubian Shield
- Neoproterozoic Gold III: Damaran Orogen (Namibia)

- Key Takeaways and Discussion

Presenters

China University of Geosciences Beijing (CUGB)
Richard is a research professor at Colorado School of Mines and China U. of Geosciences Beijing, as well as USA-based consulting geologist; spent 35 years as research geologist at USGS, specializing in the geology and geochemistry of orogenic gold.

Bob Foster
Bob Foster & Associates
Bob is a UK-based consulting geologist who commenced his career in Zimbabwe and most recently spent 10 years as Chief Executive of AIM-listed Stratex International, focused on gold exploration and project development throughout Africa and in Turkey.

Caitlin Jones
Senior Consulting Geoscientist
Caitlin is a Consulting Geoscientist at Tect Geological Consulting in South Africa, where she focusses on the 3D geomodelling of structurally-complex orebodies and their host rock sequences in LeapfrogGeo. Caitlin holds an M.Sc. in Structural and Economic Geology from the University of Stellenbosch. Her research for Barberton Mines (Pty) Ltd focused on the structural controls of hydrothermal fluid flow and gold mineralization within the Sheba and Fairview Mines of the Barberton Greenstone Belt.

Registration

For members of the Geological Society of Zimbabwe, but who are NOT members of the Society of Economic Geologists, please contact Gayle Hanssen (gaylehanssen@gmail.com) regarding potential discounts before registering.

Early deadline: January 24, 2025
Regular deadline: February 5, 2025
Attendee Maximum: 50

	Early	Regular
SEG Member	US$595	US$695
SEG Student Member And 2024 Graduate	US$35	US$55
Non-member	US$695	US$795

All prices are in United States dollars (USD). SEG reserves the right to cancel this event should minimum attendance numbers not be met by January 24, 2025. All registrants will be given a full refund should SEG cancel the course. Cancellation policy, event photography, dietary restrictions, and more are detailed in the SEG Terms and Conditions.