

## **Orogenic Gold in the Arabian Nubian Shield**

This presentation discusses Orogenic Gold deposit formation using the Mineral System analysis questions as the structure for discussion. The talk endeavours to answer the 5 Questions posed in Mineral System Analysis developed by recent Cooperative Research Centres (Australian Geodynamics 1993-2000 and Predictive Mineral Discovery 2001-2007).

- 1 What is the Geodynamic setting?
- 2 What is the crustal architecture?
- 3 What are the fluid sources?
- 4 What are the fluid pathways and drivers?
- 5 What are the deposition mechanisms?

The talk presents a synthesis of the results of over 30 years on-going exploration research into Orogenic Gold deposits in Western Australia. It demonstrates its universal application by analysis of the Arabian Nubian Shield using the giant Sukari gold deposit as a type example.