

OVERBERG GEOSCIENTISTS GROUP (OGG) **& Earth Sciences, The University of Melbourne**

2025 International Gold Presentation Program

The series of presentations by international and local experts listed below will provide new insights into gold placers, and the role of geological settings, structural controls, metamorphism, fluids systems, porphyry gold deposits and igneous petrology in the genesis of primary gold deposits.

Very often we can make scientific advances in understanding our ore deposits by stepping outside pure economic geology into many of the disciplines taught at universities but commonly shelved after that. We intend to revisit some of the familiar sub-disciplines to better understand our gold deposits.

Some of the scientific content here is very new and was presented at the **Gold24 Conference (Perth)**, published in late 2024, or currently under review for the Special Issue of Australian Journal of Earth Sciences evolving from Gold24.

Date (2025)	Speaker	Topic	Time
Thursday 6 March	Prof Dave Crow (University of Otago, NZ)	<i>Placer gold science (without avoiding the Witwatersrand)</i>	Zoom (RSA-South Africa @ 10h00)
Thursday 13 March	Dr Julian Vearncombe (Perth)	<i>Witwatersrand structures and gold</i>	Zoom (RSA, 10h00)
Thursday 20 March	Prof Neil Phillips (Melbourne & Stellenbosch)	<i>Metamorphic waters and some of their golden wonders (Melbourne +9)</i>	Zoom (RSA 10h00)
Thursday 27 March –	Prof John Clemens (University of Stellenbosch)	<i>Formation of Cu–Au porphyry deposits: what we can learn from igneous petrology</i>	Zoom (RSA 10h00)
Thursday 3 April	Dr Bjorn Von Der Heyden (University of Stellenbosch)	<i>Southern African metallogeny with a focus on gold</i>	Zoom (RSA 11h00) (+ In-Person)
Thursday 10 April	Keith Kenyon (Hermanus, RSA)	<i>Why does the Placer vs Hydrothermal Origin for the Witwatersrand Gold Ore controversy still persist</i>	Zoom (RSA 10h00)

Zoom Link: <https://us02web.zoom.us/j/82172892738?pwd=M1NWUkJFYzhqdTJ2Qk0yZ3BrV2srZz09>

Meeting ID: 821 7289 2738; Passcode: Overberg

For information/detail contact Prof. Neil Phillips (Melbourne, Australia; neil@phillipsgold.com.au) or John Bristow (Hermanus, South Africa – jwbdia@gmail.com; m: +27 82 571 3004).

Presenter Profiles

Professor Dave Crow (University of Otago, NZ): Dave is an Emeritus Professor in Geology at University of Otago, where he was researcher and lecturer in applied geology for 35 years. His research interests have focused on gold deposit formation in tectonically active areas, and include both orogenic and placer deposits. A current retirement hobby focuses on beach gold placers and their origins.

Dr Julian Vearncombe (Perth, Australia): Julian is an economic geologist with +30 years' expertise in precious, base and strategic metals, and experience in executive and strategic management, public listings, the identification of key projects on all continents. His career includes academia, technology development, consultancy, management and Director of publicly-listed companies. He has been a member of teams that identified >8 million ounces of gold and one of the world's largest tungsten resources. A focus of Julian's career has been the application of structural geology to mineral exploration and mining, and inventor of SpaDiS™ technologies. Author or co-author of more than 100 publications, a member of the editorial board of Journal Applied Earth Sciences (combined Transactions of AusIMM and IMMM-B) and active in the Australian Institute of Geoscientists (AIG).

Professor Neil Phillips (University of Melbourne & Stellenbosch): Neil completed his PhD working on high-grade metamorphic rocks around Broken Hill (Australia), then documented 90 years of underground gold workings and drilling at Kalgoorlie, ahead of the *Superpit* development. With Prof. David Groves he developed many ideas used in Western Australian gold exploration since the 1980s. He has researched Witwatersrand gold deposits for over 4 decades, applying new ideas to their origin and exploitation. His leadership of exploration and scientific research teams in Australia has impacted concepts of gold exploration and mining programs, and generated an extensive publication record. A great mentor to young and experienced geologists, he regularly conducts community talks and field excursions.

Professor John Clemens (University of Stellenbosch): JC trained as a minerals-industry geologist at RMIT in the early 1970s, and subsequently gained his PhD in the early 1980s at Monash University. He pursued an academic career at Arizona State, Blaise Pascal, Manchester, Kingson-upon-Thames and finally at Stellenbosch, with focus on the formation and physical and chemical evolution of silicic magmas (with minor excursions into mineral physics and nuclear waste disposal). His early specialty was experimental petrology and subsequently concentrated on chemical and isotopic aspects. A particular emphasis has been the Devonian silicic magmas in Victoria and how they inform on crustal structure and tectonics. Now retired, he holds an emeritus position at Stellenbosch, where he continues research. His publications have something like 12,500 citations, with an H-index of 51.

Assoc. Professor Bjorn Von Der Heyden (University of Stellenbosch): Bjorn completed his PhD in geology at Stellenbosch University in 2013 and subsequently spent two years working as a geologist in the South African minerals & mining sector, for Exxaro Resources Ltd. Following exposure to the mining industry, he returned to academia as a lecturer in Economic Geology (University of Stellenbosch). He leads key research projects, generating publications on mineral deposits of southern Africa, and providing quality education to the next generation of African earth scientists.

Keith Kenyon (Consulting Geologist, Hermanus, RSA): Keith started out as head of Gold Research Group at Anglo American Research Laboratories (AARL), then Senior Divisional Research Geologist (Geochemistry) for AA Gold & Uranium Division in 1996. He moved to AngloGold in 1997, then AngloGold Ashanti as Global Manager Geochemistry. Keith joined Uramin plc in 2006 as Technical & New Business Manager and since 2008 he has operated as a Geochemical Consultant. He has +50 years of experience in mineralogy & petrology, mineral chemistry, regolith-geochemistry, exploration geochemistry including litho-geochemistry, applied statistics and ore-body paragenesis, and worked in about 35 Countries.