

## 16<sup>th</sup> SGA BIENNIAL MEETING Plenary Discussion Session

# Lifting the hood on the relationship between academia, industry, and geological surveys

### Organized by Thomas Belgrano<sup>1</sup> and Halleluya Ekandjo<sup>2</sup>

<sup>1</sup>Ore Deposits Hub and the University of Southampton <sup>2</sup>Ore Deposits Hub and iCRAG, University College Dublin

The academic, industry, and government sectors of the minerals community need to work seamlessly and symbiotically if we are to deliver the minerals necessary for the energy transition. Strong opinions and misunderstandings within this relationship abound, so join Ore Deposits Hub and the SGA for a 'group therapy' session between the academic, industry, and geological survey sectors of minerals geoscience.

#### Format

This panel discussion is a collaborative event by Ore Deposits Hub and the SGA, building on their established roles as intermediaries between different sectors of the mineral resources community.

We'll be speaking to representatives from each sector and giving everyone a chance to explain what is actually important for them. We'll then look to the audience and the Ore Deposits Hub moderators for input on how we could better work together to achieve our respective goals, and ultimately deliver the minerals necessary for a carbon-neutral future.

Date and time: Tuesday 29 March 20:30 - 21.30 New Zealand date and time

Further information: email Thomas Belgrano at tom@oredepositshub.com

#### Panelists:



## David Cooke - Centre for Ore Deposit and Earth Sciences at the University of Tasmania

David Cooke is the Director of CODES, the Centre for Ore Deposit and Earth Sciences at the University of Tasmania. He has also been an Associate Editor of Economic Geology since 2001. In collaboration with his students, postdoctoral research fellows and research colleagues, David has been researching hydrothermal and magmatic processes that lead to porphyry copper and epithermal gold ore formation since the mid-1980s. David's team have also been studying geochemical halos to porphyry and epithermal deposits for almost two decades, developing new geochemical exploration tools for the minerals industry, which was recognised with the

inaugural AMIRA International Award for Geoscience Research Excellence in 2012. David received the Society of Economic Geologists' Thayer Lindsley lecturer award in 2005, the SEG Silver Medal in 2013, the Australian Academy of Science's Haddon Forrester King Medal in 2018, and was the SEG Distinguished Lecturer in 2021.



## 16<sup>th</sup> SGA BIENNIAL MEETING Plenary Discussion Session



#### Kathy Ehrig - BHP

Kathy completed a PhD in Geology from the University of California-Berkeley in 1991 and left San Francisco in 1992 to join the former WMC as a research geologist to work on the genesis of the Olympic Dam deposit, and to provide mineralogical support to the metallurgy department. In 2006, she moved to Adelaide to lead the development of the world's largest and most comprehensive geometallurgy program as Principal Geometallurgist for BHP. In 2017, she received a Professional Excellence Award from the AusIMM and Doctor of Science honoris causa from Flinders University in recognition of her contribution to the geological and geometallurgical understanding of the Olympic Dam deposit.

#### Anna Nguno - Geological Survey of Namibia



Anna Nguno is the head of the Regional Geoscience (Mapping) Division within the Geological Survey of Namibia (GSN), Ministry of Mines and Energy. For the past 22 years, she has been a geologist in various posts at GSN, working on the compilation of Geological maps, coordinating mapping and research in collaboration with local and international research institutions, GIS and Remote Sensing, and Geoscience data and information management. Mrs Nguno is a Geoscience Council of Namibia President, a Geological Society of Africa Councillor for Southern Africa, a Secretary-General, Sub-commission for Africa Maps, Commission for the Geological Map of the World, and a member of the AU- African Mineral and Energy Resources Classification and Management System (AMREC / UNFC- AMREC), Technical Working Group.



#### Glen Nwaila - University of the Witswatersrand

Glen Nwaila currently holds a full-time Adjunct Professorship in Economic Geology at Wits University (South Africa [RSA]). His academic qualifications include a PhD in Geology (Univ. Würzburg, Germany), MSc Chemical Engineering (Univ. Cape Town, RSA) and BSc (Hons.) Geology (Univ. Johannesburg (RSA). Glen has over a decade of experience in mining and exploration geology, mineral assets valuation and geostatistics. His current research involves integrating multi-source/scale data with machine learning for optimal decision-making in order to reduce uncertainty in the minerals industry and to unravel ore-forming processes.



#### Sandra Occhipinti - CSIRO

Sandra Occhipinti is Research Director for the CSIRO Mineral Resources Discovery Program. A structural geologist with over 20 years of experience she has worked across the government, industry and academia sectors. Her work has bridged the scales from understanding the tectonic development of a region to vectoring to ore deposits at the district and prospect scale using geology, geophysics, mineralogy and geochemistry. Her recent work in mineral systems science includes integrating multi-scale interdisciplinary datasets in order to complete multicommodity analyses that include integrating 4D geological domain knowledge into the analyses. She also worked in project generation within regions throughout Australia, areas in South East Asia and the Americas.



## 16<sup>th</sup> SGA BIENNIAL MEETING Plenary Discussion Session



#### Robert Kaemba - First Quantum Minerals Ltd.

Robert is Exploration Manager – Zambia, with First Quantum Minerals Ltd. leading a Multi-disciplinary Team in the Sediment Hosted Copper search space. He was trained at the University of Leicester (2007), and has been in Industry since, working on grassroots exploration Programmes as well as brownfield and advanced stage Projects. He was part of the Team that made the Southeast Dome (Kansanshi) satellite-deposit discovery, and has further led work on the Phoenix Copper Project, Kipushi (Zambia - DRC border) and the Fishtie -Kashime Cu-Co deposit, Mkushi. Robert is also Fellow of the Geological Society of London and a Fellow of the Society of Economic Geologists (SEG), and is currently serving as Vice President of the Geological Society Of Zambia (GSZ).

#### Thomas Belgrano – Moderator and organizer

Thomas is a Post-doctoral Researcher working on precious and critical metals in VMS systems at the University of Southampton. He has worked in Canadian mineral exploration, holds a BSc from Victoria University of Wellington, and a PhD from the University of Bern, where he worked on field, geophysical, and remotely sensed mapping of hydrothermal systems in the Alps and Oman. In April 2020, he co-founded Ore Deposits Hub, and continues to guide the development of the platform.



#### Halleluya Ekandjo – Moderator and organizer

Halleluya Ekandjo is a second year PhD Candidate working on the geochemistry and mineralogy of the Rosh Pinah Zn-Pb-Ag (Ba) deposit, Namibia. Halleluya graduated with an MSc in Economic Geology from the University of the Witwatersrand in 2017, and a BSc (Honours) from the University of Namibia in 2014. She has spent most of her professional time exploring for base metals in Namibia. She enjoys geoscience communication.