

8th SGA-IUGS-SEG-UNESCO Short Course on African Metallogeny

9 – 13 October 2023, Johannesburg, South Africa

2nd Flyer: Provisional programme and final call for registration

The organizing committee has put together a detailed lecture, social and field programme. The provisional programme is available. Delegates are requested to register and pay to confirm their attendance.

ORGANIZERS: Society for Geology Applied to Mineral Deposits (SGA); DSI-NRF CIMERA (Centre of Excellence for Integrated Mineral and Energy Resource Analysis); UNESCO; Society of Economic Geologists; IUGS-RFG.

The role of Mineral Wealth in the Energy Transition – Southern Africa

This short course will address the broader context of the achievability of the energy transition by considering the available mineral resources in southern Africa and unpacking the role that southern Africa can play. New concepts and methodologies for sustainable and energy-efficient mining and ore processing will be presented.

We will visit mines actively involved in broadening their energy mix by the rapid deployment of cleaner, renewable energy.

The energy transition frequently makes news headlines and dinner party conversations. But does society really understand the mineral requirements to meet the ambitious targets set by politicians?

Southern Africa is heavily dependent on fossil fuels, specifically coal, for its primary energy requirements. Southern Africa also hosts a multitude of mineral commodities required for the energy transition, including vanadium, PGE's, manganese, copper, cobalt, CRMs, etc. As another driver, southern Africa is challenged by frequent electricity outages, which is causing many industries to speed up the expansion of their energy-mix portfolios. Wind, solar, geothermal, hydropower, tidal and biomass all potentially have a role to play.

Registration Fees (€)

LECTURES:

Students	200 €
Academia/government/parastatal	500 €
Industry	900 €
Online participation	100 €

FIELDTRIPS (all inclusive):

Students	200 €
Academia/government/parastatal	400 €
Industry	600 €

Banking details

In Southern Africa:

Bank name: First National Bank
Account Number: 62615873149
Branch Name: MAIN STREET 051
Branch Code: 251705
Swift Code: FIRZAJJ
REF: 05.05.079991.20.16700.0

Outside Southern Africa:

Bank name: Credit Suisse
Address: Postfach 500, CH-8070 Zurich, SWITZERLAND
Account holder: SGA
IBAN (International bank account number): CH4604835181963192000
BIC (Bank identification code): CRESCHZZ80A

Registration

The deadline for registration is **15 September 2023**, and the deadline for online registration is **2 October 2023**.

Registration link: https://docs.google.com/forms/d/12oxeHKNfz8s_d3LOcJuACfHgKA5ujYGWodPMza79XqI/viewform?edit_requested=true

Contact information

General information:
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The role of Mineral Wealth in the Energy Transition – Southern Africa

Provisional Lecture Programme – 9 to 11 October 2023, JBS Park, University of Johannesburg

SPEAKER	AFFILIATION	PROGRAM ITEM
MONDAY 9 OCTOBER 2023		
REGISTRATION – JBS Foyer, JBS Park, Kingsway – Bring ID/passport for access.		
Nikki Wagner	DSI-NRF CIMERA	Opening ceremony
Doug Silver	Denver (USA)	Keynote: Materials required for the energy transition: global perspective
Discussion		Panel Q&A
TEA		
Judith Kinnaird	DSI-NRF CIMERA (South Africa)	Energy transition in southern Africa
Stefanie Weise	Shango Solutions (South Africa)	Mineral commodities of southern Africa: review of resource and reserves, specific focus on minerals required for the energy transition
Sarah Gordon	SATARLA (United Kingdom)	Environmental social governance (ESG) in the context of the low carbon economy: what does it mean?
Discussion		Panel Q&A
LUNCH		
Sumaya Khan	CSIR (South Africa)	Placing the South African mining sector in the context of a circular economy transition
Sue Webb	University of the Witwatersrand (South Africa)	Advances in exploration geophysics and role in the energy transition
Jerry Ahadjie	African Development Bank Group	Strengthening Africa's role in the battery and electric vehicle value chain
Discussion		Panel Q&A
BREAK		
Rokhaya Samba Diene	Geological Survey (Senegal)	Mineral resources in West-Africa: potentialities and opportunities for energy transition
Melba Wasunna	Base Titanium (Kenya)	Energy Transition in East Africa: Opportunities for the Mining Industry
Discussion		Panel Q&A
TUESDAY 10 OCTOBER 2023		
REGISTRATION – JBS Foyer, JBS Park, Kingsway – Bring ID/passport for access.		
		Welcome and Announcements
Gavin Mudd	RMIT (Australia)	Use of mine wastes in the energy transition
Beate Orberger	Géosciences Conseils (France)	Titanium dioxide- and Aluminium production residues: Important resources for Scandium, Gallium, Vanadium and Niobium
Daniel Franks	University of Queensland (Australia)	The development minerals and materials of development
Discussion		Panel Q&A
TEA		
Karen Hanghoj	British Geological Survey (United Kingdom)	Critical minerals for the energy transition: why critical minerals are different and why they are not
Jock Harmer	Rhodes University (South Africa)	REE in permanent magnets: from source to use
Judith Kinnaird	University of the Witwatersrand (South Africa)	PGE and their role in clean energy
Discussion		Panel Q&A
LUNCH		
Desh Chetty	Mintek (South Africa)	Extraction of Li, Cu, Co, Mn, phosphates for the energy transition
Bertus Smith	University of Johannesburg (South Africa)	Manganese and South Africa – A match made in history, a relationship for the future
Markus Reichardt	Sustainability for NextSource Materials Inc (global)	The need for graphite in the energy transition and occurrence in Africa
Discussion		Panel Q&A
BREAK		
Mikhail Nikomarov	Bushveld Energy (South Africa)	Vanadium, uses now and in the future
Mmilili M. Mapolelo	Botswana Institute for Technology Research and Innovation (Botswana)	Mineral Beneficiation: Towards Value Addition to the Mining Industry in Botswana
Discussion		Panel Q&A
WEDNESDAY 11 OCTOBER 2023		
REGISTRATION – JBS Foyer, JBS Park, Kingsway – Bring ID/passport for access.		
		Welcome and Announcements
Peter Venn	Seriti Green (South Africa)	Coal company and the energy transition
Tafeeq Dhansay	Council for Geoscience (South Africa)	Geothermal energy and its potential role in the energy supply of southern Africa
Kgothatso Nhlengetwa	Imbokodo Mining Services (South Africa)	Artisanal and Small Scale Mining in Africa and its Potential Role in the Energy Transition
Discussion		Panel Q&A
TEA		
Joel Gill	Cardiff University (United Kingdom)	The UN Sustainable Development Goals: Driver and Beneficiary of a Just Energy Transition'
Norton Titus	Ministry (Namibia)	Repurposing Thermal Power Plants from Coal to Nuclear. A case for SMRs or Traditional Reactors
Final discussion and closure of lecture series.		No lunch @ JBS

Provisional Field Programme

DATE	PROGRAM ITEM
FIELD EXCURSION 1a: Wits Mining Institute ADVANCES IN MINING TECHNOLOGY FOR THE LOW CARBON ECONOMY (max 60 people)	
Wednesday 11 October	Arrival at the Wits Mining Institute (WMI)
	Presentation by Prof Glen Nwaila WMI Director, Chamber of Mines
	Lunch & visits (Divide into 2 groups)
	Group 1: Lunch (20 mins)
	Group 1: Digimine (15 mins)
	Group 1: Simulated tunnel visit (40 mins)
	Group 2: Simulated tunnel visit (40 mins)
	Group 2: Lunch (20 mins)
	Group 2: Digimine (15 mins)
	Depart WMI
	TBC
	TBC
	Transfer back to hotel / JBS Park
	End of day
FIELD EXCURSION 2: Visits to mines (max 40 people)	
Thursday 12 October	Depart hotel for JBS Park
	Depart from JBS Park for Brits: Vanadium Mine
	Mine visit
	Lunch
	Transfer to Polokwane
	Arrival at hotel (The Ranch, Polokwane)
Friday 13 October	R&R
	Braai dinner
	Breakfast and check out
	Depart for Mogalakwena Mine
	Visit Mogalakwena
Friday 13 October	Lunch
	Depart for JHB
	Arrival at JBS Park & completion of the field excursions





Provisional Social Programme

DATE	TIME	THEME	PROGRAMME ITEM
Sunday 8 Oct	Arrival in JHB		
	17:00	Shuttle	Shuttle from hotel to venue UJ JBS Park, Kingsway (max 5 min car ride from hotel). Please bring ID / passport for access.
	17:00 – 18:00	Registration	JBS Park Foyer.
	18:00 – 20:00	Ice-breaker	Ice-breaker party, welcome reception at the University of Johannesburg JBS Park. African traditional group performance.
	20:00	Shuttle	Back to hotel.
Monday 9 Oct	08:30	Shuttle	Shuttle from hotel to venue UJ JBS Park, Kingsway (Max 5 min car ride from hotel). Please bring ID / passport for access.
	18:00	Shuttle	To short course dinner (venue tbc).
	18:00 – 20:30	Shuttle	Back to hotel.
Tuesday 10 Oct	08:45	Shuttle	Shuttle from hotel to venue UJ JBS Park, Kingsway (Max 5 min car ride from hotel). Please bring ID / passport for access.
	18:00 – 20:00	Shuttle	Geoquiz or panel discussion evening?
Wednesday 11 Oct	08:00	Shuttle	Shuttle from hotel to venue UJ JBS Park, Kingsway (Max 5 min car ride from hotel). Please bring ID / passport for access.



Travel and Accommodation

Many airlines fly directly to Johannesburg. *Uber* is recommended for ground transport.

For fieldtrips, the accommodation, transport and meals are included in the proposed price. Many types of accommodation are available around the University of Johannesburg.

Visa Requirements

Letters of invitation will be sent to pre-registered delegates on request.

Number of participants

The lecture sessions can accommodate up to 80 people in person. The field excursion may be limited to 40 people, depending on site-access requirements.

Target Audience

Geoscience students and early-career professionals with an interest in mineral deposits and the energy transition are encouraged to attend. There will be ample opportunity for networking with specialists in this field and industry partners. Speakers will include international experts from academia and industry.

Language

The workshop will be held English.

Organizing Committee

Nicola Wagner

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Edmund Nickless

IUGS Chair: Resourcing Future Generations Initiative, United Kingdom

Kombada Mpohjeni

UNESCO

Samba Rokhaya, Malick Faye and Doro Niang

Geological Survey of Senegal