



# Relevance of the GSSA in the Past, Present and Future

GSSA Online Talks Series

06 April 2020



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# The Past



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# The History Books

## FOUNDING OF THE GEOLOGICAL SOCIETY

The discovery of gold on the Witwatersrand in 1886 caused the scientific and technical centre of gravity to shift from Kimberley to Johannesburg. With this concentration of the geological, mining and financial fraternity in the infant Johannesburg, the scene was set for the foundation of the Geological Society of South Africa.

This took place on Monday February 4, 1895 in the Council Room of the Transvaal Chamber of Mines in Market Street, Johannesburg.

Dr Hugh EXTON MD, FGS was in the chair and elected as the first President. David DRAPER FGS the midwife - was elected secretary and treasurer.

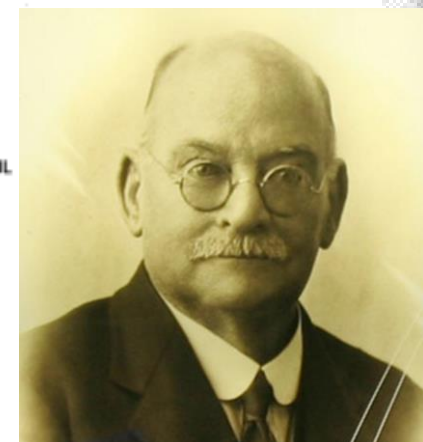
A constitution based upon that of the Geological Society of London was adopted by the Council of the Geological Society of South Africa.

### FOUNDING COUNCIL

Honorary President: Lionel Phillips  
Honorary Vice President: Prof. Thomas Rupert Jones  
Honorary Vice President: Dr William Guybon Atherstone

The founding Council for 1895 consisted of:

President: Dr Hugh Exton  
Vice Presidents: Arthur Robert Sawyer and John Ballot  
Members: Charles Aburrow  
Arthur Sackville Boucher  
Edward Button  
John Alexander Chalmers  
John Storey Curtis  
Sydney Howard Farrer  
A.R. Goldring  
Adolf Goetz  
Harry Dennis Griffiths  
John Dempster Green



Leopold Graham  
Edward Jones  
John Henry Johns  
Elwin Baldwin John Knox  
Theodore Reunert  
William Marshall Philip  
Eben Kamper-Vosa  
Franklin White  
Cunningham Wilson-Moore  
Peregrine Oliver Wilson  
David Draper (Secretary)

## TRANSACTIONS

### THE GEOLOGICAL SOCIETY OF SOUTH AFRICA.

No. 1.

INAUGURAL ADDRESS BY THE PRESIDENT, DR. EXTON, F.G.S.  
(Delivered April 8th, 1895.)

Gentlemen.—At the meeting in February at which the Geological Society of South Africa was first instituted, you did me the very great honour of placing me in the chair as the first President of the newly-formed Society. I mentioned at that meeting, as some excuse for my shortcomings, that for some years I had not been directly engaged in geological work; and I, therefore, feel the greater responsibility which devolves upon me in presiding over this unusually important meeting—a meeting which I may say marks a distinct epoch in the life of the Rand, and I trust I may say also, in the history of science in South Africa.

As a Society, we feel proud of the number of members who have joined our ranks, not only of specialists who are in active work in the field of geology, and those whose duties in connection with the mining industry secure them a very practical acquaintance with the rocks and their stratification; but also that much larger class who have neither time nor opportunity to make an elaborate study of geological phenomena, but whose aspirations are to know something of the structure of the earth upon which they live! These papers which are already promised to the Society cannot fail to offer many attractions, and, I trust, many advantages also.

The Council of this Society has taken much pains in drafting a series of rules and regulations which have been amended and accepted at the general meeting held on the 11th March. It is hoped they will be found to be of such a nature as will conduce to the well-being and prosperity of the Society. If at any future time it may be considered necessary to revise or alter these regulations, I may point out that it will be desirable to devise some means of reaching the non-resident members and of obtaining an expression of opinion from them upon the working of our rules and upon any suggested alteration.

# The Founding Father

DAVID DRAPER, D.Sc.

19

DAVID DRAPER, D.Sc.

(Read 24th February, 1930.)

By Harold S. Harger, F.G.S.

[PLATE I.]

The year 1929, just closed, was probably one of the saddest in the annals of the Geological Society of South Africa, on account of the loss of two of its most distinguished members: Dr. David Draper and Dr. P. A. Wagner. The former, as founder, might well be termed the father of the Geological Society of South Africa, as Andrew Geddes Bain, a contemporary of his younger days, has been termed the father of Geology in South Africa. Dr. Wagner, on the other hand, was one of the younger school, who had built up, by his brilliant, scientific attainments, a very high reputation throughout the geological world. It fell to the lot of Wagner to pay his last respects as a pall bearer at the funeral of Dr. Draper, and none of us thought on that occasion that our esteemed young geological confrere was destined very soon to follow his old friend to everlasting rest. Their labours have ended, and it is for us to record our appreciation of their efforts in the annals of the society they have both served with such distinction.

**Harger, H.S.**, David Draper, Dsc. Transactions of the South African Journal of Geology, Volume 33 Number 1, Jan (1930), p. 19–30.

*Historia*, 63, 2, November 2018, pp 17-39

**David Draper: The making of a South African geologist**

Suryakanthie Chetty\*

## Abstract

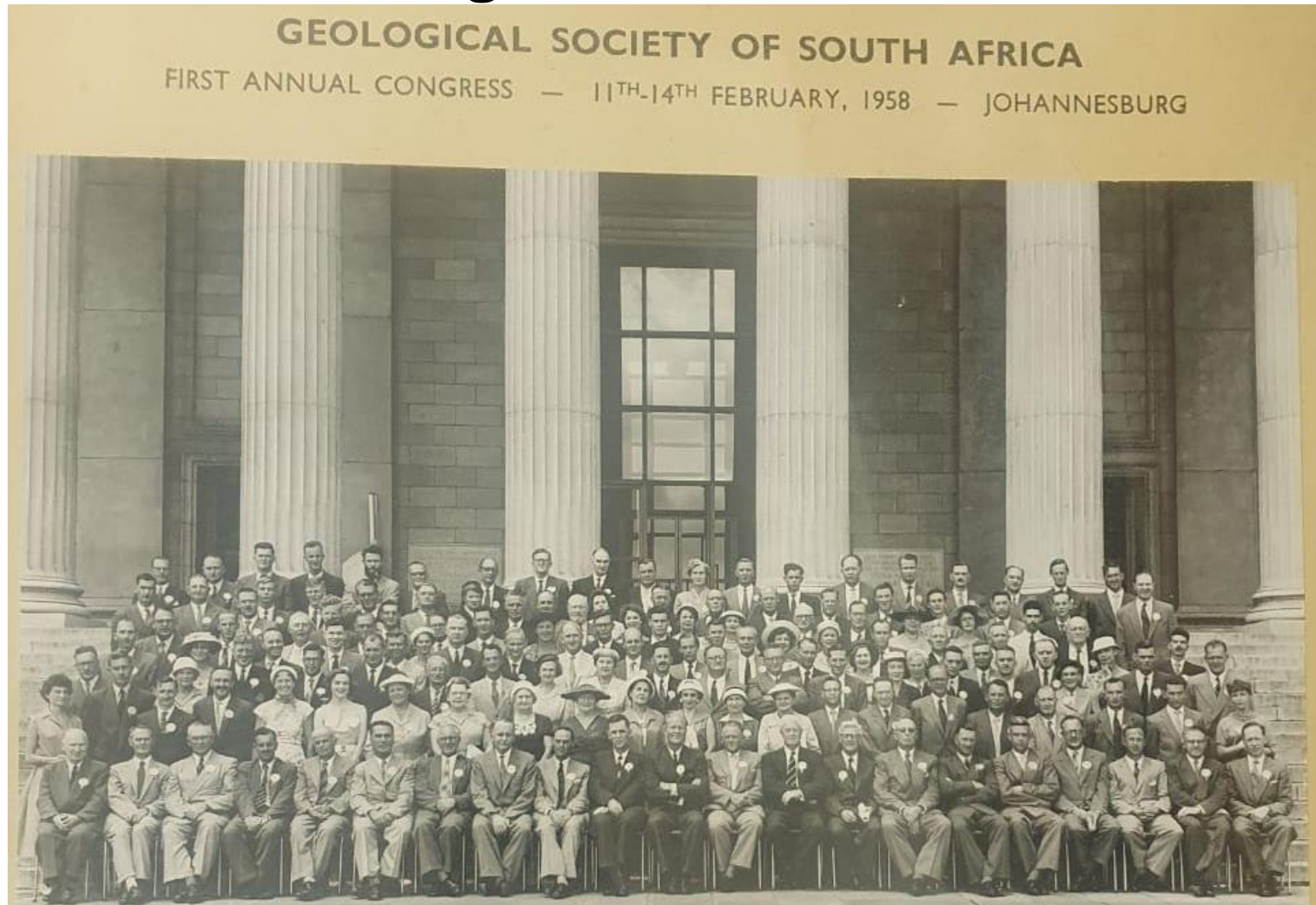
David Draper was a South African geologist and key figure in the professionalisation of geology in the late nineteenth and early twentieth centuries. His biography demonstrates the importance of geology in South African political, economic and social history. This article traces Draper's life from the mid-nineteenth century to the mineral discoveries and the South African War in the early twentieth century. It uses the figure of Draper to show the complexities and tensions in the creation of a South African identity that were themselves reflective of the political and ideological struggles of a nascent nation. It further argues that the history of geology cannot be divorced from the history of the country, mirroring the processes of colonial domination, conflict and ultimately, the creation of an independent state.

**Keywords:** David Draper; geology; science; 1820 settlers; South African War; Geological Society of Southern Africa; imperial history; Molengraaff.

**Chetty, S. (2018).** David Draper: The making of a South African geologist. *Historia*. 63.10.17159/2309-8392/2018/v63n2a2.



# The First Geocongress



# The Present



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# What is the GSSA?



- Established in 1895 (125 years old)
- The GSSA is a professional society with the aim of being the professional 'home' to academic, government and industry earth scientists with an interest in African geology, mining and geoheritage
- A 'Learned' AND a 'Professional' Society
- Stay networked to your local and global community of practice



# The Historical Objectives of the GSSA



- To promote and advance the study of the earth sciences
- To promote the best interests and relevance of the earth sciences, the earth science professions, and earth scientists
- To promote, serve and represent the best interests of the GSSA membership
- To uphold high professional and ethical standards amongst its members for the professional and public good
- To promote cooperation and synergy with related structures and societies in Africa



# Membership Profile



- Currently ~3100 members
- ~2500 members and fellows
- ~600 student members
- Professional membership is by application with all applications vetted.
- Members must abide by the constitution and code of ethics
- Membership reflects the number of earth science and geological science registered with SACNASP
- ~80 % of members employed in industry, mining in particular
- ~10% are international (outside SA)

# Our Core Business



- Publishing
  - Scientific publications
  - Networking publications

- Meetings
  - Scientific meetings
  - Skills training
    - e.g. CP Training
  - Field excursions



- Networking
  - Branches and Divisions
  - Website and Newsletter



- Professional Affairs and Advocacy



# GSSA Portfolios



**Meetings  
& DPP**



**Professional  
Affairs**



**Membership &  
Transformation**



**Communications  
& Publications**



**Finance & Admin**



**Academic  
Affairs**



**Fellows  
Committee**



**Branches and  
Divisions**



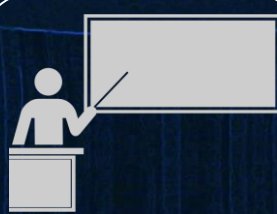
# GSSA Committees and Representation



**Complaints  
Committee**



**Ethics  
Committee**



**CPD  
Committee**



**REI Fund**



**Editors**



**SACNASP**



**Council for  
Geoscience**



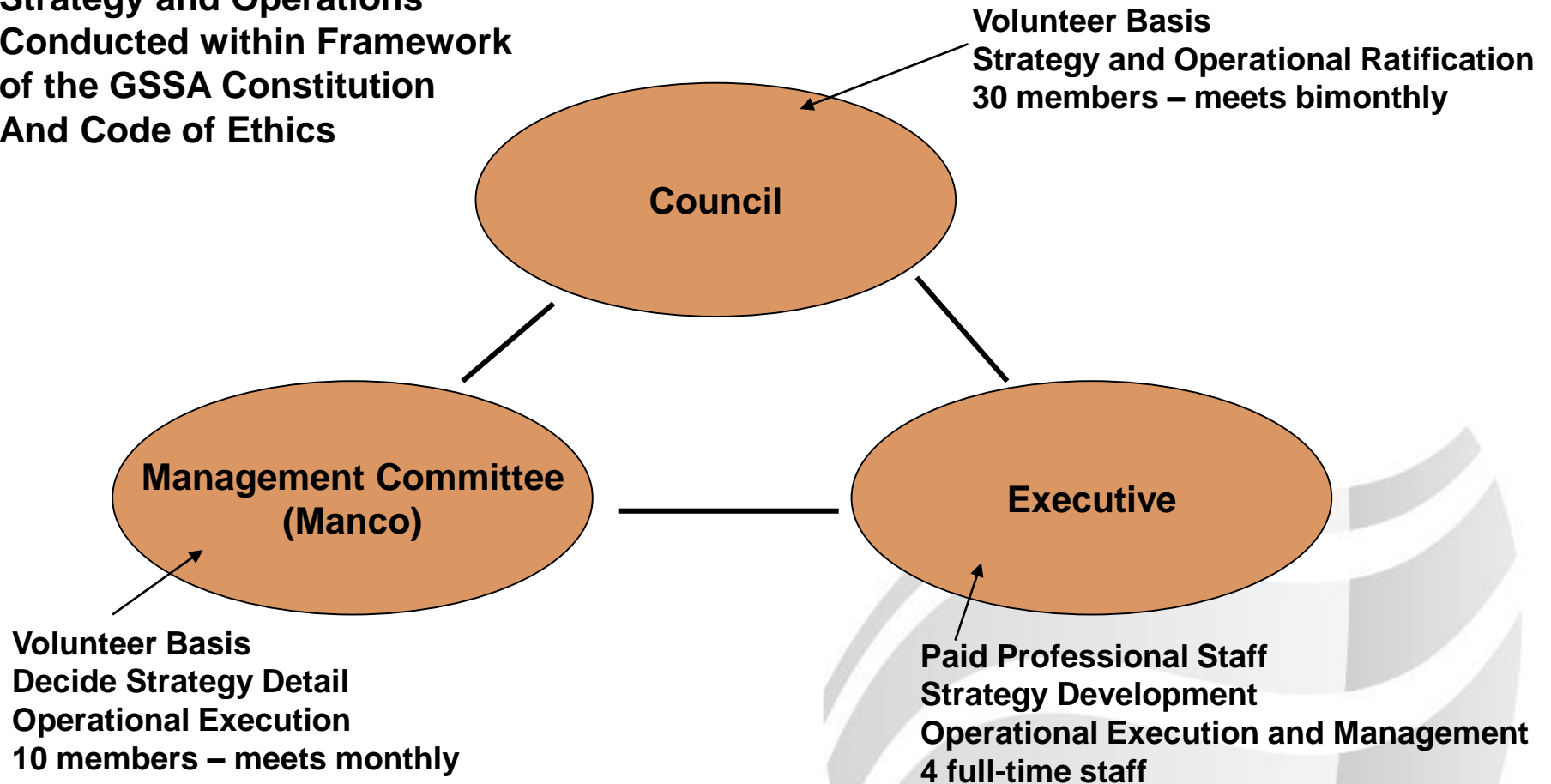
**Samcodes Standards  
Committee**



**Geology Museum  
Committee**

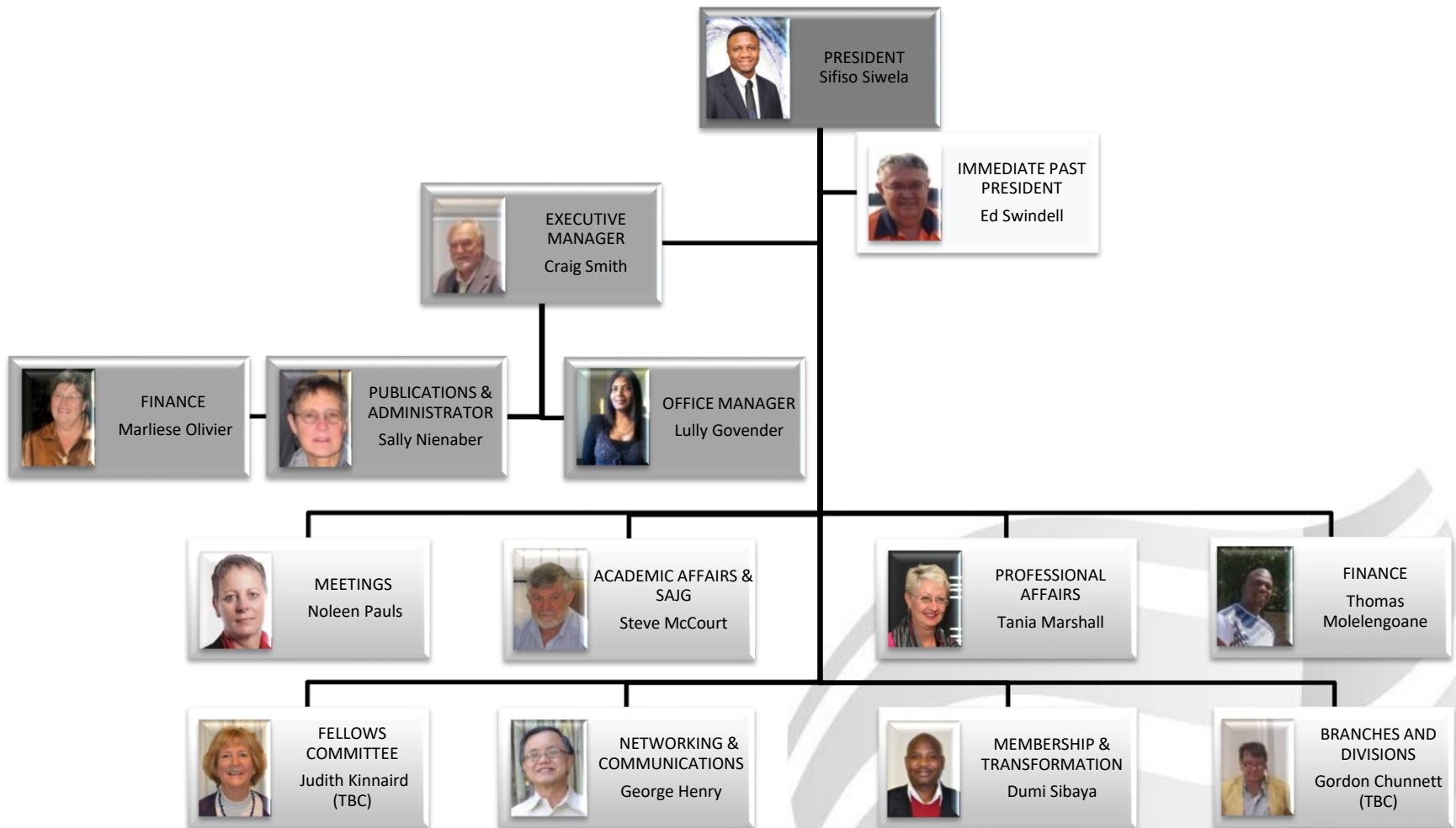
# GSSA Operations

**Strategy and Operations  
Conducted within Framework  
of the GSSA Constitution  
And Code of Ethics**










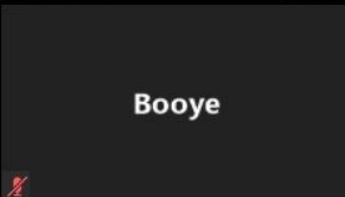
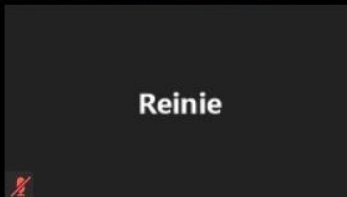


# Manco and Staff





# Council

 Lukep	 ssiwela	 chatton	 Natalie Brand	 Grant Bybee
 Robyn Ormond	 Tania Marshall	 Riaan Botes	 Steve	 Thomas
 Masibulele Zintwana	 Dumi Sibiya	 Mike Knoper	 Noleen	 Craig Smith
 AlexMasonApps	 joshuak	 Gillian Drennan	 andries	 Graham
 Marcia van Aswegen	 Gordon C	 F Roelofse	 Booye	 Reinie

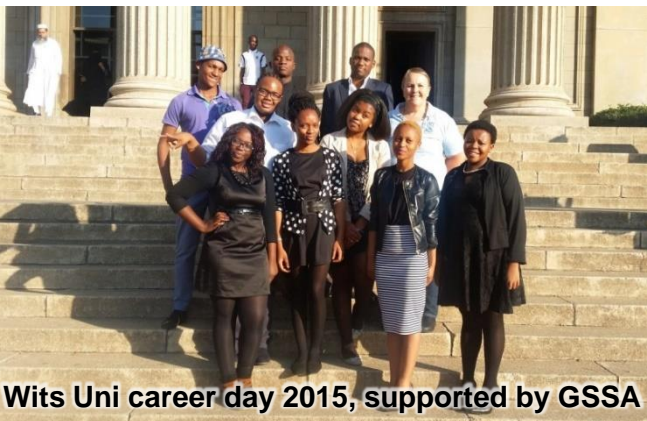
# Membership



Maths & Science Expo Limpopo 2016



Maths & Science Expo Limpopo 2017



Wits Uni career day 2015, supported by GSSA

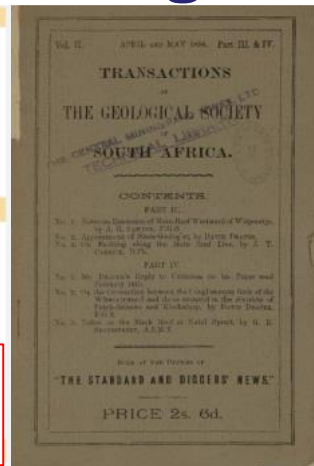
- GSSA Membership spans from high school level, through professional life right through to retirement.
- **The GSSA provides 6 membership categories to accommodate all prospective candidates:**
  - Junior member at high school level;
  - Student Member at university level;
  - Member at early career level;
  - Fellow at +5 years career level;
  - Affiliate Member for non earth scientists;
  - Institutional Member for companies in geoscience.
- The Membership Portfolio promotes earth sciences to the youth through career days and outreach initiatives at high school level.



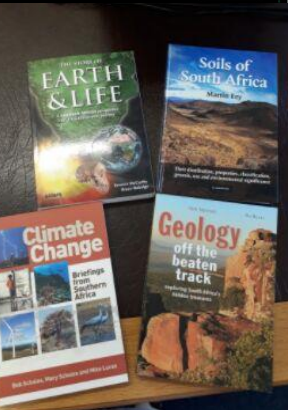
# Publishing and Communications



**Editors:**  
**Marlina Elburg**  
**Mike Knoper**



**Editor:**  
**Trishya Owen-Smith**



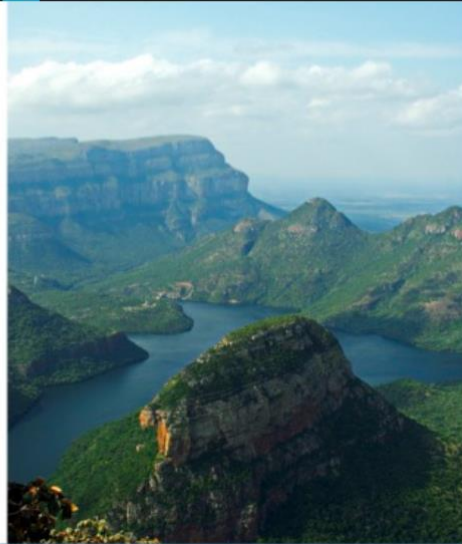
- **SAJG:** Peer-reviewed journal, now in its 124<sup>th</sup> year of publication.
  - **The Richard Viljoen Heritage Collection:** The 1896 to 1999 issues of the **SAJG** and its precedent, the **Transactions of the GSSA**, are now available to all at no cost via Sabinet ([www.sabinet.co.za](http://www.sabinet.co.za)).
- **Geobulletin:** A quarterly news bulletin with up to date earth science news and informative articles.
- **Monthly GSSA e-Newsletter:** Members are kept abreast of the latest developments in the geoscientific community and news about our society.
- **Social Media:** Regular updates on global news, conferences, workshops, job openings and government policy affecting membership. Follow us on **LinkedIn**, **Facebook** and **Instagram** (@geological\_society\_of\_sa)
- **Website:** Visit [www.gssa.org.za](http://www.gssa.org.za).



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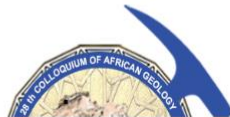


# Website



**THE GEOLOGICAL SOCIETY OF SOUTH AFRICA**

*Promoting the study and advancement of earth sciences since 1895*



## Highlights

Wandering continents of the Indian Ocean



Lew Ashwal  
Wits University



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# Website – Corona Communication

← → ↻ ⓘ Not secure | gssa.org.za ☆ ⓘ



NEWS ▾

PUBLICATIONS ▾

CONTACT US ▾

MEMBERS ▾

EVENTS ▾

*agree with views expressed and do not accept responsibility for inaccurate reporting.*



[Learn more about Coronavirus here](#)

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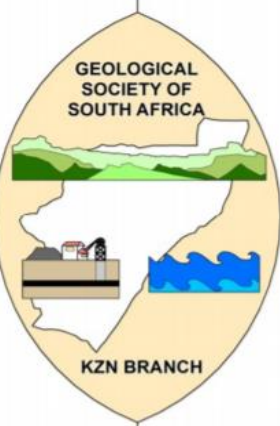
# Branches and Divisions




- Western Cape
- Barberton
- UniVen
- Fort Hare
- Eastern Bushveld

Northern Cape branch  
Geological Society of South Africa









Mineralogical Association  
of South Africa

A specialist Division of the Geological Society of South Africa  
[www.gssa.org.za/minsa](http://www.gssa.org.za/minsa)









# REI Fund



- GSSA manages a Research Education and Investment Fund which disburses R300 to R400K annually for earth science research (student travel and research costs supported in particular)
- 1 April 2019 = 16 applications received, 12 were approved at a cost R477k.
- REI Colloquium held bi-annually
- Investments managed via an Investment Company



# Role of the GSSA re Meetings and Training



VP Meetings – Noleen Pauls: [info@gssa.org.za](mailto:info@gssa.org.za) or [noleen@fastmail.fm](mailto:noleen@fastmail.fm)

Date	Event	Venue
19 – 21 February	Drilling Methods in Johannesburg	Mandela Mining Precinct, JHB
25 - 26 February	SAMCODES Conference	Birchwood Hotel, JHB
18 March	SAMOG Code in JHB	Mandela Mining Precinct, JHB
15 April	CPD Workshop	Mandela Mining Precinct, JHB
30 April	Bushveld PGE Day	Glenhove Conference Centre, JHB
21 May	Hydrothermal and alteration systems short course	Glenhove Conference Centre, JHB
19 June	Geoskills "pop-up" event	TBC
29 June – 1 July	Geocross 20	Stellenbosch
16 July	Mineral Rights in South Africa: the current state of affairs	JHB
16 July		Johannesburg Country Club Auckland Park, JHB
14 – 16 August	Advanced structural geology field trip	KZN
20 August	3-D Geological modelling	Glenhove Conference Centre, JHB
September	Diamond Conference	Kimberley
16 – 18 September	Drilling Methods	Avianto, Muldersdrift
8 October	CPD Workshop	Mandela Mining Precinct, JHB
16 October	REI colloquium	JHB
22 October	Project Management for geologists	JHB
6 November	Geoskills "pop-up" event	TBC
11 November	Fellows Dinner	Johannesburg Country Club Woodmead
12 -13 November	Technology Day African Exploration Showcase	Glenhove Conference Centre, JHB

## First Competent Person Training Course

All News ▶

28th July 2014

Coffey senior principal Ken Lomberg was among the presenters at the recent Competent Person Training Course for the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC).



Ken Lomberg (far left) at the event

Ken is Chairman of the SAMREC Working Group and presented with past Chairman Ed Swindell and the South African Council for Natural Scientific Professions' Rolf Bekker.

About 50 people attended the event in Johannesburg, with most being geologists and mining engineers.

The course addressed the background and historical context of SAMREC, its relationship with other codes used by the industry and the role of the competent person.

The day concluded with a presentation on an update to the code currently being implemented by the SAMREC Working Group.



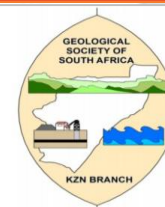
## SAMCODES CONFERENCE 2020

Good Practice and Lessons Learnt

Industry Reporting Standards

18–19 August 2020

Glenhove Events Hub, Melrose Estate, Johannesburg



## 2018 Alex Du Toit Memorial Lecture

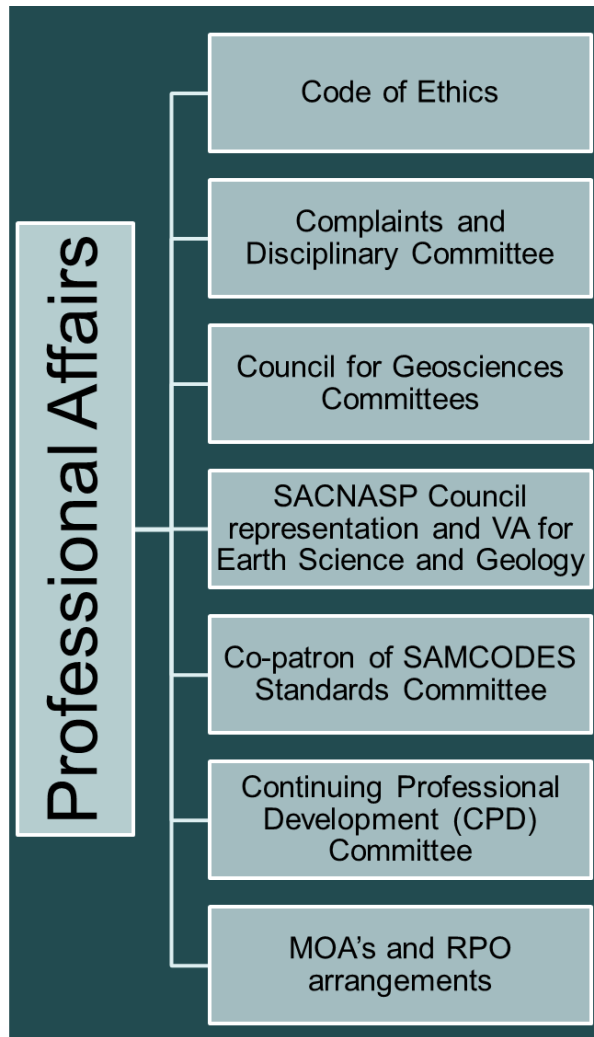
*"Wandering Continents of the Indian Ocean"*



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# Professional Affairs



□ The Portfolio serves to advance, promote and protect the professional status of GSSA members through:

- Identifying the professional needs of members
- Ensuring that appropriate educational, registration, CPD, professional indemnity insurance and reciprocity needs are addressed;
- Supports the concept and training of Competent Persons

# The 3 Pillars of Professionalism in Geoscience



## REGISTRATION

- Statutory/Professional (SACNASP)
- Confirmation of qualifications, experience, character



## CONTINUING PROFESSIONAL DEVELOPMENT

- Career-long personal process
- Self-driven by each professional.



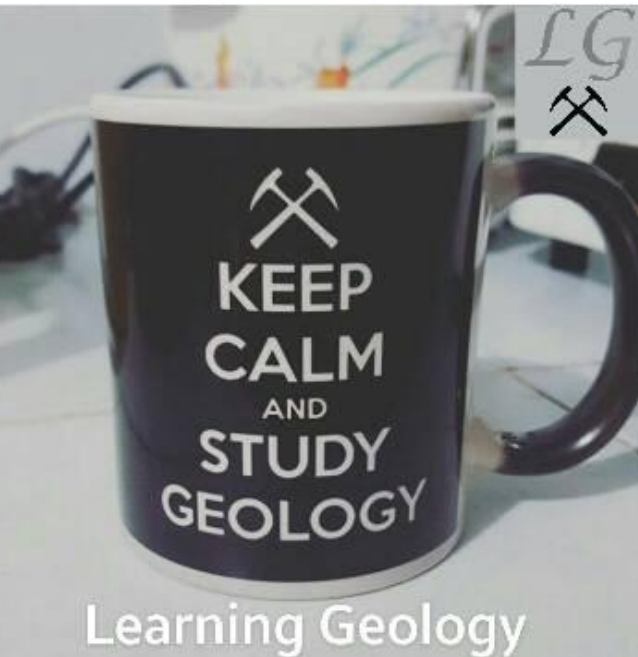
## PROFESSIONAL CONDUCT

- Codes & Standards
- Complaints & Disciplinary
- Geoethics

COMPETENCE



# Continuing Professional Development



- *Members shall continue their professional development throughout their careers and shall actively assist and encourage those under their direction to advance their knowledge and experience (Code of Ethics, GSSA)*
- *Members shall not take on the functions of an expert in fields other than their own or accept professional obligations that they are not competent to discharge (Code of Ethics, GSSA)*
- Competence vs Qualification
- Competence an ever changing goal and career long pursuit
- GSSA and SACNASP MOA to coordinate and rationalise CPD systems is in place
- GSSA CPD system currently a matter of voluntary log keeping
- Mandatory system is up and running



# The Future of ...



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# Relevance – the Next 125 Years



## GEOCONGRESS 2020 Postponed

*Stellenbosch - Western Cape*

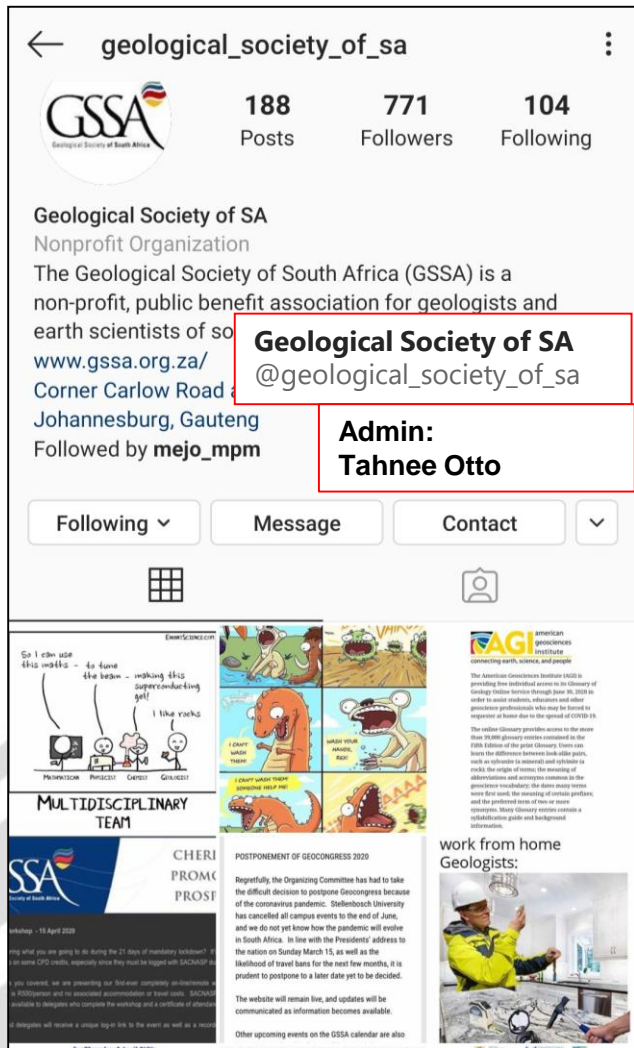
The next 125 years of Earth Sciences



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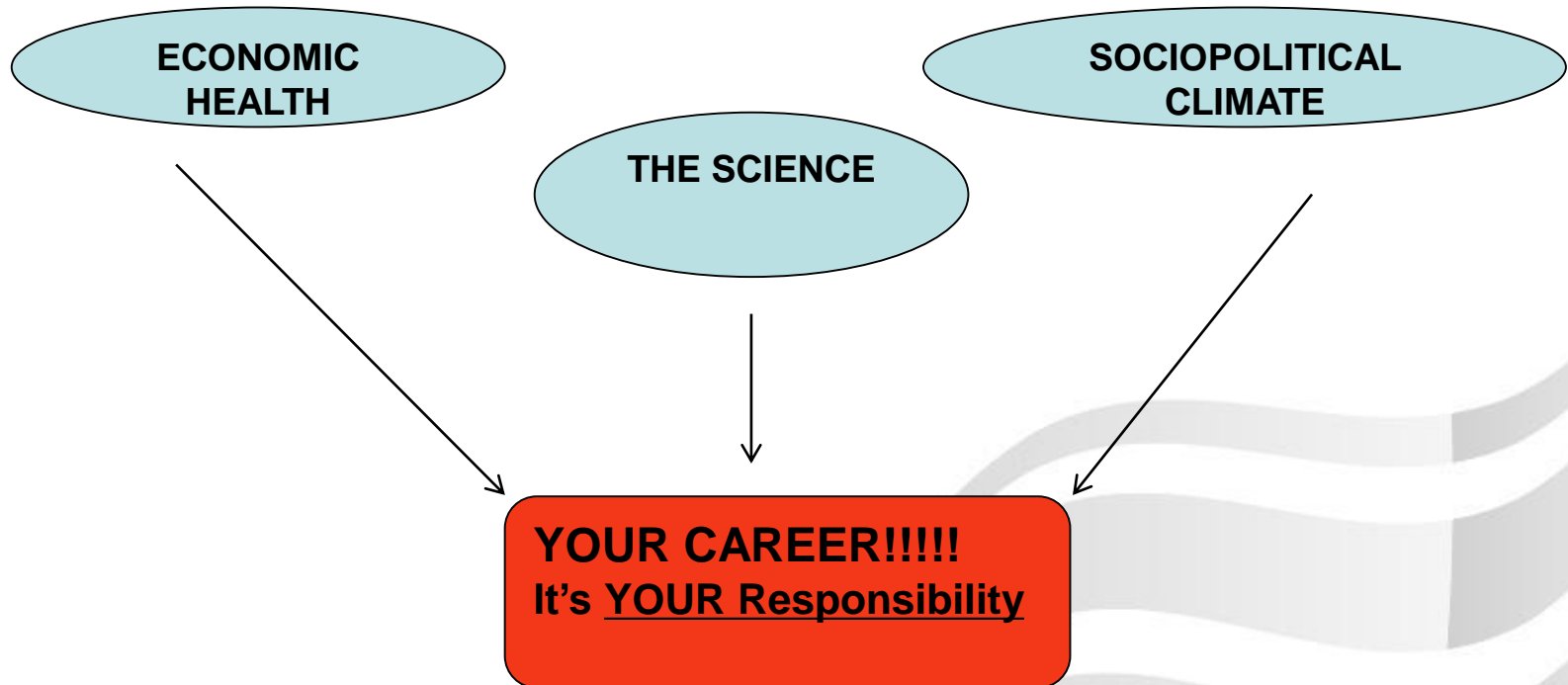
# Remote Working and Connectedness

Government:  
work from home  
Geologists:



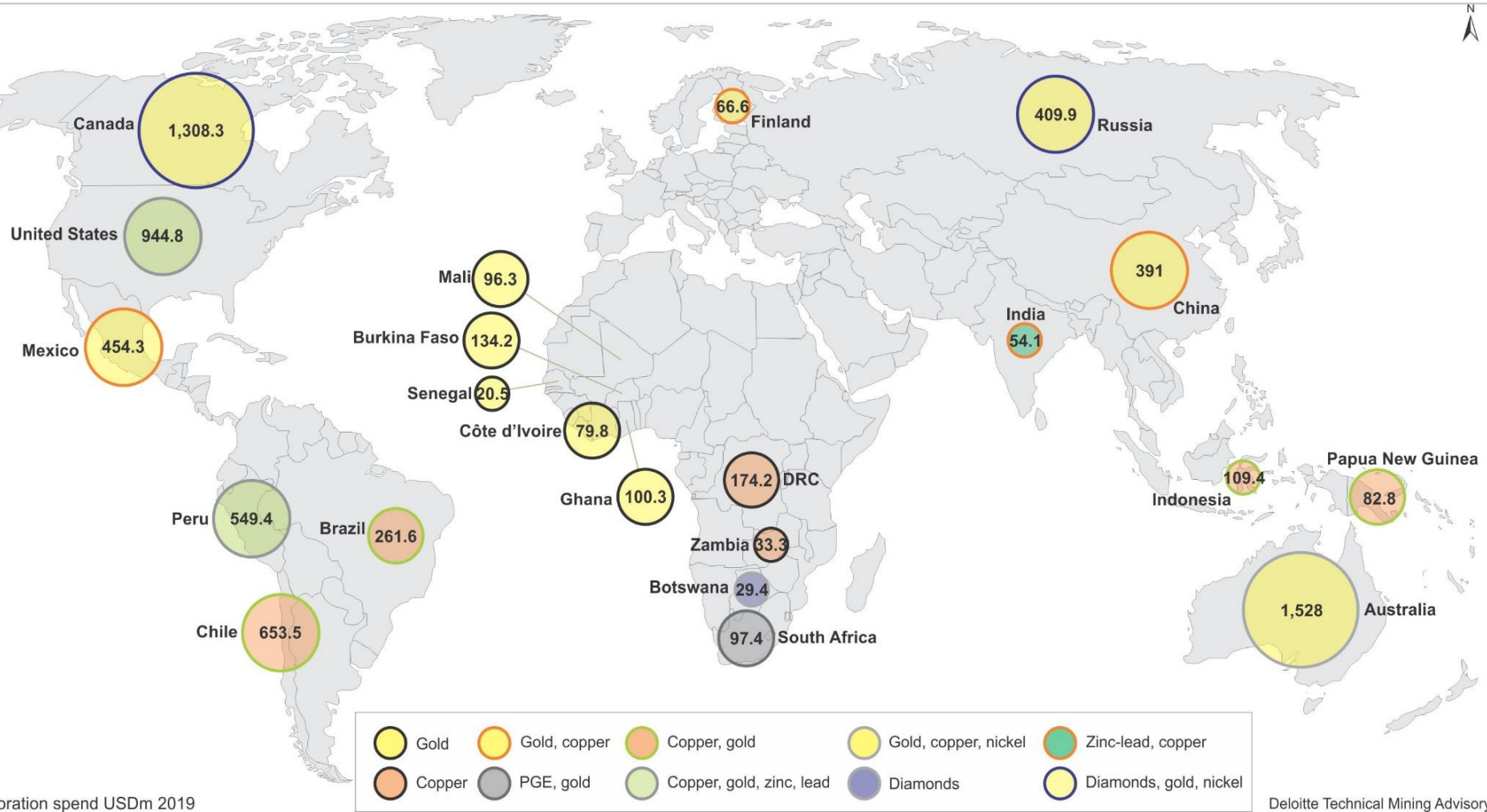
# The Landscape

## Economic – Sociopolitical - Scientific





# The Exploration Landscape – non-ferrous metals

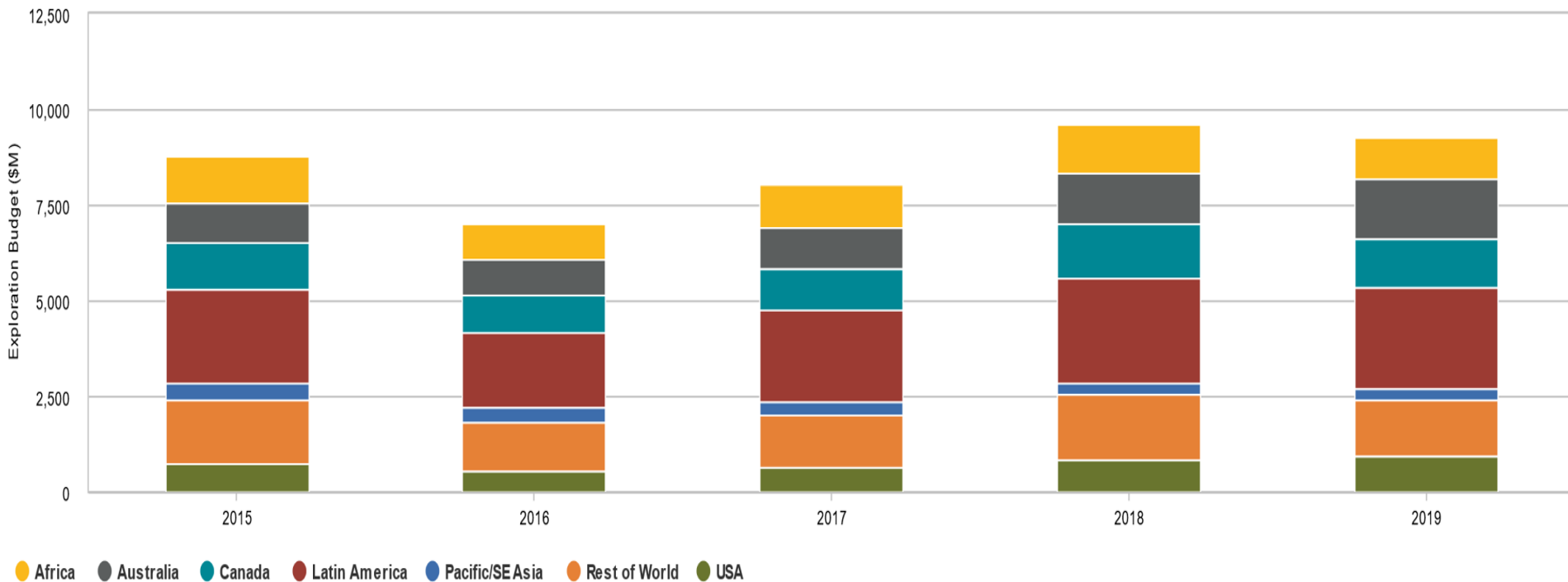


# Global Exploration Budget - Location

## Exploration Budget Trends

Stage(s): Grassroots, Late Stage & Feasibility, Minesite

Company Type(s): Major, Intermediate, Junior, Government, Other



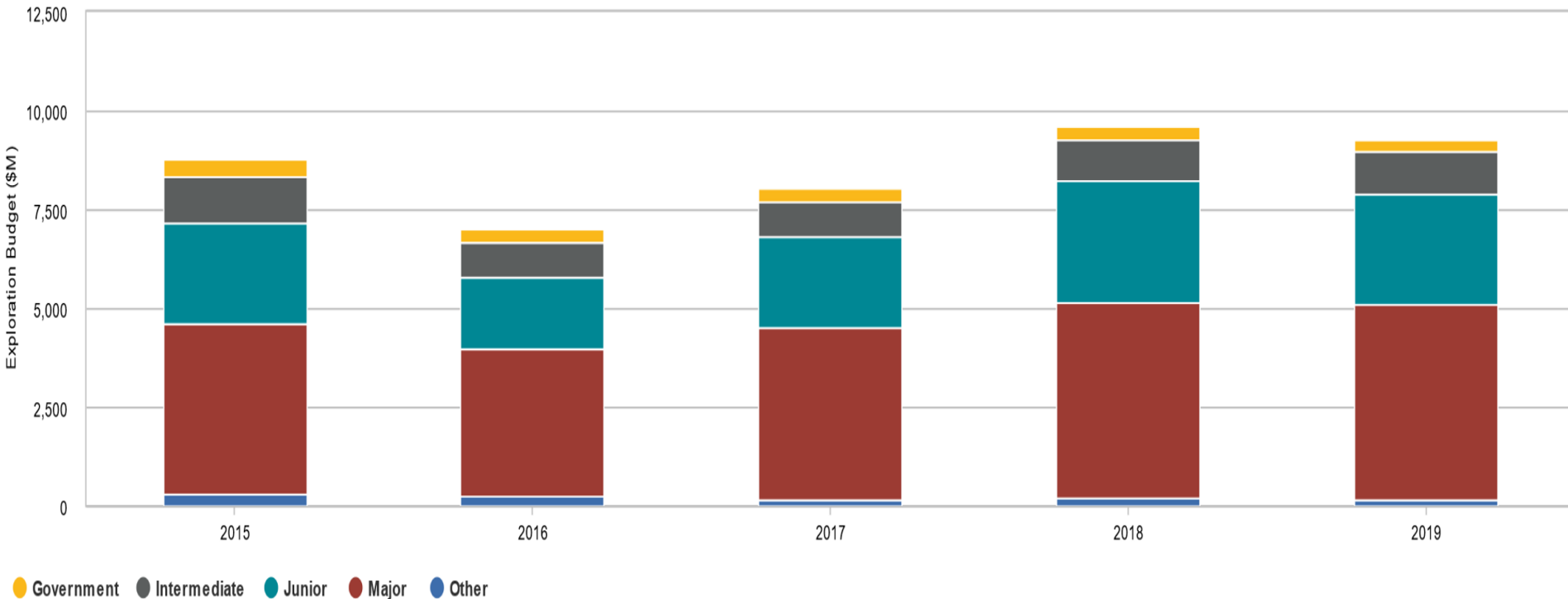
Source: S&P Global

# Global Exploration Budget – Company Type

## Exploration Budget Trends

Location(s): Africa, Australia, Canada, Latin America, Pacific/SE Asia, Rest of World, USA

Stage(s): Grassroots, Late Stage & Feasibility, Minesite



Source: S&P Global

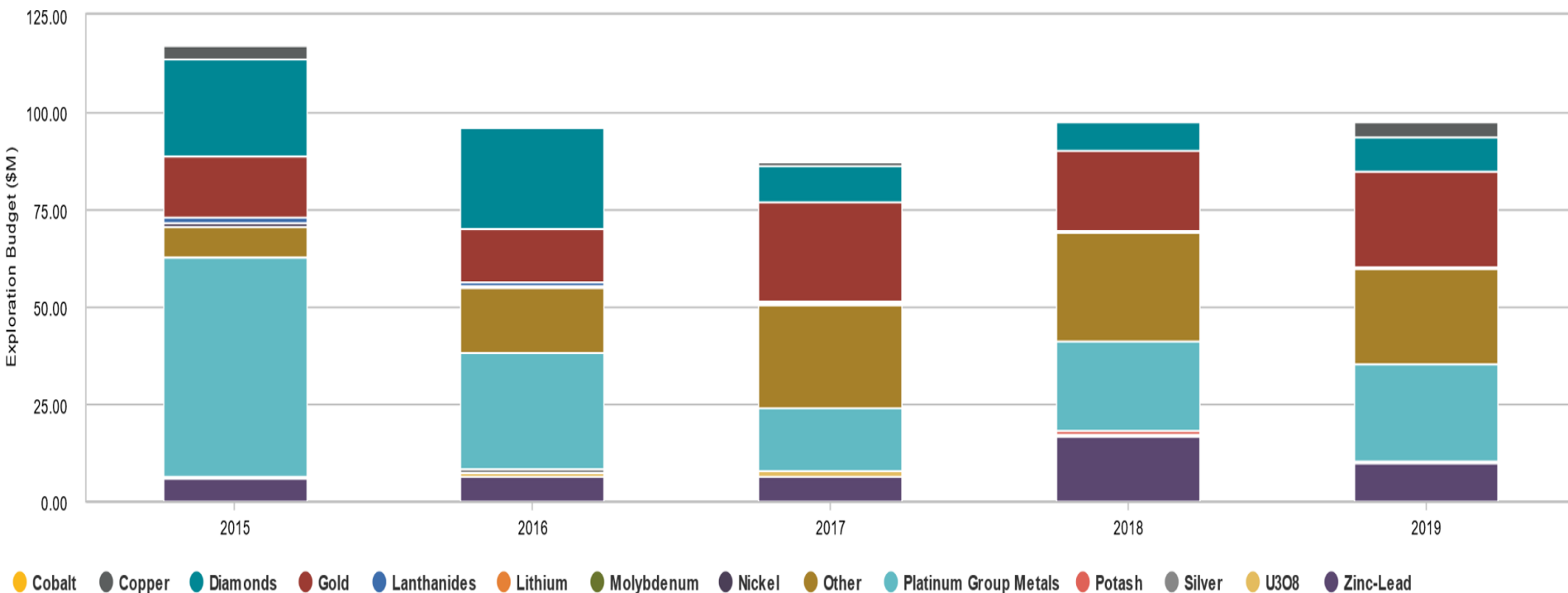


# Local Exploration Budgets

## Exploration Budget Trends

Stage(s): Grassroots, Late Stage & Feasibility, Minesite

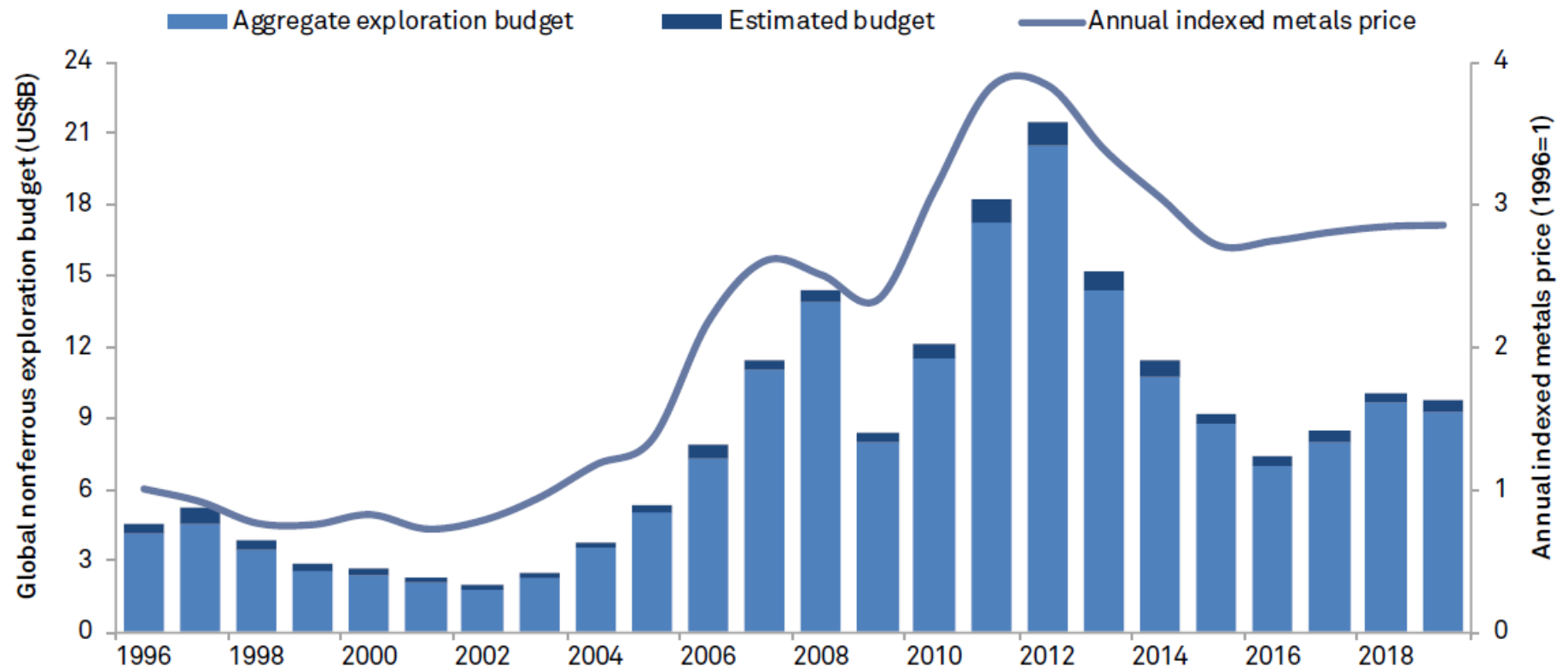
Company Types(s): Major, Intermediate, Junior, Government, Other



Source: S&P Global

# Global Exploration Budget & Metals Price index

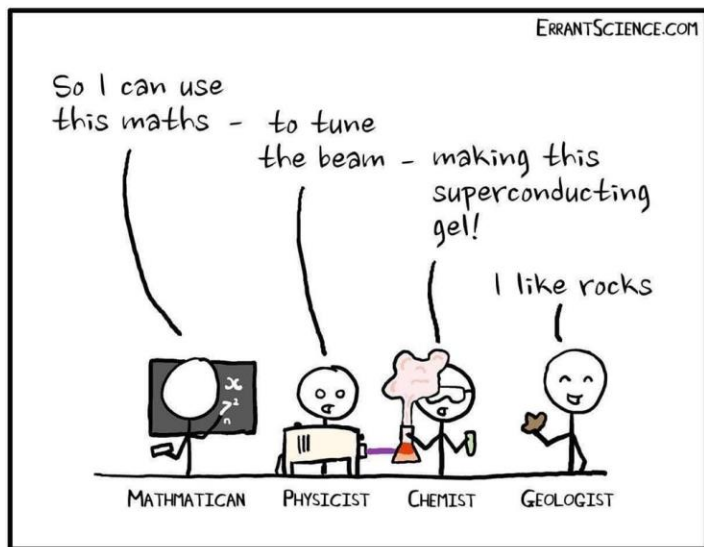
## Nonferrous exploration budgets vs. indexed metals price, 1996-2019



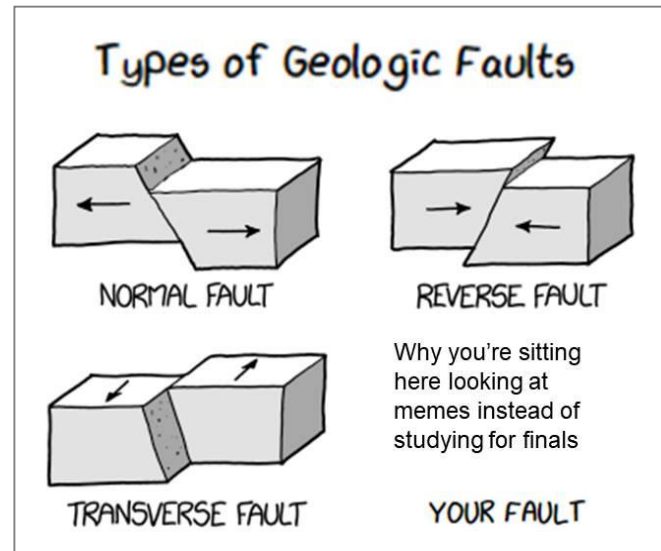
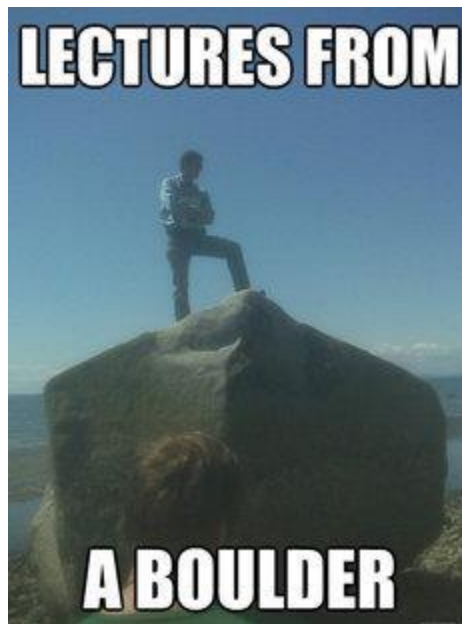
Data as of Oct. 9, 2019.

Source: S&P Global Market Intelligence

# New Age Geologist



MULTIDISCIPLINARY  
TEAM





# Issues and Opportunities

- The world is changing fast and is suffering an economic crisis never before experienced – but earth scientists are more crucial to our society than ever before. And they will be more responsible to society than ever before.
- Mineral resource requirements will continue to increase in the long term, as will the need for sustainable development, more R&D, education of the public, and environmental sustainability.
- The Community of Practice will become more complex and multidisciplinary in response to long term societal needs; the GSSA will need to support its members in their professional endeavours.

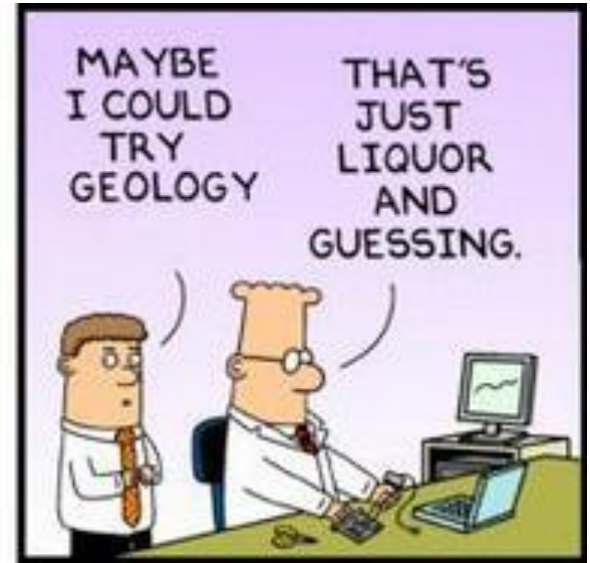
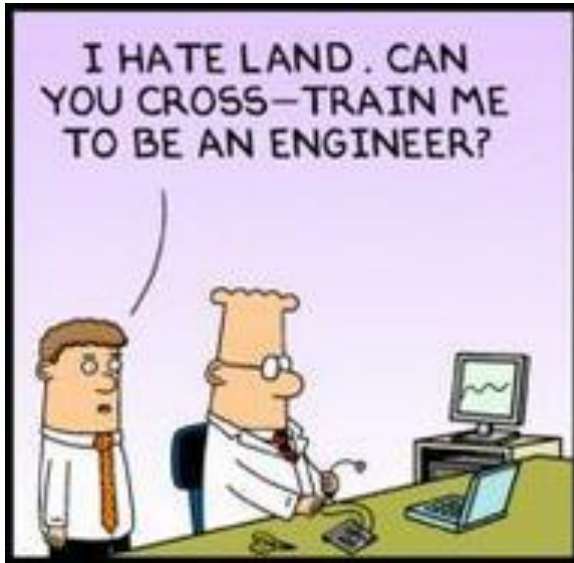


# The Future of...

- Work
- Conferencing, webinars, AGM
- Communication
- e-Learning
- Journals and Geobulletin
- CPD
- Surveys
- Mentorship
- Geoheritage and Public Series, Geology Museum
- Branches and Divisions
- SAMCODES
- Regional societies synergies
- Geocongress at SUN and 125<sup>th</sup> Celebration



# The End



## WEBSITE

[www.gssa.org.za](http://www.gssa.org.za)

## EMAIL ADDRESS

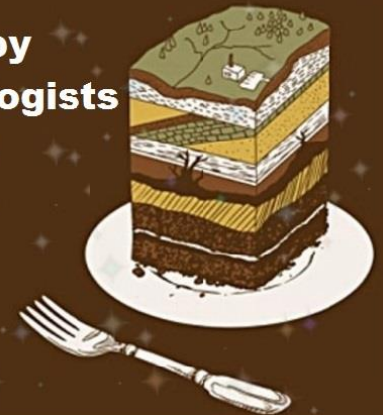
[info@gssa.org.za](mailto:info@gssa.org.za)

## PHONE NUMBER

011 358 0028



**Happy  
Geologists  
Day!**



**GSSA**  
Geological Society of South Africa

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