

DIAMONDS FROM EXPLORATION TO MANUFACTURING

20 - 30 JUNE 2022

OVERBERG GEOSCIENTISTS GROUP





CPD POINTS

GSSA = 3216 Part A or B **SACNASP - 4**2 Part A or B

ONLINE PRESENTATION SERIES

FIRST CIRCULAR

The last half century has seen a massive shift in geological thinking and technological development across all facets of diamond exploration, mining, recovery, manufacturing, and marketing spectrum. Recently synthetic gemstone diamonds have taken an important place alongside natural gemstone-diamonds and jewellery. Blockchain technology is coming to the fore to ensure 'source to sale-point' tracing and integrity.

However, in spite of the very significant advances in all forms of technology applied to the diamond, 'pipeline', it is notable that diamond sector has not seen a new world-class (Tier-1) diamond mine since 1991. In addition, most existing mines have progressed, or are progressing, to underground operations with the concomitant reduction of rough diamond production. The Argyle diamond mine, famous for producing rare pink-diamonds, closed in November 2022, and several other small operations and projects have also closed. Interestingly, in late-2021 both De Beers and Rio Tinto announced they would pursuing new exploration ventures in Angola, and in January 2022 De Beers advertised for an Exploration Programme Manager in Botswana.











MORE INFORMATION

In this context, the OGG in conjunction with a team of prominent local and international experts, SADPO (which represents the Small and Junior alluvial and kimberlite producers), and the GSSA, is offering a ten-part series covering the complete range of diamond exploration, evaluation, mining, processing, recovery, manufacturing, and marketing.

This course provides participants with exposure to the latest developments in diamond exploration, geophysics, structural studies, kimberlite petrology and mineralogy, diamond formation, mantle indicator and fine diamond applications. It further covers the full ambit of primary (kimberlites and lamproites) and secondary (land and marine based alluvial) diamond deposits, including the evaluation, mining and exploitation, processing and diamond recovery from these deposits, as well as marketing and sales.

It is pitched at fourth-year university students, researchers, and industry professionals looking update their knowledge of this fascinating industry.

VIRTUAL SHORT COURSE OUTLINE

PART A: 20 - 24 JUNE

- Introduction to the diamond industry
- Diamonds and their origin
- Diamond exploration
- Kimberlites and lamproites
- Mantle Indicators as applied to diamond exploration
- Micro/macro diamond relationships

PART B: 27 - 30 JUNE

- Alluvial diamond deposits
- Mining, processing and recovery methods
- Diamond valuation and project evaluation
- Discussion + Concluding Remarks

FIELD TRIPS

- 1(a) Cullinan Diamond mine (Petra Diamonds) (Anton Wolmarans) (20 persons)
- 1 (b) Helam Fissure diamond mine (Swartruggens) (Jim Davidson) (10 persons PPE)
- 2 (a) Kimberley Mine Museum & Nodule Dumps (Jock Robey) (20 persons)
- 2 (b) Blue Rock diamond mine (Ulco, Ghaap Plateau, Kimberley region) (Jock Robey) (20 persons PPE)
- 2 (c) Middle Orange River (MOR) alluvial operation between Douglas and Prieska (Lyndon De Meillon) (20 persons)
 - Visit to Diamond-tender (auction) House in Johannesburg (Grant Ziegler)(20 persons)

MORE INFORMATION ON THE FIELD TRIPS

Currently the intention is to undertake the field trips during in July 2022 which could change in the event that Covid challenges and lockdowns necessitate a change of dates. Participant numbers will be restricted and a first-come first serve situation will apply.

Trips 1a, b will be run over two consecutive days out of Johannesburg/Pretoria, and Trips 2a, b, c over three consecutive days out of Kimberley. Participants will be required to make their own travel and accommodation arrangements to Cullinan and Helam, likewise Kimberley, and to the Johannesburg Tender House. The organisers will assist with overall arrangements and shared transport arrangements, recommend suitable cost-effective accommodation in Kimberley, advise on meeting points, and provide Technical documentation for Field and Mine trips. The visit to the diamond tender house (Trip 3) in Johannesburg will take place in July by special arrangement, is limited to twenty persons, and on a first come first serve basis.

PRELIMINARY PROGRAMME

COSTS

Online Short Course

- GSSA, SADPO, & OGG members R7000 | (US \$470) for the full online Course, or R3500 (US \$235) per Part A or Part B
- Non Members R 7500 | (US\$500) for the full online Course, or R3800 | (US \$250) per Part A or Part B
- Registered University Students R2000 | (US \$135) for the full online Course;
 R1000 | (US \$70) per Part A or Part B
- Pensioners R2000 | (US \$135) per person; R1000 | (US \$70) per Part A or Part B

Field and Tender House Trips

- Cullinan and Helam R500 | (US \$35) per person; no-cost for online course participants
- Kimberley Diamond Museum & Dumps, Blue Rock, and MOR R500 (US \$35) per person;
 no-cost for online course participants
- Johannesburg Tender House Visit R500 | (US \$35) per person; no-cost for online course participants

For further information, background, and sponsorship offers please contact one of the following:

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