



Mineralogical Association of South Africa

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07 June 2008

Dear Maryse

REQUEST TO HOLD THE IMA GENERAL MEETING IN 2014 IN SOUTH AFRICA

As a division of the Geological Society of South Africa (GSSA) the Mineralogical Association of South Africa (MINSA) hereby requests to be given the opportunity to host the IMA General Meeting in South Africa in 2014.

Introduction

Because of a number of important factors, we believe that MINSA and South Africa are in an ideal position to organize and host an outstanding IMA General Meeting in 2014. South Africa, as a country with a large and active mining and mineralogical industry and strong geological and geochemical research initiatives, would be a highly appropriate host for an international mineralogical conference. Most of the mines and mineral occurrences are close to good infrastructure and easily accessible. In addition mine and land owners are generally cooperative and supportive when it comes to visiting their properties.

Other easily accessible southern African countries also boast some outstanding geology and mineral fields including Namibia, the Great Dyke of Zimbabwe, the Copperbelt of Zambia/DRC and the exciting new goldfields of Tanzania.

South Africa can also boast with a high concentration of automated mineralogical equipment such as Qemscan and MLAs.

During the meeting we plan to supplement international contributions with a showcase of South African examples of excellent research in the field of mineralogy and to simultaneously provide South African scientists with exposure to cutting edge research from the rest of the world. It would also be a wonderful, and affordable, opportunity to expose young scientists and students from Africa to both the local as well as the international mineralogical environment.

Venue and Timing

The proposed venue for the conference is Misty Hills Country Hotel and Conference Centre in the Muldersdrift area near Johannesburg. After evaluation of several potential venues, including various university campuses and conference facilities at game reserves, this is the preferred venue. It is about 65 km from OR Tambo International Airport, Johannesburg, by road. The venue has excellent conference rooms, 20 in total, accommodating anything between 20 and 800 delegates, and is equipped with the latest audiovisual systems, as well as suitably trained support personnel, the latter aspect being less well provided at the various game reserve venues investigated. Accommodation and catering is excellent, ranging from executive suites, to single, double, and family rooms for delegates who may bring accompanying participants (eg. spouses and children) along to South Africa. Cheaper student accommodation is also available in the vicinity. Theme evenings and a conference dinner are part of the venue's standard package, this being a very important feature as the social program will enable the organising committee to share aspects of South African Culture with our international visitors. One of the advantages of this venue compared to either universities or other conference centres close to one of the major South African cities, is that all delegates are in close proximity during and after the technical sessions. This facilitates easier informal networking and discussions in a less rushed setting. There are additional Country Lodges in the area for further accommodation

The conference is planned for the month of either July or September, which seems to be the timing of previous meetings. During these months, the climate is characterised mostly by sunny days with cooler nights. The area is malaria free.

Technical Sessions

The content of the technical sessions will reflect all the most important topics of our science in the form of invited plenary lectures and special symposia and will cover all the traditional fields of mineral sciences as well as locally and internationally relevant topics such as artisan-scale mining and basic, but effective, mining/beneficiation practice aimed at the second economy; the minerals industry as applied to the rural population (i.e. bead and jewelry making enterprises); mine related environmental mineralogy such as acid mine drainage; radioactivity; cross-continental transport of dust and climate change/ global warming; space (star) dust; and industrial mineralogy.

In addition, various workshops such as an industrial minerals workshop with field excursion, a workshop on fluid inclusions and others can be organized.

Possible Field Trips

It is proposed to offer a variety of field trips varying in duration from 1 day to several days. Possible trips may include:

Extended trips – 2 to 6 days

a. *Greenstone Belts and Mineralization*

Barberton Mountain Land including stratigraphic traverses of the large variety of exceptionally well preserved volcanic rocks and associated sediments including the type section of komatiites, first identified and described from this region.

Visits to layered ultramafic complexes and their mineralization as well as some of the gold mines in the district can be followed by a trip through the Kruger National Park.

The Palabora complex could then be visited as well as a number of mineral deposits (e.g. copper, zinc, antimony, gold and emeralds in the well mineralized Murchison greenstone belt.

b. *The Platinum Trail*

Visit to the well exposed eastern limb of the Bushveld complex where the various components of the layered sequence including chrome seams near the base, PGE mineral horizons further up and magnetite bands near the top are well exposed. Visits will be made to a number of PGE and chrome exploration projects and mines. Eastern Bushveld platinum mines and andalusite mines outside Lydenburg and some tourist sites in Mpumalanga and/or Pilgrims Rest are possible.

The trip can end with a visit to the Potgietersrust lobe and some of the exciting new mines and prospects on the Platreef

c. *Fluorspar, Base Metal and Uranium mineralization*

Visits to Buffalo, Vergenoeg and Witkop fluorspar as well as the Spoedwel copper deposit can be made during this trip.

d. *The NW Cape Base Metal Province*

The trip will incorporate the Mississippi valley type Pb-Zn deposits of the Transvaal dolomite followed by a variety of volcanogenic and Sedex base metal deposits including the Gamsberg Zinc deposits, Black Mountain Pb, Zn, Cu, Ag deposit and Okiep copper deposits.

The trip could also incorporate pegmatite and alluvial and kimberlite (Finch Pipe) diamonds.

e. *The Copperbelt*

Field trip to examine the regional setting, current exploration initiatives and research studies on the Copperbelt in Zambia and the DRC.

f. *Marine and Aeolian diamond and heavy mineral deposits of the west coast*

This trip will incorporate visits to marine and aeolian diamond deposits of the west coast from Port Nolloth in the north to Lamberts Bay, including the heavy mineral Namaqua sand deposits, in the south.

g. The Tanzanian Gold Province

The trip will include the mineralization of the Tanzanian craton as well as visits to a number of prospects and operating mines.

Optional visits to the Serengeti Plain and Olduvai gorge (site of important hominid discoveries) as well as the Ngorongora crater and volcanic highlands of the eastern Rift valley are also planned.

h. Copper Nickel Deposits of Botswana

The geological setting, exploration, mining and current research at the Pikwe/Selibe and Phoenix/Selkirk deposits of Botswana.

i. Namibia

A field trip to Namibia can include post collisional pegmatites, gemstones and industrial minerals in central Namibia. Deposits of mesothermal gold and metallogeny of northern and central Namibia can be included

One day mine visits and Field Trips

A number of one day field trips and visits to mines within easy reach of the Johannesburg area are planned.

a. Mine visits

- i. A Witwatersrand gold mine in the West Rand Area
- ii. An underground PGE mine in the Rustenberg area
- iii. The Premier Diamond Mine near Pretoria
- iv. Shear hosted gold deposits – precursors to the discovery of the Witwatersrand – the historic, Strubens Valley, Kromdraai and Blaauwbank mines.
- v. The Nkomati Nickel deposit

b. Field visits

- i. The Witwatersrand – a traverse from the Archaean basement in the suburbs of Johannesburg through the well exposed sequence of sediments ending in the overlying Ventersdorp volcanics. The environmental impact of previous mining plus plans to extract the remaining resource will be discussed.
- ii. The Cradle of Humankind
One of South Africa's recently declared world heritage sites. The visit will include a review of the geology, the reasons for cave formation and the 2 million year old history of hominid evolution
- iii. The Vredefort dome
Visit to the world's largest and oldest meteorite impact crater. Visit will include examination of diagnostic impact features as well as upturned gold bearing Witwatersrand strata.
- iv. Visit to Pilansberg Alkaline Complex

Trade Show

A trade show in which suppliers will be able to display and advertise their products or services is proposed for this event.

Companions program

Accompanying person's day excursions can include tours to Soweto, Pretoria, an African Market, the Cradle of Humankind Heritage Site and Maropeng, Pilanesberg Game Reserve and Sun City, the Apartheid Museum and Gold Reef City Arrangements for more tourist-oriented excursions to various game parks (Kruger National Park, Umfolozi-Hluhluwe) and other tourist attractions (Cape Town, Winelands, Namaqualand flowers, whale-watching) can be facilitated with the tourist industry in South Africa.

Administration and Publications

We feel we have the collective experience to successfully organise an international conference of this stature and have access to professional conference organizers who can and have successfully dealt with international conferences' logistics of up to 1500 delegates.

Abstracts will be published according to IMA regulations.

Summary and Conclusions

MINSA firmly believes that it will be able to stage a world class conference in South Africa in 2014. There are a large variety of mineral deposits and mines as well as research laboratories to visit and discuss.

Other topics could be added to those presented in this document but we would appreciate IMA feedback as well as suggestions and questions.

Industry has shown great interest in support of this undertaking. Other professional bodies, including the Spectroscopic Society of South Africa, the Crystallographic Society of South Africa, the South African Institute for Mining and Metallurgy and the Geological Society of South Africa have already expressed their support in writing.

Should the Mineralogical Association of South Africa be given the opportunity to host this meeting in 2014, an organising committee with representatives from the various interest groups will be convened to begin preliminary preparations. These will include finalising dates, conference venues, construction of an informative website and preparing a first circular advertising the conference soliciting the first call for papers. These preparations will be finalized before the IMA General Meeting in Budapest in 2010 so that medium- to long- range planning of the conference will be facilitated. So far a large number of enthusiastic South African mineralogists and scientists have expressed their willingness to serve on the organizing committee or in an advisory capacity.

These include:

Mrs Lesley Andrews (Anglo American Research Laboratories)
Prof Dave Billing (University of the Witwatersrand)
Prof Bruce Cairncross (University of Johannesburg)
Prof Grant Cawthorn (University of the Witwatersrand)
Dr Desh Chetty (Mintek, MINSA Vice-President)
Dr Thinus Cloete (Council for Geoscience)
Mr Louis Coetzee (SGS Lakefield, MINSA President)
Prof Johan de Villiers (University of Pretoria)
Prof Emeritus Sybrand de Waal (University of Pretoria now in Namibia)
Mrs Wiebke Grote (University of Pretoria)
Prof Chris Harris (University of Cape Town)
Dr Pierre Hofmeyer (Industrial Mineralogist)
Mr Alan McKenzie (Mintek)
Prof Roland Merkle (University of Pretoria)
Mr Joseph Mogoru (University of Pretoria)
Prof Wolf Uwe Reimold (HumboldtUniversity, Berlin)
Dr Jill Richards (SGS Lakefield, MINSA secretary)
Mrs Anelda van Staden (Anglo American Research Laboratories)
Mrs Danel van Tonder (Council for Geoscience)
Dr Sabine Verryn (University of Pretoria)
Dr Thomas Wallmach (Exxaro)
Mrs Adrienne Wedepohl (MINSA immediate past secretary)

It is one of the important missions of IMA to help the development of mineral sciences in all regions of the World.

According to the traditions of IMA, the 21st General Meeting will not take place in Europe or North America. IMA has never held a General Meeting in Africa and MINSA has been an active member of IMA. Southern African Mineralogists would really appreciate IMA's support.

As indicated in e-mail correspondence, a more detailed proposal will be presented by Sabine Verryn to the IMA business meetings at the Goldschmidt 2008 conference in Vancouver.

Yours sincerely

The Executive Committee of "The Mineralogical Association of South Africa"

Louis Coetzee (President)
Deshentree Chetty (Vice-President)
Jill Richards (Secretary & Treasurer)
Sabine Verryn (immediate past President)
Wiebke Grote
Anelda van Staden