

# Federation of Southern African Gem and Mineralogical Societies Federasie van Suider-Afrikaanse Siersteen en Mineralogiese Verenigings



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GEMBOREE

NAMIBIA TOUR

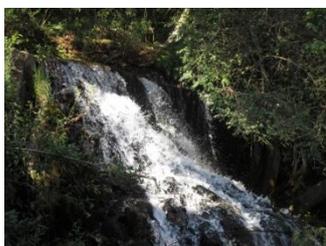
CLUB INFO

TREDOUXITE

HYPATIA

BOOKING FORM (REVISED)

## GEMBOREE 2018



*The waterfall where the tufa  
can be seen*



*Diana Reyneke, the hostess for  
the Gemboree*



*A portion of the camping site*

All photos: Linda Stone

This year's Gemboree is almost around the corner. The members of the Pretoria Gem and Mineral Club has gone out of their way to make this Gemboree one to remember. Arrangements regarding the accommodation, food and sites have all been finalised and they are looking forward in having all the rockhounds from Southern Africa to join them on the farm. Please contact Heidi Naude if you are interested in registering for the Gemboree or require any other information. Her contact details are: [pgmcnewsletter@gmail.com](mailto:pgmcnewsletter@gmail.com)

## NAMIBIA TOUR – Malcolm Jackson



*Camp Aussicht , Kaokoland*



*Smithsonite under shortwave UV  
Found at Berg Aukas,  
Grootfontein*



*Malachite in shattuckite*

All photos: Malcolm Jackson

What an amazing response from our eager adventurous participants! Twenty two members will be joining the tour, and is therefore unfortunately fully booked. Should we have any cancellations we will work on a first-come first-served basis.

We're doing our utmost best to try and accommodate all members' requests for either camping or indoor accommodation. In certain areas however camping is a must where you need to be self-sufficient in carrying water and wood for braais. Vehicles with good ground clearance is important.

Namibia is one of my favourite countries to collect mineral specimens. Even though I've been to the same locations numerous times there is always something new and different to find.

This year we are planning to start the tour from Rosh Pinah in the South. From there we will travel North via Keetmanshoop to the Erongo region. Over many years the pegmatite deposits and the granites with miarolitic cavities have produced world class mineral specimens.

Moving west to the volcanic area of the Brandberg and the Etendeka basalt formations and at the Goboboseb area the rich silica laver formed vesicles containing the well-known window quartz, as well as prehnite, calcite and zeolites.

From there we will travel North to the Kaokoland to the fold belt area around Omaue which is 1600 metres above sea level looking for copper and lead minerals. We will be traveling off-road on tracks to visit small miner groups who mine for specimens as these deposits are not suitable for large scale mining. For collectors it is certainly worth a visit. There is no electricity or water in the area so we need to be self-sufficient for the next three days in carrying drinking water as well as other provisions and wood.

From the Kaokoland we'll be heading in a south easterly direction to the Otavi mountain area where industrial mining has taken place since the 1800's. We will be looking for vanadinite, copper, lead, zinc and other associated minerals and we'll have a little time to look at the old mine workings and to scratch on the dumps for minerals. If you have a UV light you can bring it along on the trip as some spectacular colours come to life under the fluorescent light.

One of our last camps will be at Omaruru to visit gemstone processing cc. This will be your last opportunity, before leaving for Windhoek, to buy specimens of good quality.

The next day we will return to Windhoek to apply for our export permits from the Ministry of Mines. Two percent tax will be charged on all we have collected and receipts must be produced, or a fair value put on the items collected.

The tour starts on Sunday July 15 and ends on Saturday August 4.

### **FOUNDING DATES OF THE CLUBS**

Here follows a list of all the clubs affiliated to FOSAGAMS as well as the year in which they were founded:

South African Gem and Mineral Club	1954
Pretoria Gem and Mineral Club	1957
Witwatersrand Gem and Mineral Club	1958
Cape Town Gem and Mineral Club	1962
Kimberley Lapidary Club	1964
Natal Mineral and Gem Society	1966
Pietermaritzburg Gem and Mineral Club	1989
Nelspruit Gem and Mineral Club	2003 (2013)

## A NEW MINERAL

### TREDOUXITE – A NEW MINERAL FROM THE BARBERTON GREENSTONE BELT



*Prof. Marian Tredoux pictured with the mineral “tredouxite” on her right hand side.* Photo: geobulletin

The International Mineralogical Association Commission on New Minerals, Nomenclature and Classification in September announced the acceptance of a new mineral, named “tredouxite”, that was discovered and described by Luca Bindi (University of Florence), husband – and – wife team Federica Zaccarini and Giorgio Garuti (University of Leoben), and Ducan Miller (University of the Free State). The tetragonal mineral with the formula  $\text{NiSb}_2\text{O}_6$ , is the Ni analogue of the mineral bystromite ( $\text{MgSb}_2\text{O}_6$ ), and was discovered in the enigmatic Bon Accord Ni-oxide deposit of the Barberton greenstone belt that has been the source of six new minerals prior to the discovery of tredouxite.

The Bon Accord body was originally proposed to be an oxidised remnant of an iron meteorite, but this hypothesis has been largely discarded in favour of models suggesting a terrestrial origin of the deposit. The Bon Accord body was extracted during the 1920s due to its high nickel content, but the material proved too refractory for smelting and the ore was abandoned on a pile approximately 3km away from where it was extracted. This pile, and an abandoned sample shed near the original location of the body was pointed out to Marian Tredoux by Maarten de Wit in the 1980s. The sample in which tredouxite was discovered were collected from the shed by Marian who, after the prolific activities of Sybrand de Waal in the 1960s and 70s on the mineralogy, became the prime researcher into the geochemistry and origin of this remarkable deposit. The new mineral was named “tredouxite” in her honour, for her lifelong contributions to our understanding of the geochemistry of ultramafic rocks in general and more specifically, that of the Bon Accord body.

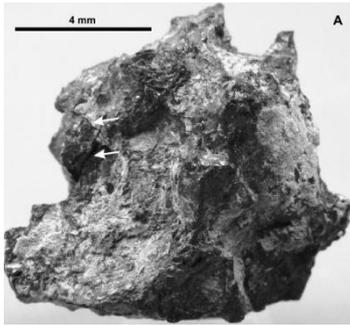
Tredouxite occurs as grains ranging from 10 to 500  $\mu\text{m}$  in size and associated with trevorite ( $\text{NiFe}_2\text{O}_4$ ) and bottinoite ( $\text{Ni}[\text{Sb}(\text{OH})_6]_2 \cdot 6\text{H}_2\text{O}$ ), within a matrix mostly composed of willemseite ( $(\text{Ni},\text{Mg})_3\text{Si}_4\text{O}_{10}(\text{OH})_2$ ). For any non – scientist reading this, tredouxite is therefore unlikely to significantly influence the gross domestic product of South Africa, nor will its discovery alleviate the problem commonly encountered when trying to find the end of a roll of Sellotape. However, its discovery shows that the secrets of Bon Accord have not been finally revealed and as scientists we look forward to further discoveries from the perplexing body of rocks that may prove pivotal in furthering our understanding of geological processes in and on the early Earth.

😊 The above extract was taken from “geobulletin” December 2017 with the kind permission of the Geological Society of South Africa.

😊 Some notes: Tredouxite was one of 5 292 minerals certified by the IMA. Only 81 out of 5 292 minerals were named after a lady. Marie Curie was one of them [curie(Ci)]. Interesting is that most of the minerals named after a lady were women from Russia. Only 700 minerals were named after a person. Normally a mineral is named after the region where it was discovered.

😊 Marian Tredoux is presently serving as a professor on the academic staff of the University of the Free State and was a member of the Cape Town Gem and Mineral Club.

## **THE HYPATIA ROCK- The rock from outer space**



***The Hypatia rock \****

The Hypatia rock was found in the area of southwest Egypt. This rock was named in honour of Hypatia from Alexandria. She was a 4<sup>th</sup> century philosopher and the first Western woman mathematician and astronomer.

Researchers from the University of Johannesburg (UJ) recently shed some light to this interesting rock. New research and analysis were done on the internal structure of the Hypatia rock.

Prof. Jan Kramers (UJ) compares the structure of this rock with that of a fruit cake. The 'nuts' and the 'cherries' consists of material never found on earth and is definitely not like any well-known comet or meteorite.

The matrix contains a lot of carbon and a little bit of silicon. The researchers at UJ found micro diamonds as well as aluminium in its purest metal form.

Prof. Kramers estimates that the rock could be 4,56 milliard years old.

Nickel, phosphorus and moissanite (a meteorite mineral; chemical composition SiC) were also found. This rock was apparently formed at -196° C.

### **Sources:**

1. *Beeld Thursday January 11, 2018.*

2. *Maroela Media Thursday January 11, 2018.*

3. \* *"Unique chemistry of a diamond-bearing pebble from the Libyan Desert Glass Strewnfield SW Egypt: Evidence for a shocked comet fragment" Jan D. Kramers, Marco Andreoli, Maria Astanasova et al.*

## **THE REVISED BOOKING FORM FOR THE MINERAL, CRYSTAL, ROCK TRADE FAIR 2018**

The revised form is available on [www.fosagams.co.za](http://www.fosagams.co.za) / Announcements

See you all at the Gemboree!

Kind regards

Linda Stone

President FOSAGAMS