



# THE MINERALOGICAL SOCIETY OF NEW SOUTH WALES INC

C/o School of Natural Science  
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## NEWSLETTER

**APRIL 2014**

**The April Meeting will be held on Friday the 4<sup>th</sup> of April at 7.30 p.m. in the LZG14 lecture theatre on the ground floor of Building LZ in the Science campus of the University of Western Sydney on the corner of Victoria Road and James Ruse Drive in North Parramatta.**

The program at the April Meeting will comprise a lecture to be given by David Foster on

### **‘Skarn Type Mineral Deposits’**

“ Members are invited to bring in mineral specimens from skarn deposits to display to the Meeting and help illustrate the lecture. Skarns may be formed when massive intrusions contact pre-existing carbonate-rich rocks. The Mt. Tennyson deposit at Yetholme is a classic example. Molybdenite associated with garnet, scheelite and powellite is to be found. Many members should have a specimen from this deposit”

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## **FORTHCOMING MEETINGS**

Meetings will be held on the first Friday of each month throughout the year except before the long weekends of June and October when it will be held on the second Friday. Some of the following programs and speakers are still to be confirmed and subject to circumstances some changes may have to be made in due course.

### **May 2nd: Member’s Mini-Auction**

Members wishing to sell specimens at the Auction should provide a list to Jim Sharpe ideally well in advance of the Auction or up to two weeks before the sale, so that the final sale list can be prepared and distributed to members.

Information on specimens to be auctioned should be sent by post to : - Jim Sharpe, 190 Ray Road, Epping, NSW 2121, Telephone :- (02) 9871 2502 or e-mail : - [sharpe4min@tadaust.org.au](mailto:sharpe4min@tadaust.org.au)

June 13th: (Second Friday). Lectures by Peter Williams on : - **‘Polymorphs. A Mineral Enigma’**  
and by Noel Kennon on :- **‘Ultra-Small Minerals and How We Can See Them’**

July 4th: Talks by Gary Sutherland and John Rankin on : -  
**Some British Mines & Minerals: Part II.**

August 1st: Society A.G.M. and Betty Mayne Memorial Lecture given by Lin Sutherland on : -  
**‘Indian Zeolites’.**

September 5th: Lecture by David Colchester on : - **‘Mudgeeite. Establishing a New Mineral’.**

October 10th, (Second Friday) : Lecture by Graham Ogle on : -  
**‘Långban, Sweden – Rarity and Fluorescence’.**

November 7th: Lecture by Brian England on : - **‘Kulnura Zeolites’.**

December 5th: **Christmas Social.**

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## **MEMBER’S MINI AUCTION**

**Friday 2nd MAY**

The annual Mini-Auction will be held at the May Meeting. There may be a few announcements made at the commencement of the Meeting but otherwise the entire evening will be devoted to the auction. Last year there were 94 specimens sold over about two hours for a total of over \$3,000 realised.

Members are recommended to start sorting out their surplus specimens for the auction from now on. Please clearly label all individual specimens and boxes. The Society takes no commission so if the member is not satisfied with the highest bid, he or she can bid for their own specimen or place a (realistic) reserve on it.

In order to provide a sale list in advance of the Auction information on specimens should be provided to Jim Sharpe ideally up to two weeks before the Sale, if not before. By post to : - 190 Ray Road, Epping, NSW 2121, Telephone :- (02) 9871 2502 or e-mail : - [sharpe4min@tadaust.org.au](mailto:sharpe4min@tadaust.org.au)

As well as the regular auction a mineral or boxes of minerals may be sold by silent auction. Just bring in a tray of specimens to leave on a table accompanied by a bid form which will be provided. There is no need to advise Jim in advance as these will not be listed.

At the March General Meeting Jim Sharpe addressed the members to urge looking to entering specimens in the Auction, even if they could find only one or two to sell. He particularly hoped to see specimens being put into the Auction by members in addition to those who regularly had been selling in previous years, urging more members to become involved in the auctioning.

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## The SOCIETY COMMITTEE

PRESIDENT:	Dieter Mylius	Tel: (02) 9477 1060
VICE-PRESIDENT:	John Chapman	Tel: (02) 9808 3481
	E-mail:	<i>chapmanjr@optusnet.com.au</i>
SECRETARY:	George Laking	Tel: (02) 9636 7145
	E-mail:	<i>bglaking@tech2u.com.au</i>
TREASURER:	Graham Ogle	Tel: (02) 9868 4446
	E-mail:	<i>grahamo@australiandiabetescouncil.com</i>
COMMITTEE MEMBERS:	David Colchester	Tel: (02) 9449 3862
	John Rankin	Tel: (02) 9482 7474
	Gary Sutherland	Tel: (02) 9871 1379
	Jeremy Taylor-Edwards	Tel: (02) 9889 5889
	Edward Zbik	Tel: (02) 9638 6586

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### The Kids with Cancer sale at the February Meeting

At the March General Meeting Jim Sharpe announced that the sale of specimens donated for the Kids with Cancer sale at the February Meeting had generated a sum of almost \$1,700 for the Foundation. He regarded this result as very commendable. It had been the largest sum generated so far from the sales of donated specimens and reflected well on the great support from members donating the specimens and the others purchasing them.

In fact the final sum to be remitted to the charity this year was \$1,833.30 due to a small amount of money being added to the current sale proceeds from the previous sale in 2013 when some purchases were made by members after the majority of monies generated then had been sent to the Foundation.

Should anyone wish to know more about the **Kids with Cancer Foundation** there is a wealth of information about it on the Internet. The Foundation is a non-profit Public Benevolent Institution (PBI), a status granted by the Australian Tax Office (ATO). A PBI makes its services available without discrimination to every member of the public which the organisation aims to benefit, is administered for the public good without purpose of private gain, and provides direct relief for the benefit of a disadvantaged section of the public.

According to statements on the Foundation Websites :- '100% of all direct donations to Kids with Cancer Foundation are passed on to struggling families of kids with cancer and to children's hospitals where they are treated. No management fees, salaries or any running costs of the Foundation are taken from our 'Gift Account', .... Cancer foundation donations are only used for families who are struggling financially, and have a child in one of our Australian children's hospitals being treated for ... any childhood cancer, or directly to children's hospitals'.

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## THE EDNA WALKER BEQUEST

At the March Meeting the President announced that the Society had received a bequest of a considerable amount of money from the estate of the late Edna Walker.

The Society had been notified in June 2012 by the office of the **NSW Trustee and Guardian** that long-time Society members and siblings Harold and Edna Walker had passed away, Edna on April 29th that year and Harold over a year earlier and that the will of the late Edna Walker had provided a bequest to the Society, the amount to be determined and advised when administration of the estate was completed. This was expected to take from six to nine months. The work has taken a little longer but on the 3rd of February this year a sum of \$49,110.79 was deposited into the Society's account by the Trustee. Administration of the Walker estate is not quite completed since another smaller sum of \$5,544.08 was also deposited on March 10<sup>th</sup> and there may yet be other minor matters to finalise.

Dieter Mylius recommended that members consider what action could be taken over the bequest fund and to communicate suggestions to the Committee. Ultimately a debate could be held at a General Meeting to discuss suggestions and determine a plan to make good use of the fund.

### **The Betty Mayne Bequest.**

A few months after the Society received the bequest from the estate of the late Betty Mayne in 1992 a debate was held at a General Meeting to discuss how to use those funds. The decision by the members at that time was that the fund capital, (initially of some \$17,500), should be kept intact in an interest-bearing term deposit and that the interest should be used from time to time for funding mineralogical-promoting projects such as the benefactor might have wished to support. This has been done to a degree although with limited suggestions or ideas put forward to receive funding the interest has not all been used and has accumulated to the present level of almost \$32,000. Whilst the general feeling then and in discussions later has been that the Society should maintain a comfortable financial reserve, the acquisition of another bequest means that more suggestions for promotional or commemorative projects are clearly needed.

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## The MARCH MEETING

At the commencement of the Meeting the President, Dieter Mylius, reported that the **Micro-Mineral Group** Meetings were now being held monthly on the second Saturday at various member's houses and the meeting this month, actually on the day following the General Meeting, would be at his house in Hornsby Heights at 1.00 p.m. The theme would be on lead minerals and visitors were welcome, subject to their advising in advance that they wished to attend.

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The scheduled report on the **2014 Tucson Show** and the lecture were given by George Stacey who initially addressed the Meeting to compliment the Society members on the money generated from the **Kids with Cancer sale**. The charity had a particular significance for him since his son had needed treatment for cancer at the age of 2-3 being on chemotherapy for a year and a half. The treatment had happily been entirely successful because his son was now aged twenty-six !.

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## **Tucson Show 2014**

### **George Stacey**

As members will have been informed during many previous reports about the Tucson Show, the main show, properly 'The Tucson Gem & Mineral Show' is held for four days in the Tucson Convention Center starting on the second Thursday in February. In addition there are numerous other 'shows' large and small, held by dealers, dealing companies, collecting groups or individuals at dozens of locations across the city. Most of the hotels and motels are occupied by one or more mineral dealers or collectors displaying specimens in hotel bedrooms, lobbies, in tents erected outside and tables on the lawns. The subsidiary shows may be set up from 3-4 weeks before the main show and continue for up to a week afterwards. There are so many of these that a visitor would need four or more weeks to get around to view them all as well as a reliable street and location guide, not to mention transport to get around to all the locations.

On his visit to Tucson this year George Stacey described how he was able to look at some of the larger subsidiary shows such as the one set up by the Westward Look company. The prices of some of their more spectacular specimens were eye-opening, up to half a million dollars. A couple of nice azurites that the speaker noticed had prices of US\$125,000 and the other US\$95,000.

This year there were many Chinese dealers, about 60-70 different venues with some selling interesting specimens of helvite from Inner Mongolia. Helvite is a manganese, beryllium sulpho-silicate and can be a brilliant mineral and the speaker had acquired one specimen on quartz which he had brought to the Meeting to display. The Chinese dealers also had large amounts of azurite which in spite of the amount available were quite highly-priced. There were also some nice fluorites from China but also with handsome prices up to \$100,000 !.

On one dealer's display the speaker noticed some nice specimens from the Congo of shattuckite which is a copper hydroxy-silicate. At another display George Stacey spoke to a Spanish dealer that he had met the previous year who then and this year had been selling an amount of hübnerite, manganese tungstate, nice specimens with prices up to US\$5,000. There were quite a number of polished petrified wood tables from Arizona with very nice workmanship on some of them and prices from \$6000 to \$18,000. As usual there was lots of Brazilian amethyst. In answer to questions the speaker reported that he had seen very little Australian material and as far as he could recall, no Mt Isa specimens.

The overall impression that George Stacey brought back from Tucson this year was that prices of all materials had increased substantially more or less across the board and by as much as 50%.

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### **'My Recollections of Mt Isa – The Mine in the Spinifex'.**

#### **George Stacey**

The speaker then moved on to give his lecture on 'Recollections of Mt Isa'. George Stacey had worked at the mine in Queensland for some twelve years from 1963 to 1975 as a research metallurgist and gave a lecture about his time there to the October 2007 Meeting of the Society. The lecture this evening was to recap on the speaker's recollections of working at Mt Isa and provide an idea of the very varied tasks and types of work which he found himself called upon to handle.

In the course of his lecture the speaker also provided a few anecdotes about some of the escapades he and some of his colleagues involved themselves in from time to time, particularly in regard to collecting specimens which he was always alert to finding and for which he was prepared to go to some effort.

When George Stacey first started work at Mt Isa in 1963 the mine was at that time extracting ore from the Black Rock Open Cut and the speaker learned that there was cuprite to be found amongst the ore. Accordingly he managed to acquire some specimens, gradually exchanged with other collectors over the years. He was also able to acquire a number of other specimens such as a specimen with copper crystals spinel-twinned with a patina of cuprite crystals which he had brought in to display to the Meeting. Still in his first year at Mt Isa the speaker described one late evening when in talking, and drinking, with some colleagues they decided to go underground to look for barite samples. This was very much against mine regulations but they went anyway and deep underground managed to extract some very nice barites containing native copper from Number Four Level, just under the Open Cut, carrying the specimens back in empty beer cans.

The speaker described something of his chemistry work at the mine, establishing methods of extracting and purifying metals from the ores by selective precipitation of metals from solutions by having dissolved the ores in various acids or other chemicals then gradually altering the pH. Over the years he had worked with cyanide, hydrogen sulphide, hydrochloric, sulphuric and hydrofluoric acids as well as various metals including cadmium and thallium, and also x-ray equipment and radio-isotopes, so much so that he speculated that he was possibly fortunate to be still here !.

During his lecture George Stacey showed a series of images of Mt Isa, the mine, the workings, the town and some of the minerals he was able to collect over the years. As an example of the various tasks he was faced with from time to time the speaker also showed a list of some two dozen jobs or problems that he had had to deal with. These included his chemical and mineralogical analysis work, developing or improving smelting processes, examining furnace function including how to deal with and clean exhaust gases, methods for testing the air quality over the mine and town and electrical generation.

Other tasks involved developing methods, equipment or materials to deal with problems arising from the mining work such as that of unexploded detonators which were constantly injuring miners. The speaker managed to develop a type of metal detector which could indicate the presence of unexploded detonators to the miners.

Computer simulations in FORTRAN, (**Formula Translating System**), on mineral processing methods were set up which in those days of limited computer capability or availability involved the speaker having to send a stack of punched cards to a computer centre in Brisbane to run the simulations. The simulations were set up to look at many processes or problems such as examining how to obtain the best performance from reverberatory furnaces being fired with coal containing varying amounts of water which would affect the operating temperature of the furnace .

Turning to talk about fossicking over his time at Mt Isa George Stacey said that the prospects were great and he spent a lot of time travelling about the countryside where apart from the big mine itself there were many other mine workings, mostly small. Mica Creek is just to the south of Mt Isa and minerals such as quartz crystals, epidote, dravite tourmaline and beryl could be found and on one occasion the speaker found a specimen of chrysoberyl in quartz which he still had in his collection. Further afield there were possibly hundreds of mines in that part of Queensland, most being small operations having involved only a few miners but all potentially specimen-productive.

George Stacey repeated some of the information previously delivered in his 2007 lecture about the mineralization at Mt Isa which features two adjacent but geologically and mineralogically separate lodes of silver-lead-zinc and copper ores hosted in the Urquhart Shale. Also some of the history of the deposits, originally discovered by the prospector, miner and jack-of-all-trades John Campbell Miles in February 1923. The prospector was obviously a very rugged and tough character among other exploits having at one time when he was aged about twenty-four travelled from Broken Hill where he had been working up to gold fields in northern Queensland, pedaling a push-bike all the way !. Many years later when he was about forty he was travelling by horse from Cloncurry to Camooweal and stopped to prospect on outcrops of mineralized rock discovering what became the Mt Isa mine.

Campbell Miles started pegging claims, gradually drawing in other miners and financial backers and with the arrival in late 1923 of the energetic mining engineer and manager William Henry Corbould, the discovery was soon to be floated as Mt Isa Mines Ltd. A number of images from the early days were shown, of the people first involved in the discovery and setting up the mining company then of the mine and the gradual development of the mining area and the processing plants and of some of the specimens recovered over the years. George Stacey noted some inaccuracy in specimen attribution since over his time at Mt Isa the Black Rock Open Cut was mining the copper lodes only, there was no lead in that deposit. Accordingly specimens of pyromorphite, a lead phosphate, said to have come from the Black Rock Cut would have been labelled incorrectly.

George Stacey finally spent some time describing the last few years and current mining activities and projections for the future of the Mt Isa mine. Referring to a chart indicating the production levels over the years he described it as one of the World's great silver-lead-zinc mines. For many years it produced eleven million ounces of silver a year, falling off latterly with a figure of 5.7 million ounces recorded for 2010. In addition the mine for many years has been producing over 200,000 tons of copper, 180,000 tons of lead and over 240,000 tons of zinc annually. Mt Isa Mine, (M.I.M.) was bought by the Swiss company X-Strata in 2003 which merged with the Glencore company in May 2013. Charts indicated that there is a lot of life left in the Mt Isa mining area even although the operating company is mining only copper, lead production with all the attendant processing and pollution problems has been discontinued. But according to figures shown by the speaker there is still a resource under Mt Isa of some three million tons of copper and twelve million tons of zinc. Projections by the company are that mining should be able to continue profitably until 2019.

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## **FORTHCOMING EVENTS**

### **CANBERRA ROCK SWAP 2014**

The **Canberra Rock Swop**, organized by the **Canberra Lapidary Club** is being held again this year as usual on the camping ground at Wagtail Way in the EPIC park alongside Northbourne Avenue in Canberra over Saturday and Sunday the 5<sup>th</sup> and 6<sup>th</sup> of April from 8.30 am to 5.00pm each day. Some of the attendees would probably start arriving and setting up on Friday the 4<sup>th</sup> when the camping area will be already open. Entrance is FREE for the public whereas campers and vendors are asked to register.

The Rock Swop is entirely a tail-gating swap n' sale event presenting a substantial opportunity for social interaction and is normally attended by several dozen vehicular groups and campers and many day visitors. There will be fossickers and dealers, sales of minerals, crystals, rough and cut gemstones, opals, fossils, jewellery, polished and fashioned ornaments, books and equipment.

Information on [www.canberralapidary.org.au](http://www.canberralapidary.org.au), e-mail [canberralapidary@gmail.com](mailto:canberralapidary@gmail.com) or telephone 02 6281 3312.

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## **GEMBOREE 2014**

**Australia's 50th NATIONAL GEM, LAPIDARY, JEWELLERY AND MINERAL SHOW.**

GEMBOREE 2014 is to be held in Gatton, Queensland, over Easter, the 18th to 21st April 2014. Presented by the Australian Federation of Lapidary & Allied Crafts Associations Inc. (AFLACA).

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## **GEMFEST**

The Lismore Gem & Lapidary Club will be presenting their 24th annual GEMFEST at Lismore Showground over Saturday 17th & Sunday 18th May 2014

'A full dealers pavilion with a good mix covering all areas of the hobby – many of these dealers have been regulars here for a long time. Tailgating, many of our tailgaters are long term regulars.

On site registrations for travelers giving admission to the show and powered site camping from noon Thursday until noon Monday for only \$30 (covering 2 adults and 2 children) –

On Saturday evening, join us for the renowned Cent Auction.'

Enquiries re Tailgating should be addressed to Jan Thompson at PO Box 743, Lismore, NSW 2480.

Dealer and general enquiries can be sent to Bruce Copper at the same address, or by email to [bcopper@bluemaxx.com.au](mailto:bcopper@bluemaxx.com.au) Lismore Gemfest, Lismore, Northern NSW

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## **The Blaxland Gem & Mineral Club Gem Show**

**August 16th and 17th 2014**

Displays of lapidary work and gem, mineral and crystal sales.

Refreshments available.

Glenbrook Community Hall, Great Western Highway, Glenbrook, NSW

(Next to Glenbrook Theatre) Just west of Information Centre.

<http://www.freewebs.com/blaxlandgemmineralclub/BGMCshow.htm>

8 am to 4 pm Daily                      Entry: Adults: \$3    Children \$1

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