



THE MINERALOGICAL SOCIETY OF NEW SOUTH WALES INC

C/o School of Natural Science
B.C.R.I. Parramatta Campus University of Western Sydney
Locked Bag 1797 Penrith South DC N.S.W. 1797
Website: www.minsocnsw.org.au

NEWSLETTER

DECEMBER 2015

The December Meeting will be held on Friday the 4th of December 2015 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 DECEMBER MEETING WILL BE THE ANNUAL

CHRISTMAS SOCIAL and SWAP N' SELL

At the December Meeting there may be a few announcements made but otherwise there will be no formal program or lecture, the evening being devoted entirely to the sale or exchange of mineral specimens and mineralogical material, books, magazines and equipment. The Meeting would be officially opened at 7.30 pm but the venue would be open from about 6.30 pm to allow time for members with material for sale to get set up.

There will be a substantial and comprehensive range of snack food refreshments and drinks. Members, guests and visitors attending the **Christmas Social Meeting** will be charged \$10 towards the cost of the refreshments. In past years in making arrangements for the Social it has been found that the charge of \$10 against the costs of providing the extra refreshments has balanced approximately even and accordingly members may be assured that the charge is equitable. There will be a lucky door prize awarded by raffle. Tickets will be issued to each person as they arrive. Please make sure you receive one.

Members are reminded that the Society Committee has previously determined that anyone attending the Christmas Social who was not currently financial may buy but would not be allowed to sell minerals. Since **Society membership subscriptions are due from January 1st next** any members who were unsure of their current financial status could pay their subscriptions for 2016 from now on and would then be taken as financial. A membership renewal form will accompany this Newsletter.

Membership payments may be made to the Secretary or Treasurer at the Christmas Social especially if the member is unsure of his or her financial status. Membership renewal forms will be available and members are asked to fill out a form particularly if any of their addresses, telephone number/s or e-mail details have changed. Please keep the Society up-to-date on these details.

HARD-COPY NEWSLETTERS

In the interest of cutting down to a degree the postage and stationery costs of sending out hard-copy Newsletters to a number of members, not to mention cutting down on the time taken to print and envelope etc it is suggested that members who have Internet access could accept receiving Newsletters by e-mail only from the first issue next year. Accordingly from February 2016 the Secretary would like to cease sending hard-copy Newsletters to any members who have given e-mail addresses unless they specifically request this. The Society will always be printing some Newsletters for those members who do not have Internet access and can readily include a few members who do have access but who still wish to receive hard copies however it would be ideal to cut down on the current amount of printing and postage.

FORTHCOMING MEETINGS AND PROGRAMS FOR 2016

Some Meeting programs for 2016 have already been scheduled; others are yet to be confirmed. The Society does not hold General Meetings in January and the first Meeting in 2016 will be on February the 5th. Meetings will be held on the first Friday of each subsequent month throughout the year.

February 5th 2016: The program in February will include a talk to be given by Dieter Mylius on:-
‘Collecting Minerals from the Clara Mine in Germany’.

The talk will be followed by a lecture to be given by Ross Pogson on :-
The Cliefden Caves and Speleological Themes at the Australian Museum.

At the February Meeting there will also be a **Mineral Sale** to raise money for the **Kids With Cancer Foundation** and members are invited to start looking from now on for surplus specimens that they could donate for this sale.

Information about donations for the Kids With Cancer sale should be communicated to Jim Sharpe on (02) 9871 2502 or e-mail sharpejames@tpg.com.au by mid-January 2016 in order to provide a sale list of specimens for distribution in advance. Compiling and providing a complete list is not essential however and further donations could be brought in on the sale evening.

March 4th 2016: Lecture on **‘Blood Diamonds of Liberia** by Peter Buckley

April 1st 2016: A 40th year commemoration will be held as part of the April meeting with a small number of founding or very long-time members of the Society invited to provide a few anecdotes and impressions of the earliest years. There will be substantial extra refreshments provided.

The commemoration talks will be followed by a **Mineral Quiz** presented by Ann & Noel Kennon

May 6th 2016: Member’s **Mini-Auction**

June 3rd 2016: Open night, interactive forum on : - **‘Kingsgate Re-visited’.**
(First Friday, - Member’s collections, re-collections and discussion.
The Queen’s Birthday in 2016 is on the 13th)

SOCIETY MEETING VENUE

The Society has been under threat for some time now of losing the use of the LZG14 meeting room at the north Parramatta campus of U.W.S., (now the **Western Sydney University**), due to extensive building renovations being undertaken and which have been scheduled for some time. To the present extent of knowledge the Society should be able to use the G14 room into the early months of 2016 with as yet no definite date for the renovations to commence. Alternative venues for Society Meetings to be held in the Parramatta area have been considered with the prospect that arrangements should be fairly straightforward. Members will be notified of the venue change in due course.

FIELD TRIP TO OBERON & DIAMOND HILL

Date: 12/13th December, 2015

A State Forest field trip visiting a skarn and Mo deposits.
Requirement: State Forests Fossicking License (One license covers a family). Open to all members.
To register and obtain details, email etzed@optusnet.com.au or call (02) 9638 6586 until 10:00 pm.

The **Field Trip to the Mudgee area** held over the weekend of the 21/22nd of November was attended by twelve members and was very successful. Thanks to prior arrangements made by Ed Zbik the party was able to spend a full two days fossicking first in the **Mt Knowles quarry** on Saturday and the **Buckaroo quarry** on Sunday. A large amount of specimens were recovered including some spectacular examples of calcite particularly from Buckaroo and a few of the type specimen, mudgeeite, from Mt Knowles. Both quarries are within about twelve kilometers of Mudgee where the party members were able to stay overnight and avail themselves of an evening dinner at the Mudgee Club. A detailed and illustrated report of the Trip will be written up and added to the Society Website in due course.

The SOCIETY COMMITTEE

PRESIDENT:	Dieter Mylius	Tel: (02) 9477 1060
VICE-PRESIDENT:	John Chapman	Tel: (02) 9808 3481
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@diabetesnsw.com.au</i>
COMMITTEE MEMBERS:	Peter Beddow	Tel: (02) 8810 8446
	David Colchester	Tel: (02) 9449 3862
	Geoff Parsons	Tel: (02) 9548 3289
	John Rankin	Tel: (02) 9482 7474
	Edward Zbik	Tel: (02) 9638 6586
	E-mail:	<i>etzed@optusnet.com.au</i>

The NOVEMBER MEETING

The November meeting was opened by the Vice-President, John Chapman, in the absence of the President, Dieter Mylius, who was attending the annual **Mineralogical Seminar** in Tasmania.

Jim Sharpe addressed the Meeting to remind members that the **February Meeting** would include the now established annual **Kids with Cancer Sale** and asked members to consider donating specimens for the event. He further recommended that donors provide him with a list of their donations fairly well in advance of the sale so that a list of the sale specimens could be prepared and distributed before the Meeting. He suggested that the success of previous sales had probably been enhanced by the Society having been able to send out a list in advance of the sale for members to examine. However specimens not previously listed could still be brought in on the sale evening, the donor only asked to provide the name, locality and price. Jim Sharpe advised that the February sale should see some new material that members may not have seen before.

Ed Zbik reported on the recent **Field Trip** to the **Mogo State Forest** and the **Bimbimbie** gold mining area near the coast between Batemans Bay and Moruya. A small party investigated two sites in the area and found only a few small specimens of pyrite and mica. An article written about the area by Laurie Lawrence many years ago had indicated that gold at the Bimbimbie sites was very fine and ore had to be taken to Port Kembla to be treated. Accordingly there was no likelihood of finding visible gold in samples and a metal detector would not have helped. The party also visited the Waterfall Creek Tunnel mine area which is due to be rehabilitated but found no specimen material.

The Bimbimbie mine had been quite successful and profitable at its peak of operation in the late 1800s yielding some 200,000 ounces of gold. There had been a fairly extensive rail system built around all the workings, extensive waterworks built to collect up, store and provide water for the processing, dumps were spread over one and a half kilometers and several mine shafts situated every 3-400 meters.

The Trip to the Mogo and Bimbimbie areas had not produced much specimen material but the party had been able to examine the area thoroughly and acquired an amount of useful information.

The next **Field Trip** over the **22nd/23rd November** weekend would be to **Mudgee** to visit the **Mt Knowles** quarry where the mudgeeite had been found and the Trip had been scheduled as a follow-up to the talk given at the October meeting about the new mineral.

Mineral of the month – **Smithsonite**

Jim Sharpe

A number of smithsonite specimens showing quite a pleasing range of colours had been brought in by members to display to the Meeting and Jim Sharpe was able to refer to these as he described the mineral. Smithsonite is zinc carbonate, $ZnCO_3$, and the speaker has always been impressed with the mineral which is known to occur in a whole variety of colours. This feature he speculated was probably due to the incorporation of small amounts of the ions of copper, chromium and cobalt into the mineral. Another example referred to was 'turkey-fat ore', an old name for a variety of botryoidal smithsonite coloured yellow with cadmium sulphide. The speaker speculated that the varied colours in smithsonite compared to the related lead carbonate mineral cerussite which is rarely found coloured, were due to the colouring ions in smithsonite being of a similar size to the zinc ions and therefore more readily incorporated into the structure of the mineral lattice.

Jim Sharpe further speculated that another zinc mineral, hemimorphite, also tended to be found in a range of colours for the same reason. Conversely the lead ions in cerussite were much larger than zinc and less likely or able to allow the incorporation of minor amounts of smaller ions. One of the exceptions to this was demonstrated by referring to a specimen of chrome cerussite from the Dundas Extended mine however it was noted that according to work conducted by Eric Melchiorre and others the yellow colour in 'chrome cerussite' may not be due to the presence of chromium.

By referring to the 1982 book on the '*Minerals of Broken Hill*' which is dedicated to Sir Maurice Mawby, Jim Sharpe related a personal experience of having had the privilege of meeting the man who is regarded as one of the important figures in the history of Broken Hill. Maurice Mawby, (knighted in 1963), was born in Broken Hill to parents of Cornish stock and spent most of his life in or connected with the town and its mines and mining companies. He studied thoroughly and became an assayer, metallurgist and geologist as well as gradually moving into managerial positions mainly within the Zinc Corporation eventually becoming general manager. He was also a keen mineral collector and assembled an important collection of Broken Hill minerals.

Jim Sharpe as a very young man was working for an engineering firm in Birkenhead Point and having expressed an interest in minerals to the chief chemist of the firm was given a letter of introduction to Maurice Mawby, at that time working in the Zinc Corporation company offices in Sydney. The speaker found the manager in a very large office '*the size of the Society meeting room*', that he was very helpful and was prepared to spend an hour with the younger man showing some of his mineral collection and encouraging the speaker to maintain an interest in minerals. A few years later when Jim Sharpe was intending to make his first visit to Broken Hill he wrote to Sir Maurice Mawby reminding him about the previous meeting and asking if he could be allowed to visit the Zinc Corporation in Broken Hill. He received an acknowledgment saying '*Yes, by all means*' and a letter of introduction to the chief geologist of the company saying '*Take Mr Sharpe to any part of the mine that he wishes to go to look for minerals*'.

George Smith over the period of his tenure at Broken Hill in the late 1800s described the Consols mine opening a vugh the size of a room filled with magnificent stalactites covered with smithsonite but unfortunately was only able to get a few specimens.

In asking members to add comments on the various specimens they had brought in for display and which included specimens from Tsumeb and Arizona as well as Broken Hill, one point that emerged was about the increases in the value of specimens demonstrated. A specimen that Jeremy Taylor-Edwards had obtained for \$25 was said by Arthur Roffey to be now probably worth about \$500 and Jim Sharpe had found that specimens shown on the Internet similar to one that he had brought in and which he had obtained for \$50 were being advertised at prices up to \$800 !.

'The Block 14 Mine, Broken Hill'

John Rankin

John Rankin had already established himself over the course of a number of lectures given to the Society over the years as a keen and thorough mining historian and during the lecture given to the Society Meeting provided an obviously well-researched and detailed history of the Block 14 mine at Broken Hill. The lecture was extensively illustrated by the speaker displaying a large number and variety of images and explaining about them in considerable detail as he proceeded.

There were views of the mining areas and miners at Broken Hill and the orebody, the town and mine workings, images of some of the spectacular minerals found and particularly a series of images of newspaper and other reports in the local and national newspapers reflecting the mining activity and progress and many associated events over the forty years of the Block 14 operation from 1887 to 1929.

The story of Block 14 as a separate entity started effectively in 1887 when the main company, Broken Hill Proprietary Ltd decided to divide up the workings on the orebody into various blocks to be operated separately as subsidiaries and offered to sell Block 14 as a parcel of £5 shares paid up to £4.10/-. As it happened there were not sufficient acceptances so the directors distributed the shares among the parent company shareholders, who would have received the money anyway. This proved to be something of a bonanza for them because within three years and due to a silver boom the shares had become worth £14. An image of one of the early share certificates was illustrated.

Whilst the neighbouring blocks on the Broken Hill lode, 10, 11, 12 and 13 were rich in silver because they contained amounts of kaolin which had absorbed the metal, Block 14 was described as a lead mine, the minerals there comprising mainly oxidized galena, - cerussite and anglesite. A list of the Block 14 minerals which were all from the oxidized area zone was shown. Images of newspaper reports from 1889 showed large specimens of cerussite and smithsonite which had been recovered. Other images from that period showed views of various groups of miners dressed for work in their ordinary clothes notably wearing no protective clothing at all.

Another newspaper report from 1890 referred to miners living then in small cottages in close proximity to the mine allowing their domestic stock to graze nearby on ground which would be substantially contaminated with lead fumes from the nearby smelters. Block 14 mine had a bad reputation for causing lead poisoning. The general manager of Block 14 in 1890, Zebina B. Lane, lost his two and a half year-old daughter from lead poisoning due to her practice of eating flowers found in the paddocks around the manager's house and an image of the house from that period a short distance from the smelters was displayed. In 1892 a Lead Commission to investigate the poisoning problem was formed but its work was obstructed to a degree by Lane in spite of his loss. Also at that time in 1892 a second child died after being scalded by falling into a pond of cooling water from the smelters which tragically was still very hot, there being no regulations at the time to require cooling ponds to be fenced off.

In 1907 the South Australian Museum bought the Hall collection and a mineralogy lecturer, the young Douglas Mawson, went to Broken Hill to arrange transport. It was known that whilst there he met with the then Block 14 mine manager and was given some specimens for the museum. Unfortunately the speaker has not been able to ascertain which specimens, presumably still in the South Australian Museum collection, came from Block 14 because Douglas Mawson had not kept an adequate catalogue.

Over the years there were reports about the size of the labour forces, sometimes up to 1,600 men in the neighboring Proprietary Mine blocks with annual dividends being paid to the shareholders of those mines of totals of over £1,000,000 but with Block 14 averaging only about half of that. Reflecting the variable metal prices over the years from the late 1880s years the Block 14 mine periodically either closed down the furnaces and reduced the work-force or closed completely for a period and allowed the shafts to fill with water before being re-opened and worked through the First World War to 1921 when it closed again for a time. In 1929 the mine was re-opened and 120 miners taken on, but this was only about a month before the Wall Street stock market crash. The management then asked the miners to accept a cut in their wages but they refused and the mine was closed permanently that year.

By 1932 the mine owed the government over £31,000 in fees with no prospect of paying and in 1933 public liquidators were instructed to sell the mine by public auction with a reserve price of £2,000.

A little before the auction it was arranged that a collection of minerals that had been accumulated by the mine management would be sent to the Australian Museum and this time Maurice Mawby arranged for the packaging and transport. The museum has registered 149 Block 14 specimens.

In the course of his research into the history of Broken Hill and frequently visiting the town John Rankin has had the opportunity to examine the areas of ground alongside the mine workings and dumps where the miner's cottages had originally been situated and found a number of artefacts from the early period. These included remains of children's toys, pieces of crockery, bottles, a few coins, pieces of tobacco pipes, and other domestic items. One unexpected find however was of a piece of the local newspaper, *The Barrier Miner* from 1900, still quite legible and which had survived intact under a rock.

A number of views were shown from the 1990s of the Block 14 open cut which as a result of being stripped exposed a number of the original underground mining structures, timbers, ore shutes and dumps with some minerals. Workers then had also found a number of miner's artefacts and an amount of old newspapers in the old workings. Unfortunately the speaker was only able to acquire a few examples of these. Finally a number of images of some of the more spectacular minerals were displayed, some from the now broken up Milton Lavers Collection and others with collectors including that of the speaker.

At the end of his very thorough lecture John Rankin answered a considerable number of questions with comments, observations and information also being provided by members.

FORTHCOMING EVENTS

THE AUSTRALIAN FINE MINERAL SHOW

Saturday 5th December, 2015 10am to 5pm

ONE DAY ONLY – AN EVENT NOT TO BE MISSED

At the AUSROX/CRYSTAL UNIVERSE SHOWROOMS

202 Turner Street, Port Melbourne, Victoria

Featuring newly prepared Broken Hill specimens from the MILTON LAVERS COLLECTION and other superb Australian & overseas mineral specimens. International and Australian Dealers including Crystal Classics (England), Ausrox (Australia), Trinity Minerals (USA), Allan Arnold (ACT), Dehne & Maureen's Minerals (TAS) and Terry Hogarth & Lynne Webb (NSW).

Enquiries (03) 96461744 or rob@crystaluniverse.com.au

The 1st Annual SYDNEY CRYSTAL SHOW

Over Saturday 5th & Sunday 6th December from 9.00am to 5.00pm each day

To be held in the Fraser Park Pavilion, 100 Marrickville Road, Marrickville

(Close to the Sydenham Train Station), Less than 10 klm from the CBD!

'Two full days of incredible natural wonders from Australia's leading mineral, fossil & jewellery merchants. Join us for the best crystal show in town! Amazing natural wonders; Minerals, Crystals, Fossils, Jewellery, Gems, Lapidary Supplies & more, all in one place and just before Christmas. Lock in the dates & tell your mates! An oresome event for all ages !'

SALE OF MINERAL COLLECTION BY SILENT AUCTION.

Ken Mitchell is selling his mineral collection which will be on display in his garage at 81 Fern Street, Gerringong, NSW. 2534, on the South Coast 120 kms from Sydney.

The sale will be conducted by silent auction and offers will close on 4th April 2016. The collection is for sale to the highest bidder and the person whose offer is the highest monetary value, [if its meets or is above the reserve], will win the ENTIRE collection. It may be viewed at any time from the present to April 3rd 2016 by appointment. Ken should be contacted to make arrangements to view the collection.

Ken's contact details are : - Home: 0242341448, mobile:0448724211.

Please leave a message or e-mail : - *kandmitchell@aapt.net.au*

All persons who wish to make a bid should ensure that their bid is sent in before the closing date and must place their offer into a sealed envelope. The envelopes will be placed in a sealed container and on April 4th 2016 Ken will be opening the envelopes and checking the bids.

The highest offer may not be the winner, as it may not meet the reserve price.

The Collection consists of:-

Mt Isa Fluorite, Epimorphs, Quartz crystals with inclusions: from Ken's location.

Quartz crystals, Rosettes and more from Tom's Mountain, Mt Isa Inlier.

Mt Lidster, Hematitic Quartz, Mt Isa Inlier.

Quartz crystals from new localities in Mt Isa Inlier.

Fluorite in Quartz Crystals: Soldiers Cap, Cloncurry.

Skeletal Quartz: Beyond the Graves, Wee McGregor, Mt Isa.

Amethyst: Kuridala, Cloncurry.

Rare Drusy Quartz on Calcite, Purlewaugh, NSW.

Stellerite Plus, Tambar Springs area.

Prehnite, Mullaley, NSW.

Broken Hill Minerals.

Brazilian Minerals.

Namibian Minerals.

Shatter Cones and Melt rock from Australian Meteorite Impact Sites.

Many other specimens are available.

90% of my Collection is self-collected.

Look forward to hearing from you all soon.

Cheers Ken



THE MINERALOGICAL SOCIETY OF N.S.W. INC.

MEMBERSHIP RENEWAL

Membership fees are due from January 1st

Please provide your full name, postal address, telephone number/s and e-mail address (if available). Unless otherwise indicated, members with e-mail capability will be able to access the Society Website to view information and will not be sent hard-copy Newsletters unless they specifically request this.

NAME:

POSTAL ADDRESS:

.....

.....

Telephone (ah)..... (bh).....

(mobile).....

E-mail address

If an E-mail address is supplied please indicate if the member also wishes to receive hard copies of any Society correspondence. ? E-mail only: ? Hard Copy also:

.....

FEES: Adult membership, Sydney metropolitan area	\$30
Adult membership, country or interstate	\$25
Child/youth (under 18 years), or student member	\$20

Additional family members (spouse/partner and children only) can be admitted for membership at the cost of \$5 each (after the first member's costs as per the list above). If applying for additional family members, please list the name(s) here:

.....

OPTIONS FOR PAYMENT

1). Direct Credit / bank transfer to the Society's account

The account details are: - Account Name: Mineralogical Society of NSW Inc.
BSB: 062016 Account number: 28023647
Please ensure that your name is placed in the Memo line.

Members paying by bank transfer would not need to fill out and send in this form unless your details, address, telephone or e-mail etc have changed.

2). Cheque or Australia Post Money Order, (please do not send cash by post), - sent to :-

The Treasurer,
Mineralogical Society of New South Wales Inc.
58 Amazon Rd,
Seven Hills,
NSW 2147

- 3). ***Cash or cheque delivered to the Treasurer, or in his absence the Secretary,
- at any General Meeting***