



THE
MINERALOGICAL SOCIETY
OF
NEW SOUTH WALES INC

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

NEWSLETTER

MAY 2017

The May Meeting will be held on Friday the 5th of May at 7.30 pm in the clubrooms of the Parramatta and Holroyd Lapidary Club at 73 Fullagar Road, Wentworthville.

The program at the May Meeting will comprise the

Member's Mini-Auction

There may be a few announcements made at the commencement of the Meeting but otherwise the entire evening will be devoted to the Auction. Members bringing in specimens for sale are recommended to arrive by 7.00 pm to set up. The Meeting will start at the normal time of 7.30 pm and after any announcements the auction will commence immediately.

A list of 66 specimens will accompany this Newsletter.

Members please note that transactions are made directly with the vendor. The Society takes no commission on the sales and will not enter into any transactions which must be entirely between the vendor and purchaser. During the Auction if someone feels that bidding on any of their specimens is not proceeding high enough they can bid for the specimen themselves.

In addition a number of trays of minerals can be sold by silent auction. Members can bring in a tray to leave on a table accompanied by a bid form which will be provided. There will be no need to notify the Society in advance about trays being brought in for sale as they will not be listed.

Please clearly label all your specimens and trays.

Forthcoming Meetings and Programs

Meetings will be held on the first Friday of each month throughout the year.

June 2nd: Lecture by Simon Peckover on :- **'The Origins of the High Grade Sapphire Deposits of Kings Plains.'**

July 7th: Lecture by Peter Williams on ‘**The Floating Stones of Stonehenge**’ or ‘**Where did the Metamorphic Stones of Stonehenge Come From?**’

August 4th: Society **Annual General Meeting** followed by the Betty Mayne and Edna Walker **Memorial Lecture**. This year the Memorial Lecture will be given by Society member Lee Spencer on gemstones in Burma/Myanmar titled ‘**Up the Irrawaddy**’.

FIELD TRIPS

Collecting in the Bungonia SCA under the Society’s Science licence ends 30th June 2017

If you are still interested, two trips are anticipated on short notice. Both are dependent on weather in the week before trip and involve bush walks to locality and overnight bush camping.

First trip during week to locate and map Block-up mines.

Second trip on weekend to Block-up area and collect samples.

Also if we have enough participants, a repeat of the bush walk and bush camp from Tolwong Homestead to the campsite and then downhill to the upper Tolwong mines. Following the same route as the 2016 trip.

If interested in participating, register your interest with Edward Zbik by e-mailing ecjz@optusnet.com or SMS to 0401 538 480 or call (02) 9638 6586.

Please Note:

Collecting in National Parks is prohibited and can result in severe fines or imprisonment

The AUSTRALIAN JOURNAL OF MINERALOGY

Subsequent to the election of a new managing, editorial and publishing committee for the A.J.M. in October last year and the transfer of those functions to West Australia, the new committee will be publishing the next issue of the Journal soon. The following notice has been circulated by the W.A. committee by e-mail which also included attachments of a subscription form and order form for previous issues, a number of which are still in stock. The notice is both intended as a subscription drive but primarily to advise all mineralogy enthusiasts that the Journal is back on track. Copies of the notice have already been forwarded on to members by e-mail but will be partially reproduced following.

In referring in the notice to renewing old or making new subscriptions and to a list of previous issues which are being sold at a 30% discount, forms for these were attached to the e-mail. Any members who are not e-mail-enabled can obtain copies from the (NSW Society) Secretary.

Notice from the A.J.M. Editorial Committee, April 2017

Dear Mineral Enthusiast,

The next issue of the Australian Journal of Mineralogy will be V18 #1 which will be ready for distribution by the middle of the year, and work on the following issue is already well advanced. The front cover will be a photograph of a wulfenite from a new find at Penny West, described in one of the feature articles. Penny West is also the third location worldwide for bushmakinite. Other articles in the issue cover the Almada Silver mine, the Golden Mile, the Northampton Mineral Field, and more.

Now is the time to subscribe. If you are interested in mineralogy and Australian minerals, be part of the revival of the Australian Journal of Mineralogy, and take out a subscription. The cost remains unchanged at only \$32 for two issues, or Au\$39 for overseas subscribers. The print run will be limited - so subscribe now - don't miss out! To the loyal subscribers who have stayed with us over the years, thank you for your support. You all have mineral friends who are not AJM subscribers, but should be. Please encourage them to take out a subscription. If every subscriber recruits just one new subscriber, the AJM subscriber base will soon be strong again.

When AJM management transferred to the new committee late last year we inherited a large stockpile of back issues. To clear this stock we introduced a 30% off sale. Many have already taken advantage of this offer, which remains open. If you are missing back issues, take this opportunity to acquire them at a reduced price.

To speed up stock reduction we now also make a special offer to libraries. Any tertiary, high school, or public library prepared to pay the cost of postage and packaging (\$40 within Australia) will receive a free set of the AJMs that are included in the current 30% off sale. Applications must be made by the Acquisitions Librarian on Library letterhead, and emailed to ajm.secretary.treasurer@gmail.com. A library that does not fall within the three approved categories may still apply, and the application will be considered on merit. If you know of a library that you consider might be interested in this offer, please bring it to their attention. The 30% off sale and library offer will remain open till November 30th, 2017, or as long as stocks last.

Kind regards, Geert Buters Secretary / Treasurer
 AJM Publications Inc. (A0033540Z)
ajm.secretary.treasurer@gmail.com

2017 Society Membership Fees: A Reminder

Society membership fees were due from January 1st and whilst by now most members who were financial for last year have renewed and we have a few new members, there are still a number who have overlooked their subscriptions. Please check whether you have paid for this year. The Society carries several insurances to protect the Society and members against injury or financial loss etc but insurance cover is subject to them being financial for the current year. According to the Society Constitution membership is valid in any new year up to March 31st when it will be deemed to have lapsed but would be re-instated immediately upon payment of the current year fee.

The SOCIETY COMMITTEE

PRESIDENT:	Dieter Mylius	Tel: (02) 9477 1060
	E-mail:	<i>dieterm@internode.on.net</i>
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@diabetesnsw.com.au</i>
COMMITTEE MEMBERS:	Peter Beddow	Tel: (02) 8810 8446
	David Colchester	Tel: (02) 9449 3862
	Geoff Parsons	Tel: (02) 9548 3289
	Simon Tanner	
	Edward Zbik	Tel: (02) 9638 6586
	E-mail:	<i>ecjz@optusnet.com.au</i>

WELCOME

Welcome to new member Nicholas Raffans of North Turramurra

The APRIL MEETING

Ed Zbik reported on his inquiries and progress making arrangements for **Field Trips** with a number of sites under consideration. Notably he had managed to obtain permission for a party to visit the **Sibelco Tallawang Magnetite Mine** near Mudgee the next weekend of the 8th and 9th April. He acknowledged that this was unfortunately very short notice but he had been speaking with a company contact for about three weeks and had just been advised that since the company was in the process of closing the mine this month any visits should be made as soon as possible. Accordingly he had scheduled a trip for the next weekend.

Arthur Roffey drew member's attention to the forthcoming **53rd Gemboree** being held at **Lithgow** over the Easter weekend. The Gem & Lapidary Council organisers had registered twenty-four mineral dealers and over eighty tailgaters. By this time he advised that to his knowledge all camp sites in the Showground venue were booked out and also all accommodation in the town. This however should not deter members from making day trips to the Show.

Graham Ogle advised that the next meeting of the **Micro-Mineral Group** which would have been held on Saturday the 8th had been put back two weeks to the 24th because of the Field Trip being scheduled for the next weekend. The meeting would be held in Maitland and the members attending would be looking at minerals of the Middleback Ranges in S.A.

The first talk of the evening was delivered by Dieter Mylius on Organic Minerals. The talk was very comprehensively illustrated by a presentation of a number of detailed images.

Organic Minerals

Minerals Containing Carbon, other than carbonates

Dieter Mylius

There are a large number of minerals classified as carbonates but also a number of others which contain carbon in some form other than as a carbonate. Many of these are of major economic importance, the large deposits of the carbonates, limestone, dolomite and marble and then the minerals comprised only of carbon - coal, graphite, diamond etc and obviously the deposits of hydrocarbons, petroleum etc.

Dieter Mylius however based his talk on the group of minerals which are generally termed organic in containing carbon which may have been derived from biological processes but where the mineral has otherwise formed naturally. As an example, in 1999 Peter Williams and Jim Sharpe discovered two minerals from the Potosi mine at Broken Hill, hoganite and paceite, both of which were found to be acetates of copper. These were formed in the presence of decaying leaves generating small amounts of acetate ions which reacted with copper ores in a gossan. Both are extremely rare although hoganite has since been reported from a site in America. They fall into the small class of organic minerals of which the I.M.A. has recognised about fifty. Apart from the few acetates the larger number are oxalates, such as whewellite and weddellite, - calcium oxalates. Others are formates, methyl sulphonates and thiocyanates. Many are found in association with large sources of carbon such as whewellite usually found in coal deposits whilst weddellite was first found in sediments at the bottom of the Weddell Sea in Antarctica. Both minerals are also found in kidney stones, an undeniably biological occurrence.

Dieter Mylius had compiled a very thorough presentation of a substantial amount of information on organic minerals displaying a number of images, most with captions, of lists of the substances and specimens and described all of these as he delivered his talk, noting that quite a number of the organic minerals are fluorescent. At the end of his talk he acknowledged the assistance he had obtained by referring to the Mindat database but also to some references and images of hoganite and paceite in the Australian Journal of Mineralogy. A number of specimens of carbon-containing minerals had been brought in by members for display and the speaker was able to refer to these during his talk.

Hoganite And Paceite

Jim Sharpe

Jim Sharpe addressed the meeting briefly to relate the story of the discovery of hoganite and paceite which he described as something of a fluke. In 1999 he and Peter Williams had decided to visit the Potosi mine at Broken Hill and examine an open pit and shaft which had not been worked since the early 1900s. A few specimens of linarite were collected after which Jim decided to visit Frank Pace, a collector and dealer in Broken Hill whom he had visited before to see if the collector had any more specimens of the linarite. The only specimen the collector had which he thought might have any linarite was sitting on his air conditioner at the time. Jim Sharpe was able to take the specimen away and back in Sydney in examining it under a microscope found a single unidentifiable crystal.

Later analysis with an x-ray diffractometer of the crystal gave a clear picture which was then presented to a data-base of xrd pictures. Initially the xrd of the crystal was unidentifiable until the speaker extended the data-base search to look through its library of organic materials and the answer came up, copper calcium acetate $\text{CaCu}(\text{CH}_3\text{COO})_2 \cdot 6\text{H}_2\text{O}$. The only other reference to the mineral had been in a report from Europe where someone had found very small crystals in an old mineral storage cabinet where

copper-containing specimens had reacted with acetate ions emanating from the cabinet timber. That finding had not been submitted for recognition as a new mineral.

Further examination of the Frank Pace specimen indicated a number of other more minute crystals which appeared different to the first one. Returning to Broken Hill and the collector Jim Sharpe was able to obtain a few more samples which upon subsequent xrd analysis were shown to be another very similar organic substance, copper acetate, $\text{Cu}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$. In considering what names to attach to the new minerals as part of the process of having them recognised the speaker had decided that one of them could readily be called paceite after the collector and upon being told that Frank Pace had obtained the specimens from another collector named Graham Hogan, the second name was provided, hoganite.

There was a great deal more work necessary to be able to present the specimens to the I.M.A. for recognition but the minerals became accepted in 2002. The I.M.A. will accept organic minerals for consideration only if they have formed naturally without any direct or deliberate human intervention. In the case of the hoganite and paceite it was apparent that pieces of ore had been dumped in a gully away from the workings and left in contact with leaf litter for many years. The leaves had gradually generated acetic acid which reacted with the copper in the ore.

In attending a publicity launch at the GeoCentre in Broken Hill for the second Broken Hill book which lists and names the collectors, Jim Sharpe noted that Frank Pace and Graham Hogan were also attending. Hogan was apparently a man notorious for never having been observed to smile but during the launch when his name was mentioned Jim Sharpe observed that Hogan actually grinned !

The main lecture for the evening was given by Society member John Rankin. In introducing him the President, Dieter Mylius, noted that he and the next speaker would regularly see one another at the Australian Museum where both are volunteer workers. John Rankin in particular has been conducting research into the origins and background of the Australian Museum mineralogical collections.

19th Century European Minerals in the Australian Museum

John Rankin

John Rankin at first reported that he usually spends one day a week at the Australian Museum examining minerals and another day searching through the archives. He had long noted that the acquisition and locality records of the minerals earliest acquired by the Museum were incomplete, particularly of any European specimens, and had resolved to rectify this as much as possible. This had led him into quite a detective story at times, in identifying labels and brief entries in old ledgers and associating or comparing them with labels, dealer's sale lists and similarly brief entries in other parts of the Museum archives. The lecture was illustrated by images of minerals, labels, ledger entries and images of some of the personalities involved in the purchasing, building up and organising of the Museum mineral collection in the 19th century.

There were a number of people relevant in the later 1800s in the gradual acquisition of minerals for the Museum. Records of main acquisitions of European minerals start in 1861 with a purchase from a French dealer, Louis Saemon, then in 1878 a thousand pounds was sent to dealers James R.Gregory in England and Conrad Schuchardt and the Krantz dealership in Europe. Other purchases were made in 1882 from Gregory, 1885 from Ward in America, in 1881 from A.E.Foote and again in 1889 a purchase of £200 of specimens from J.R.Gregory.

The provenances for many of the early purchases seem to have been totally lost. The 19th century mineral catalogues were found to be 'a real mess', and had localities but no information about where and from whom specimens had been purchased. In 1887 a new catalogue was started but the speaker found that it had no connection with the specimens because the catalogue numbers do not correspond. It was apparent that the people who had purchased the minerals knew little about organising a collection. These included the Reverend W.B. Clarke and Archibald Liversidge who had purchased quantities of specimens without preserving much accompanying documentation. The situation started to improve in 1860 with the appointment of Gerard Krefft as Assistant Curator and he set about compiling a catalogue of the mineral collection. This work was continued in 1881 when Felix A. Ratte was appointed Mineral Curator and started a mineral register. Then in 1892 Dr Thomas Cooksey came in and proved very prolific, cataloguing everything in sight but did not record any provenances. In 1906 Charles Anderson was appointed as mineralogist and later director of the Museum and set about going through the invoices from the dealers and managed to match up a lot of the labels.

John Rankin in examining all the European specimens in the Museum collection against whatever records were available in the archives has managed to match up 568 out of a thousand specimens. One clue that he was able to follow up, among other indications, was in having noted that some of the numbering on specimen labels was written in a French style which was also found on some of the invoices. This suggested which specimens belonged to which invoices and therefore from whom they were obtained. In the course of his research a large number of photographs of the minerals he had been investigating had been taken. The speaker was then able to spend a large part of his lecture displaying the images whilst providing information on the origin, locality and whatever provenance he had established for each one after an obviously considerable amount of research that he had conducted.

At the end of his lecture John Rankin answered a number of questions, taking the opportunity to stress to members the importance of maintaining catalogues and retaining old labels and as much information about specimens as possible.

FORTHCOMING EVENTS

27th Lismore GEMFEST 2017

The 27th Gemfest will be held in the Lismore Showgrounds, Alexandra Pde, North Lismore, over the weekend of the 20th & 21st of May next. Saturday from 9am to 5pm and Sunday from 9am to 3pm.

Quoting from the Lismore Gem & Lapidary Club Website Show promotional information : -

'Lismore GEMFEST is the biggest annual event in the country devoted to lapidary and allied arts and is organised by the Lismore Gem & Lapidary Club Inc. Exhibitors come from all parts of the country and range from amateurs to the most experienced professionals. Everything from rough stone for cutting, through to finished jewellery in all price ranges, along with mineral specimens, fossils, gold nuggets and meteorites are to be found on display. There are gem sieving activities for children, demonstrations of jewellery making and other craft activities.'

Further information from : - bruce.copper@bigpond.com, Telephone 02 6688 8280
Or from the Website : - www.gemclublismore.org.au

The BANKSTOWN GEM & MINERAL FAIR

To be held in the Arena Sports Club at 140 Rookwood Road in Yagoona, over the weekend of the 3rd & 4th of June. Saturday 9.30 am to 5 pm, Sunday from 9.30 am to 4 pm.

The Fair is supported by the Bankstown & Districts Lapidary Club.

There will be a large range of items on sale including jewellery, gemstones, beads, opals, gem rough, carvings, fossils, crystals and mineral specimens.

Refreshments available, plenty of parking, admission fees, \$7 per adult.

For more information on the Bankstown Show contact : - Peter on 0412 333 150

Or the Club website www.bankstownlapidary.com

WINDSOR GEM & MINERAL FAIR

Over Saturday and Sunday the 17th and 18th, of June at the Windsor Function Centre, on the corner of George and Dight Streets, Windsor. Saturday 9.30 am to 5 pm, Sunday 9.30 am to 4 pm.

Jewellery, gemstones, beads, opals, gem rough, carvings fossils, crystals and mineral specimens from all over the World. Sales, dealers and displays. Entry fees \$7 for adults and children under 18 accompanied by parents are free. There will be a lucky door prize of a 9ct gold and sapphire pendant awarded after a raffle draw on Sunday afternoon. The Show is supported by the Hawkesbury Valley Lapidary Club.

For more information email Peter Beckwith at peterrare@optusnet.com.au

BLAXLAND GEM & MINERAL CLUB GEM SHOW

Being held over Saturday and Sunday, August 19th and 20th 2017 in the Glenbrook Community Hall, Great Western Highway, Glenbrook, NSW. (Next to Glenbrook Theatre), just west of the Information Centre.

From 8 am to 4 pm daily. Entry: Adults: \$3 Children \$1

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

Refreshments available.

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

THE JOINT MINERALOGICAL SOCIETIES OF AUSTRALASIA 40TH ANNUAL SEMINAR

The 2017 Seminar will be held over Wednesday the 4th and Thursday the 5th of October in the Hahndorf Resort Conference Centre, Hahndorf, S.A. and is being hosted this year by the **Mineralogical Society of South Australia.**

The Theme will be '**Copper Minerals - Copper State**'

The entire seminar with a program of events including a number of field trips will run from Saturday the 30th of September to Friday the 6th of October.

The formal proceedings, opening address and lecture program will take place over the two days of Wednesday the 4th and Thursday the 5th of October with various activities including field trips scheduled from October 1st through to the 6th. Additional field trips are planned for the 9th – 14th October to the north of S.A, and to locations and collections in and around Broken Hill.

The Seminar will be based in the historic German settled village of Hahndorf, only 30 minutes' drive by car from Adelaide City. A range of accommodation options are available including at the seminar venue. The theme of 'Copper Minerals - Copper State' has been selected in view of South Australia's early copper mining history. A number of field trips to copper, uranium and phosphate deposits are currently being planned. There are a number of tourist-interest places to visit in the region including dozens of wineries.'

Contact : Harold Gallasch
Phone: (08) 8388 7218
email: gallasch@bukartilla.com.au

GEMKHANA 2017

The Gemkhana will be held again this year in the Hawkesbury Showgrounds at Clarendon near Richmond over Saturday to Monday, the 1st, 2nd & 3rd of October from 10.00 am to 5.00 pm on Saturday & Sunday, and from 9.00 am to 12 noon on Monday.

The Gemkhana is presented by the Gem & Lapidary Council of NSW Inc. and is the Annual Gem & Mineral Show and Competition of Lapidaries from all over NSW. Since the venue last year was very successful and geographically convenient the Gemkhana is being held again in the Hawkesbury District Showgrounds, at Clarendon. The Showgrounds are directly opposite the RAAF base, on the Windsor Road approximately mid-way between Richmond and Windsor, turn-off on to Racecourse Road. \

There is unlimited parking in and just outside the Showgrounds which are a fairly short walk from Clarendon railway station.

'Featuring Competition, Exhibitions, Dealers, Demonstrations and Tailgating; Sales of minerals, fossils, jewellery, lapidary equipment, faceting rough stones and slabs, silver work and gem cutting activities.'
