



THE MINERALOGICAL SOCIETY OF NEW SOUTH WALES INC

Website: www.minsocnsw.org.au

Please address all correspondence to :-
The Secretary, 58 Amazon Road, Seven Hills, NSW 2147

NEWSLETTER AUGUST 2019

The August Meeting is the Society's ANNUAL GENERAL MEETING and will be held on Friday the 2nd of August 2019 at 7.30 p.m. in the clubrooms of the Parramatta and Holroyd Lapidary Club at 73 Fullagar Road, Wentworthville.

The A.G.M. will present the President's report for 2018/2019, the Treasurer's report and presentation of the annual financial accounts for 2018/2019 and the election of the Society Committee and office-bearers for 2019/2020. In accordance with the Society Constitution the entire current Committee retires at the commencement of the A.G.M. and all positions are open for nomination and election. Nomination forms for election to the 2019/2020 Committee were circulated with the July Newsletter. According to the Society Constitution nominations should be received seven days before the commencement of the A.G.M.

At the A.G.M. any other business may also be raised and discussed. The minutes of the previous 2018 A.G.M. were circulated in the September 2018 Newsletter. Copies will be available at the 2019 A.G.M. or may be obtained from the Secretary.

After the A.G.M. has been concluded the Betty Mayne, Edna and Harold Walker Memorial Lecture will be given this year by Peter Williams and Jim Sharpe on :-

Secondary Copper minerals of the Mt Isa District.

FORTHCOMING MEETINGS AND PROGRAMS

September 6th : There will be a lecture to be given by Lee Spencer on **Arsenates:**
(with examples from the Ojuela Mine, Mexico).

October 11th (Second Friday): There will be a lecture on **Mineral Museums in Australia and Overseas** by Dieter Mylius and Graham Ogle.

Nov 1st: Lecture by David French on **Minerals in Coal.** (title to be confirmed)

AN ITEM OF TRIVIA

Did You Know?: The Kawah Ijen Lake in Indonesia is the world's largest sulfuric acid lake. At its most acidic, in the center, the lake has a pH of 0.13—more acidic than battery acid. Regards: Ed Zbik

OPEN DAY AT THE WB CLARKE CORE LIBRARY

A public open day at the WB Clarke Geoscience Centre Londonderry on 15th August
Attendees must register on the below link, (Cntrl+Click). Regards Ed Zbik

Hi: Invitation to Stories in Stone - August 15 @ Londonderry Core Library.

We'd love to see you at our public open day at WB Clarke Geoscience Centre in Londonderry. All are welcome to come along and learn about the geology of NSW. Places are limited, so please register:

<https://sydney-science.com.au/2019/event/stories-in-stone-the-nsw-library-of-rocks/>

Regards, Simone Meakin, Manager Publications & Outreach, Geological Survey of New South Wales

The AUSTRALIAN JOURNAL OF MINERALOGY

The latest issue, Volume 20, No 1 of the A.J.M. has been published and distributed to subscribers. This issue contains several major articles, reports and numerous.

The articles are : - 'Natrowalentaite, a new mineral from the Griffins Find, gold deposit, W.A.'; 'TC Cloud, 1848 – 1918, Mineralogist and Curator'; 'Minerals from the Cenozoic basalts at Abbotsford and Bundoora, inner Melbourne, Vic'; 'Atacamite from the Cams Mine, Lake Miranda, W.A.' and 'The Carbon Mineral Challenge: A world-wide effort to find Earth's missing carbon minerals'.

Book Review:- 'The mineralogy of Uranium and Thorium';

Society News:- 'What's New in the land of Oz?' a report on:- 'The MinSocWA field trip to the DeGrussa Copper mine, W.A.' and an update on the preparations for the 42nd Joint Mineralogical Societies Seminar to be held in Perth over the 31st of August and 1st September.

Subscriptions are \$32 per year for two issues and forms are available at Society meetings or by e-mail to the WA publishers:- ajm.secretary.treasurer@gmail.com

COLLECTING IN RUSSIA

Jamey Wilson

At the June Meeting Jamey Wilson described a recent visit to Russia that he had taken with three companions, starting their visit in Moscow. The party had a few particular interests apart from visiting the usual tourist sites but were also intending to travel a substantial distance off the usual routes into the country to reach areas associated with gem minerals, the speaker having a gem business and describing himself as 'mainly an opal guy'. The party particularly wanted to reach an area in eastern Siberia where the very valuable mineral charoite is mined and in reaching the area and spending some time there were successful in obtaining a number of large slabs of the mineral some of which were displayed to the Meeting. During their visit however the party took in a number of visits to varied places or sites of interest including perhaps inevitably, Red Square in Moscow.

One of the sites visited first by the group after Moscow was the RATAN-600 Russian radio telescope array that has been built as part of the Russian SETI (Search for Extra-Terrestrial Intelligence), program. The Russian radio telescope is located near the village of Zelenchukskaya in the Caucasus Mountains at an altitude of 970 meters and is about 600 meters in diameter, Jamey Wilson noting that the Parkes Radio Telescope has

a dish about 54 meters in diameter. The Russian array is the largest single dish radio telescope in the World. By virtue of having an introduction to the Russian SETI program the speaker was able to enter the country relatively easily and in fact was treated to a degree of ‘rock-star’ status which provided him with “*the easiest trip through customs anywhere in the World*”. This was in spite of him finding a very long queue of people waiting to get through customs but two officials met him and whisked him through. This was very useful when he left the country three weeks later by then loaded down with mineral and gemstone samples.

By contrast the speaker related a problem he had in Florida some years previously when he had acquired a single large double-terminated stibnite crystal and wanted to board a plane in Florida. He had wrapped the crystal up thoroughly in paper towels and then put it into a cardboard tube but before he got on board he was pulled aside by an officer who demanded to know what he was doing trying to get on a plane with a sword!



St Basil's cathedral in Red Square

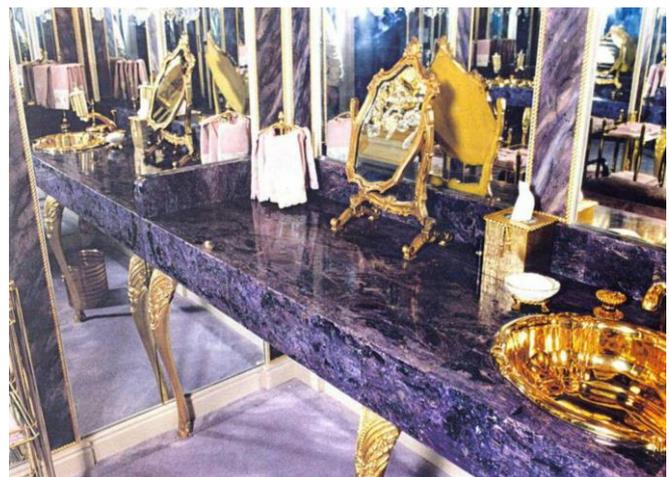


One of Jamey Wilson's travelling companions having his photograph taken with two locals who look vaguely familiar.

Jamey Wilson next described travelling into the Chara River area of eastern Siberia, to the north-east of Lake Baikal, obviously a considerable distance from Moscow. The mineral charoite was discovered in 1940 near the river but deposits were not exploited until 1978. It is a rare, strictly massive, silicate mineral, - $(K(Ca,Na)_2Si_4O_{10}(OH,F) \cdot H_2O)$, and appears insignificant in situ with a weathered powdery grey coating but when this is cleaned off a brilliant, often translucent or chatoyant lavender to purple colour with a swirling appearance and pearly lustre is revealed. After 1978 substantial amounts of charoite were produced and wealthier people were able to have pieces carved into large ornaments and even larger amounts cut into slabs to be used as kitchen table-tops, bathroom fittings and even to line swimming pools! In museums visited by the speaker a series of photographs showed examples of this extensive use.



Charoite cabochon



A bathroom with charoite and gold fittings.

The Chara River deposits are the only source of charoite in the World and gradually the supply of the mineral began to run out and the price ‘skyrocketed’. Then when the Soviet Union collapsed in 1990 many of the wealthier people whose economic situation had changed started selling off their charoite fittings for income to buyers who would convert them into smaller ornaments and cabochons for jewellery. Today the best pieces command prices of several dollars a carat. The mines ran out completely about four years ago and current regulations in Russia prevent any rough charoite being taken out of the country. Any pieces to be taken out have to have been polished or fashioned to some extent. During his visit to Russia Jamey Wilson was very lucky to make contact with a mineral warehouse of lapidary supplies that was closing down and he was able to acquire a number of pieces which had actually been in their stock since 1975.

The speaker’s party had travelled through and over a lot of off-the-main-road, rural and mountainous parts of Russia and the speaker displayed a series of images of the countryside, roads and locals met along the way and road-side meals cooked by locals providing very fresh food. Some of the countryside scenes showed a probably more typical for Russia, damp, misty view. An image taken during a visit to a local astronomical observatory showed the building enveloped in mist and almost invisible from only a few meters away. To facilitate their travelling the party had hired a utility vehicle widely used in Russia called a Bukhanka which means ‘loaf of bread’ in Russian so named because of its oblong loaf-like shape. The vehicle has been produced in large numbers by the UAZ company in Russia for many years and there are a number of models. They are a mainstay for any off-the-main-road travelling into the hinterland, they have all-wheel drive; cost about US\$800, are economic on fuel and every village has supplies of spare parts. Advertisements seen by the speaker for the vehicle stressed that in fifty years the design has changed hardly at all, or *‘50 Years of the Same. Why Change Perfection’*, (in Russian). The only addition to the ‘luxury’ model that the company has provided is leaf springs and air-conditioning, ... or beer!



A Bukhanka



Russian police roadside device to warn motorists to slow down and take more care.

During their travelling around Russia the Wilson party had come across a novel way that local police had used to try and slow down speeding vehicles. They had constructed a cut-out image of a police car with an image of an officer standing in front of it and set this up alongside roads. The visitors were told that the cut-out worked for a while until motorists had got used to it and started speeding through again but as police learnt that motorists were starting to ignore the image they replaced it for a while with a real officer!

Jamey Wilson had clearly packed a lot of travelling into his time in Russia and managed to make productive contact with a number of gemstone and precious stone suppliers in the country. He had been able to obtain an amount of other gem-quality or related material in addition to the charoite and projected not only images of specimens of uvarovite, and, pyrite etc but had brought some of them to the Meeting to display.

THE JULY MEETING

At the commencement of the Meeting graham Ogle reminded Micro-Mineral Group members and anyone else who might wish to join a meeting that the next one would be held at the **WB Clarke Geoscience Centre** in Londonderry at 11.00am on next Saturday and advised that anyone could attend but that they should check with Ed Zbik first. John Chapman would e-mail a list of the core library specimens for members who wanted to look at specific specimens and could ask to be shown them.

In the absence of Ed Zbik Geoff Parsons gave a report on the central NSW **Manuka field trip** which had been very successful with cold and often windy but fine weather. Sixteen members had assembled at Condoblin on Saturday the 22nd of June and with a seventeenth arriving on the following morning set off to reach Mt Hope on the Kidman Way. There was a quartz location a few kilometers from Mt Hope which the field trip party last year had not been able to find but this year's party were successful and spent some time at the site which was quite productive. The party then split into two groups with one heading for the Four Corners guest farm and the other to the Manuka mine to spend the night.

The following day the Four Corners group spent most of the day exploring the nearby Nymagee mine whilst the other fossicked at Manuka before both groups basically changed places. (The two-group arrangement had arisen because the Manuka mine had not wanted to accommodate more than a dozen visitors at a time and Ed Zbik had received seventeen applications to join the Trip). Accommodation at Manuka was very comfortable and the fossicking on the mine dumps and in the pit very productive. On the third day both groups headed for Cobar to join up and spend the next three days visiting mines in that area and also the Cobar Museum. For some of the evenings the entire party was able to assemble for pleasant dinners at the Condoblin RSL and the Cobar Golf Club at tables thoughtfully booked in advance by Ed Zbik

‘The NSW Economic Rock and Mineral Collection – Latest Developments’

Paul Meszaros is the Curator of the Economic Rock and Mineral Collection of the Geological Survey of NSW. The GeoSurvey dates back to 1875 and is the state's premier geoscience agency and is now a part of the Department of Planning and Environment. It collects and manages geological, geophysical, geochemical and geospatial data to provide information to the government, industry and the community about the State's geology and its mineral and energy resources. The GeoSurvey has premises at Maitland, (after moving from St Leonards in Sydney some years ago), has offices in Orange and the W B Clarke Geoscience Centre at Londonderry in Western Sydney. The Centre is named after the Reverend William Branwhite Clarke, 1798 – 1878, who was instrumental in opening up the mineral wealth of Australia in the 1850s.

The Centre archives a selection of the state's company and government drill-core and rocks, providing the material and a number of analytical instruments available to researchers when requested. It also stores important geological, mineralogical and fossil collections. The speaker proceeded to provide a report on the ongoing developments to the Centre's facilities.

Paul Meszaros commenced his report by referring to the history of the Economic Rock and Mineral Collection (ERMC), which effectively was started in 1875 by the CS Wilkinson after his appointment as Geological Surveyor initially within the Department of Lands. The collection soon after acquired the Rev WB Clarke's collection but much of it was destroyed in the "Garden Palace" fire of September 1882. The Collection was then rebuilt by Wilkinson and later by George Card and housed in the Geological & Mining Museum which was founded in 1909.

The Geological and Mining Museum underwent redevelopment in 1989 and was re-named the Earth Exchange which also briefly housed the Albert Chapman Collection. The Earth Exchange closed permanently in 1995 with the Albert Chapman collection being moved to the Australian Museum, (and recently to Bathurst), and the ERMC to Lidcombe and then in 2004-5 to its present home at the W B Clarke Geoscience Centre in Londonderry.

The bulk of the ERM Collection comprises ore type specimens and focuses on the mineralogical associations of mineralised rocks with representative specimens from mines and prospects throughout NSW. The collection has a number of high quality specimens from important and significant sites such as Broken Hill and a total of 28,112 catalogued specimens. The speaker described some aspects of the ongoing research by workers of material in the collection, examining trace elements and rare-earth presence and distribution in specimens and re-photographing important specimens by improved methods.

Illustrating the re-photographic work Paul Meszaros showed a few examples of re-imaged specimens and also some of the Collection's more prized specimens such as the Maitland Bar nugget which is now on display in the Westpac Gallery in the Australian Museum.



The Maitland Bar Nugget, 347 oz 1 dwt (10.7 kg) gross, containing 8.87 kg gold).



Crystalline gold, Nundle, purchased 1894.

Significant mineral material and specimens in the collection include examples from the early mining at Broken Hill, early mined material from the Cobar area, specimens from tin, molybdenum and associated deposits in New England region, and significant overseas specimens, such as the stibnites from the Ichinokawa Mine, Saijo City, Ehime Prefecture, Shikoku, Japan.

The improved photographing of mineral specimens was an important current and ongoing project utilising detailed techniques and explained by the speaker with reference to images of the camera set-up, photographic 'Tech Spec "Cheat" Sheet' check-lists and flow charts of the correct process.

A number of images of specimens photographed by older and improved methods were shown.

Old Photo Series



Latest Image Acquisition, (low resolution)



Erythrite, Mt Cobalt, Selwyn District, Cloncurry, Queensland

In conclusion Paul Meszaros described the recent acquisition of three new 3x3 meter cabinets which were intended to display a selection of the ERMCM significant specimens from Broken Hill, minerals from other NSW locations such as Cobar and Kingsgate and interstate and worldwide specimens collected by notable collectors such as George Smith and J.E.Carne etc.



The Curator alongside the new display cabinets

John Chapman introduced the next speaker of the evening by advising that David Colchester's lecture on **Homemade Minerals**, or '**How To Grow Your Own Minerals**' was the subject of a lecture he intended to give to the Mineralogical Seminar in Perth in October so this evening's lecture was a 'dry-run' which the Society was being privileged to hear first.

A report on David Colchester's lecture will be provided in a subsequent Newsletter.

FORTHCOMING EVENTS

THE JOINT MINERALOGICAL SOCIETIES OF AUSTRALASIA 42nd ANNUAL SEMINAR

The 42nd Joint Seminar of the Mineralogical Societies of Australasia will be held in the State Library of WA in Perth over Saturday and Sunday the 31st of August and 1st of September 2019 on the theme : -

Traps in Mineralogy – Pseudomorphs, Look-Alikes, Fakes and Synthetics

The full Seminar program includes a Micromount session to be held at the WA Lapidary Club, Rivervale, a Swap and Sell on Monday 2 September also at the WA Lapidary Club, Rivervale (\$5.00 per table for sellers), and a field trip to the Murchison Region on Tuesday the 3rd of September.

Registration fees if paid before the end of February were discounted but are now \$150.00 for MinSoc or like-Society Members, \$185.00 for non-members and \$75.00 for students.

The Conference dinner, (\$65), and Mineral Auction will be held on Saturday evening at the Mercure Hotel, Perth CBD. Inquiries for information, registration and bookings may be made to : -

Lee Hassan

Honorary Secretary/Treasurer

The Mineralogical Society of Western Australia Inc.

lee_notebook@msn.com

http://www.minsocwa.org.au

The Blaxland Gem & Mineral Club Annual Gem Show

The **Blaxland Gem & Mineral Club Inc** will be holding its **Annual Gem Show** over Saturday and Sunday August 17th and 18th from 8 am to 4 pm daily in the Glenbrook Community Hall, Great Western Highway, Glenbrook, NSW. (Next to the Glenbrook Theatre, just west of the Information Centre).

There will be displays and sales of lapidary work, gems, rocks, minerals, jewellery and beads.

Refreshments will be available. Entry: Adults: \$3 Children \$1.

Information from : - *http://www.freewebs.com/blaxlandgemmineralclub/BGMCshow.htm*

The Carlingford Gem & Mineral Expo

Being held over Saturday & Sunday the 24th & 25th of August. From 9.30am to 5.00pm on Saturday and 9.30am to 4.00pm on Sunday in the Roselea Community Centre, 645 Pennant Hills Road, Carlingford.

The Carlingford Show is hosted by the Australian Gem & Mineral Expo's and the Northern Districts Lapidary Club. Displays and sales of jewellery, gemstones, beads, opals, carvings, gem rough, lapidary cutting rough, fossils, meteorites, crystals as well as mineral specimens from Australia and all over the World.

Entry \$7, kids (*under 18 with parent/s*) are free. Lucky door prize.

Information from *www.agamexpos.com.au* or contact Peter on 0412 333 150,

E-mail at *raregems@optusnet.com.au*

GEMKHANA 2019

The Annual Gem & Mineral Show and Competition of lapidaries from all over NSW will be presented by the Gem and Lapidary Council of NSW Inc, in the Howard Pavilion at the Hawkesbury District Agricultural Showground, 40 Racecourse Road at Clarendon outside Richmond over the weekend of the 28th and 29th of September from 9am to 5pm each day. Entry \$5.

Visitors please note: The above dates are before the long weekend of the 5th to 7th of October.
Featuring: The largest emerald found in NSW; hand-crafted jewellery; polished stones; (cabochons); stone carvings; minerals and fossils. Demonstrations of Silver Work and Gem Cutting
For further details email gemkhana@gemlapidarycouncilnsw.org.au

The Central Coast Lapidary Club Annual Gem Show

Will be held in the Mingara Recreational Club, Mingara, Tumbi Umbi, from 9.00am until 5.00pm on Saturday October 12th and from 9.00am until 4.00pm on Sunday October 13th

The Illawarra Lapidary Club Inc presents the 2019 Jewellery Gems and Minerals Festival

To be held in the Heininger Hall, Ribbonwood Centre, 109 Princes Hwy, Dapto. From 9.00am to 4pm on Saturday 2nd November and from 9.00am to 2.30pm on Sunday the 3rd of November.
Entry: Adults \$3, children under 12 years free.

Featuring: Gemstone Faceting, Cabochon Cutting, Silvercrafts, Jewellery Making and Valuations, Mineral Group displays, Club and Fossicking Information, Refreshments, Raffle, Lucky Door Prizes and Kids' Games. Dealers Selling: Lapidary Supplies, Minerals, Jewellery, Crystals, Findings, Fossils, Beads and Opals
Enquiries: John (02) 42675618 www.illawarralapidaryclub.com.

The Windsor Gem and Mineral Expo

Being held from 9:30 till 5:00 on Saturday 23rd November and 9:30 till 4:00 on Sunday 24th November in the Windsor Function Centre on the corner of George Street and Dight Street in Windsor.

Hosted by Australian Gem & Mineral Expo's and the Hawkesbury Valley Lapidary Club. Displays and demonstrations by the Hawkesbury Valley Lapidary Club as well as traders and dealers from around Australia. Items for sale by the many traders will include jewellery, gemstones, beads, opals, carvings, gem rough, lapidary cutting rough, fossils, meteorites, crystals as well as mineral specimens from Australia and all over the world. Entry \$7, kids (*under 18 with parent/s*) free. Lucky door prize.

More information on the website www.agamexpos.com.au
or contact Peter on 0412 333 150 or email at raregems@optusnet.com.au
