



The Mineralogical Society of Victoria
Incorporated
A0001471E

Newsletter No. 240

December 2019



Manganese dendrites on siderite 5mm
Fyansford

Print Post Approved PP100003094

The Mineralogical Society of Victoria Inc.
P.O. Box 153
Lara, Victoria, 3212

Patron: Professor Ian Plimer FTSE, Hon FGS, FAIG, Hon SGA, BSc(Hons), PhD
Dr Bill Birch AM, BSc(Hons), PhD

Office Bearers:

President:	Alex Blount	Publicity	Alex Blount
Vice President:	John Haupt	Committee Persons:	John Haupt
Secretary:	Fred Kapteina		Carol Kerslake
Treasurer:	Ed Richard		Shayz Yuen

Excursions: John Haupt / Fred Kapteina
General Programs: Committee

Newsletter: Editor & Layout: Michael Hirst
Assembly and Circulation: John Haupt

Contact Numbers:	Excursions John Haupt	Micro-mineral Group Jo Price (03) 9836 6200	Mineral Appreciation Group Alex Blount 0407 879 097
-------------------------	--------------------------	---	---

Membership Details:

Joining Fee	\$5.00		
City Adult Member	\$25.00	Country Adult member	\$20.00
City Family membership (2 adults & children under 18)	\$35.00	Country Family Membership (2 adults & children under 18)	\$30.00
Student Member (full time)	\$15.00	Newsletter only	\$15.00

(N.B. - Country membership - more than 50 km from Melbourne G.P.O.)

Applications for membership can be obtained by writing to:-

The Secretary, Mr Fred Kapteina,
P.O. Box 153
Lara, Vic, 3212.

General meetings are held on Wednesday evenings every two months (except January and Public Holidays). Please see the Forward Diary in this Newsletter for upcoming meeting dates and locations.

Visitors are most welcome.

Newsletter of the Mineralogical Society of Victoria
P.O. Box 153
Lara, Victoria, 3212 Australia

e-mail: ablount@golder.com.au
Internet: <http://www.minsocvic.org.au>

ISSN 0811-1855

© Not to be reproduced in part or full without written permission

© All photographs are the copyright of the individuals who submitted them



The Mineralogical Society of Victoria

Incorporated
A0001471E

Newsletter Number 240

December 2019

FORWARD DIARY

PLEASE NOTE - General Meetings are held approximately every second month on Wednesday evening.

- Dec 11 GENERAL MEETING
Wednesday 8:00pm, at Royal Society of Victoria Building, Cnr La Trobe and Victoria Streets, Melbourne
Speaker: Ian Strachan, Topic– Namibia
- Dec 19 Mineral Appreciation Group: 10:00am, Nunawading Lapidary Club, Oval Way, Nunawading.
Sunday Topic: Minerals from the Victorian basalts
- 2020**
- Jan 19 Mineral Appreciation Group: 12:00noon, Nunawading Lapidary Club, Oval Way, Nunawading.
Sunday Topic: Specimens acquired in 2019
- Feb 2 Micro Group meeting, At George Lysiuk's.
Sunday Topic: Study of the Min Soc Victorian micro collection
- Feb. 12 GENERAL MEETING
Wednesday 8:00pm, at the **South Melbourne Community Centre, 1 Ferrars Place, South Melbourne.**
Swap and sell night with Pristine Minerals bringing in specimens for sale
- Feb 16 Mineral Appreciation Group: 10:00am, Nunawading Lapidary Club, Oval Way, Nunawading.
Sunday Topic: Borates
- Feb 23 Micro Group meeting, At George Lysiuk's.
Sunday Topic: The group 17 minerals, halides
- Mar 15 Mineral Appreciation Group: 12:00noon, Nunawading Lapidary Club, Oval Way, Nunawading.
Sunday Topic: "Piggyback" minerals.
- Mar 21 Field trip to Berry's Beach and Redcliff Head, Phillip Island
- Mar 29 Micro Group meeting, At George Lysiuk's.
Sunday Topic: Arsenate minerals
- Apr 8 GENERAL MEETING
Wednesday 8:00pm, at the **South Melbourne Community Centre, 1 Ferrars Place, South Melbourne.**
Speaker, topic: TBA
- Apr 19 Mineral Appreciation Group: 10:00am, Nunawading Lapidary Club, Oval Way, Nunawading.
Sunday Topic: Standout minerals

- Apr 26 Micro Group meeting, At George Lysiuk's.
Sunday Topic: Minerals from the USA
- May 17 Mineral Appreciation Group: 12:00noon, Nunawading Lapidary Club, Oval Way, Nunawading.
Sunday Topic: TBA
- May 24 Micro Group meeting, At George Lysiuk's.
Sunday Topic: A study of the Lake Boga minerals

For any of the usual attendees to MAG meetings, if you would love a particular topic to be covered or even re-covered please let us know and hopefully it will be in time for the due newsletter.

MINERAL RELATED EVENTS

2020

- Apr 10-13 56th Gemboree
Albury Show Grounds
- Oct 3-4 43rd Seminar, Sydney, NSW. "43 shades of silver"
- Oct 31 & 1 Nov. Geelong Gem and Mineral Club Show
West Geelong Town Hall, Packington Street, West Geelong

NEXT ISSUE

PLEASE NOTE:- Material for the **March** 2020 Newsletter to be with Michael Hirst by **November 25th**.

FROM THE COMMITTEE

Welcome to the last edition of our newsletter for 2019.

2019 was a busy year for the Society. For those of you that availed themselves of what was on offer, there was the seminar of the joint Mineralogical Societies of Australasia seminar in Perth WA, a two day field trip to Broken Hill, and if this newsletter reaches you early, there is still the collecting trip to Flinders on December 8, the almost monthly Mineral Appreciation Group (MAG) and Micro Mineral Group meetings as well as the bimonthly General Meetings.

We are raring to go in 2020 with more events planned as you will see from the forward diary in this issue.

There is always something going on at the Society, but to get out the most, you need to get involved and attend. Are General Meetings not your cup of tea? How about having a go at attending a MAG or Micro meeting. Field trips are always fun and one never knows if something special turns up, so register yourself for one of the 2020 trips. However, if you would like something else as well, just let one of the Committee members know and if there is enough interest we will make every effort to bring it about.

This will be the first year where we will be holding our General Meetings at the South Melbourne Community Centre, 1 Ferrars Place, South Melbourne. Please don't forget that the first meeting there will be on February 12, 2020. With this change we hope to reduce the cost of meetings and at the same time have a venue where the study and appreciation of minerals with the better lighting will be enhanced. It was understandable, that in the Melbourne CBD with the increased traffic diversions due to the new underground loop and the limited parking at the Royal, many members may have chosen to give General Meetings a miss. This should not be a problem in South Melbourne and we expect an increased attendance at General Meetings. However, unless there are unforeseen circumstances, we still hope to have the Annual General Meetings at the Royal, subject to the Royal being prepared to make our usual rooms available for that event.

To make the editor's life a little easier we need more articles for the newsletter. Please give it a go by writing about your last collecting trip or anything mineralogy related, it's not that difficult.

Wanted

A reminder to also avail yourself of the space under “**Wanted**”. This is for anything wanted to buy or sell or swapped that is in anyway mineral related and could be mineral specimens, rocks, books/magazines and even tools. Unless you are a dealer, it costs nothing to advertise.

Dealers

If you are a dealer and wish to let the wider mineral community know that you have something new on offer, all you need to do is write a short article under “what’s new”. Here is an opportunity to reach a group of mineral enthusiasts who would love to acquire something new on offer.

Your article can include your business logo and contact details. You are also most welcome to discuss with our Committee any general adverts you may wish to have in our newsletter.

Membership dues

Finally, it’s that time of the year where membership renewals are soon due. For your convenience a renewal form is attached with this newsletter. Please make your payment by March 31, 2020.

Finally, if you are unable to attend meetings in Melbourne but have some suggestions, send us an email via the Secretary. The Committee will be only too happy to consider all suggestions.

Fred Kapteina
Secretary

SHORT TALKS

As always, it is a struggle to find speakers for the Short Talks. Aside from a few regular contributors and some generous offers, it is left to the Committee to nominate people from those who we expect might be attending the General Meetings. Given the smaller numbers of attendees as General Meetings, it is also becoming nearly impossible to ‘volunteer’ people for short talks – as we are never quite sure who will be present! Whilst we have seen some exceptional presentations in the past year, we are regularly left without a short talk for the meeting.

We are happy to entertain ANY suggestions for alternative activities, ways to encourage more people to attend and present something... anything at all. These are your meetings so please let the Committee know what you would like to see or hear?

MUSEUM FUND

Donations to the Museum Fund are always appreciated and can be made through your annual membership renewal form, through buying or donating specimens for sale, or by contacting a Committee member at any time.

EDITORIAL

As this issue of the Newsletter is already 24 pages in length, the Excursion Report for the Perth Seminar will appear in the March issue next year.

Wishing you all a Merry Christmas and a Happy, Healthy & Safe New Year.

Michael Hirst
Editor

Broken Hill Excursion, November 2019

By Fred Kapteina

A small number of members of the Society attended a two day excursion to the Broken Hill area to collect minerals and to do a bit of socializing.

The trip was over the weekend prior to the Melbourne Cup Tuesday, November 2 and 3. It was a joint excursion with the Broken Hill Mineral Club and Trevor Dart from that Club was our local knowledge and trip leader.



Most of us travelled to Broken Hill on the Friday and the weather did not look promising with a temperature of 36 degrees and a gusty northerly wind that raised the dust, requiring cars to put on their headlights. It was sad to see the degradation of the landscape towards Broken Hill due to the continuing drought.

Left: Drought affected landscape near Coomba, NSW

However, once in Broken Hill and all having gathered on the Saturday morning at the designated meeting spot we were all eager and ready to go. The weather did not look as the weather had changed dramatically with heavy clouds having moved in and the local weather forecast predicting rain. We were again reliant on local knowledge as we headed off to Balaclava Station where we met one of the owners. The opinion of the owner was that it would be our call to continue in spite of the threatening weather, pointing out that there would be no possibility of Station personnel pulling anyone out should we become stuck. However, we were optimistic enough to continue, especially as the temperature had dropped to a nice cool 20 degrees, perfect for working in the field.

Our first stop was at the Garnet Mine on Staurolite Ridge. This deposit had been mined in relatively recent times for garnets to be processed into abrasives. The almandine garnets are usually black or brown in colour with smaller garnets showing some red and pink translucency.



Left: Almandine cluster with biotite schist. 90mm

They have formed in a biotite schist and the bulk of crystals are still in this black schist, however some have weathered out and can be collected loose in the mine scree. The majority of crystals are fractured with biotite filling the fractures, but other crystals appear intact. A lot of the crystals are between 5 and 10mm, however individual crystals of 40mm were also found by the lucky ones in the group.

The crystals commonly form in the dodecahedral habit but they can also be found in the trapezohedral habit and on the rare occasion the two habits can be found together on the same piece of matrix. Some of the biotite also contained black staurolite crystals, but the ones found were very thin crystals, at maximum 2 mm, and most of these were cracked and broken.



Left: Staurolite Ridge, Garnet Mine.

After spending a number of hours collecting and showing each other our finds we stopped for lunch. We then headed off to the second location, the staurolite deposit itself, which is only about 500 meters on the opposite side of the ridge that has the garnet mine. The weather by that time was starting to look a bit nasty with lightning flashing in the distance and the weather looking to drift in our direction.



We managed to collect some of the staurolite, loose or still attached to matrix, which could be found on the surface or just below. Generally they appeared as short crystal pieces up to 5mm thick and up to 10mm long, but some were twinned and a few in the form of partial St Andrew crosses. For some of the attendees, who were not lucky, Trevor Dart had found a nice pocket of crystals that he generously shared.

Left: Staurolite in St Andrew cross form. 40mm



Above, left: Staurolite Ridge, right: Rain on Balaclava Station

But now the weather was starting to look very threatening with lightning across the whole horizon to the northwest and it was decided that we would have to leave. We hoped to beat the rain front out of the Station, but it was not to be. The front had moved around to the south and the rain closed in. It was amazing how quickly the track became slippery from the rain.

With a bit of fish tailing and at the same time getting the wheel arches of the vehicles packed with mud, we however managed to all get out back onto the sealed road back towards the Broken Hill township.

As our collecting for the day had been cut short due to the weather, it was decided to spend the rest of the afternoon to look at Trevor Dart's Broken Hill collection and also browse material he had available for sale. I can highly recommend having a look at Trevor's collection. There were still a few of the old time main lode species available

like pyromorphite, cerussite, calcite and rhodonite and almandine in galena. He also showed us one of his favourite mineral cleaning techniques.

Arrangements had been made for our Society members and some from the Broken Hill Club to attend a dinner at one of the local cafes. It was a manageable group that got together over food, and of course chatting about minerals and mineral related topics and was enjoyed by all.

Early the next morning we were woken by the sound of heavy rain on the roof of our accommodation; it didn't sound promising.

On checking with Trevor Dart it was decided to delay the departure for the days' collecting by another hour to see what the weather would do. Of concern was the amount of rain that may have fallen on the Station that we planned to visit, especially as we could see the large volume of water rushing down the gutter in the street. However, the rain soon stopped and although overcast, we could see patches of blue sky. Trevor soon arrived and on checking with the owner at Limestone Station was informed that the Station had only received about 1mm of rain and that the tracks would be passable. We headed off, but just to be sure, some of us who didn't have larger 4 x 4s left their vehicle at the homestead and doubled up with those that had.

Our primary reason for coming to this area was to collect the rare zinc spinel gahnite. The first locality did not produce anything except small micro crystals so it was soon decided to move to the Nine Mile South area which was known to have produced some better material.



Right: Nine Mile South gahnite deposit

A horizon about 25 meters wide continued over a considerable distance with quartz outcropping in which some of the indicator massive gahnite could sometimes be found.

It required persistently turning over every likely rock to see if there was any gahnite crystallization. Alternatively, smashing some of the indicator rock sometimes exposed some pyramidal shaped crystals of gahnite.



Left: 8mm gahnite crystal on matrix with many smaller crystals.

Everyone else also found gahnite crystals, some better than others with some perfect pyramids in matrix with the largest up to 8mm. The find of the day was a large, multitwinned crystal of gahnite over 30mm long found by our leader, Trevor Dart.

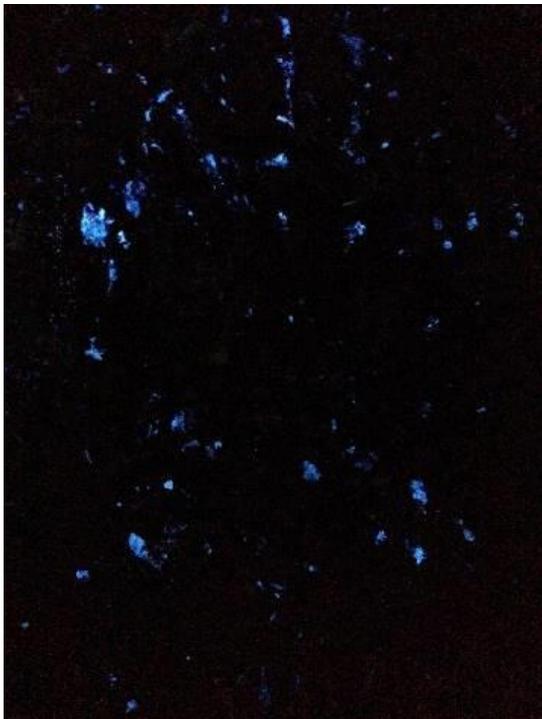


Left: Multitwinned gahnite crystal, 30mm on matrix with some smaller crystals.

From here, after lunch we also looked at one of the old copper mines, but were not successful there with only some chrysocolla found as well as some unfortunately weathered small crystals of azurite with malachite.

We then checked out the access track to the scheelite deposit ready for our night excursion. Yes, we had planned a night excursion that same evening which I believe to have been a first for our Society. After a quick dinner we got out our shortwave UV lights and met at the designated meeting spot ready to head out.

The night was perfect weather wise. We had an 8:00 pm start, heading out in the late dusk with a quick stop at the Station Homestead to see some fluorescent Broken Hill material and some from other localities collected by the Station owner. We soon headed off, together with the Station owner, to the deposit where it soon became totally dark. When we switched on our UV lights the sight that greeted us was absolutely stunning. It looked like the stars of the Milky Way had dropped to the ground. The ridge, about 3 meters wide and some 20 meters long, glowed with speckles of white-blue scheelite. The individual speckles were of different shapes and sizes with some only a few millimetres and other patches and veins more than 50mm.



Left: The ground at night showing the scheelite.

All too soon, but with a good number of specimens collected, we called it a night and farewelled Broken Hill with most making our way back home the following day.

A big thank you must go out to Trevor Dart from the Broken Hill Mineral Club, not only for making the time to take us to the different collecting localities over the weekend, but also for his generosity in sharing his knowledge as well as some of his finds with those not as lucky as him. We also need to thank the Station owners of Balaclava and Limestone Stations who permitted access to the collecting areas on their properties.

The 2019 Seminar of the Joint Mineralogical Societies of Australasia Perth, Western Australia

By Fred Kapteina

The 42nd seminar of the Joint Mineralogical Societies of Australasia has come and gone. For those of us that attended, we were left with great memories of an outstanding seminar hosted by the Mineralogical Society of Western Australia in Perth and an anticipation of the forthcoming seminar in NSW. This article is written from a personal perspective and not intended as a summary of the seminar. Things covered are events personally attended or talks that made a special impression.

The main event, a series of lectures, was staged over two days, the 31st of August and the 1st of September 2019. There was also the mandatory Saturday night dinner and an auction with other related functions prior to and post the main two days. The activities prior to these two days were the Micro Mineral Workshop, visits to the Museum and the “Welcome to Perth” by Crystal Universe. Post the main event we had the “Social Event” at the home of Mark Creasy the MinSoc WA patron, the Mineral Market, a workshop tour at Murray Thompson’s ‘Desert Fire Designs’ and an extended field trip.



Left 1): Delegates gathering at the State Library of Western Australia

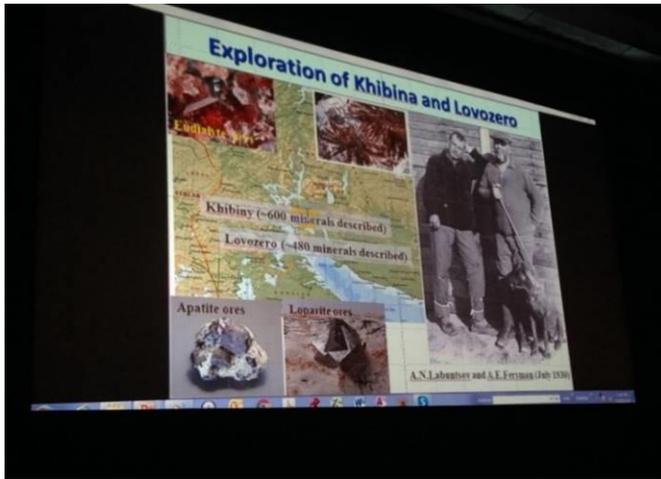
The 70+ delegates were captivated by speakers over two days. On the 1st day, after the welcome by MinSoc WA there was the official opening by Sharinan Bamforth, General Manager Geology, Sandfire Resources NL. During the rest of day one there were 10 speakers giving their lectures with diverse topics broadly within the seminar’s theme, “Traps in Mineralogy. Pseudomorphs, Look-Alikes, Fakes and Synthetics”. The talks were grouped into “Sessions” under their own, more specific

theme. The first Session covered “**Pseudomorph formation and experimental mineralogy**” and three speakers spoke to this theme.

Dr Andrew Putnis led this first sessions with his talk “Pseudomorphism in nature and experiment: from mineral to rocks and rechnological applications”. His enthusiastic approach warmed delegates to his topic so that we all came away with a better understanding of the mechanism by which one mineral is replaced by another.

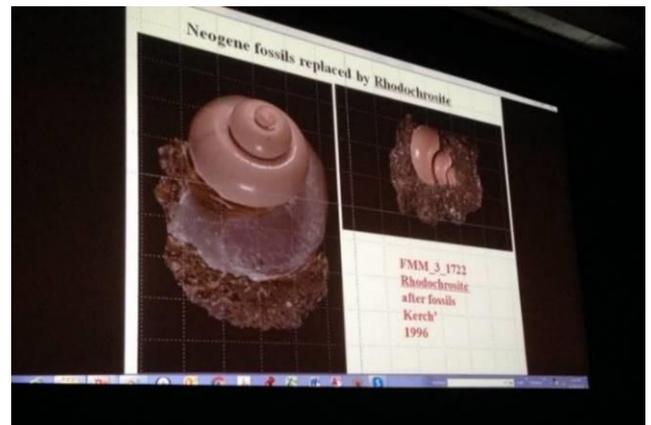
The second session of the day had the theme “**World-wide pseudomorph localities**” and we had four speakers address this theme. This session was started by Dr Pavel Plechov from the Fersman Mineralogical Museum of the Russian Academy of Science, Moscow, with the topic “World-wide pseudomorphs localities in the collections of the Fersman Mineralogical Museum”. The speaker was not actually present and this presentation was in the form of a pre-recording by Dr Plechov. The talk centred on the collection of the Museum, especially in relation to its Pseudomorphs. He talked about some of the staff of the museum, current and historical, and their research.

A number of well-known and not so well-known Russian mineral localities were provided as being hosts of large numbers of mineral species such as Khibiny with 600 species and Lovozero with 480, many also sites for examples of some unique pseudomorphs. These included glendonites (pseudomorphs after ikaite) and even rhodochrosite after Miocene fauna. (See picture 3)



Left 2): Lecture overhead of A.N. Labuntzov and A.F. Fersman in 1930 and map of one of their research areas

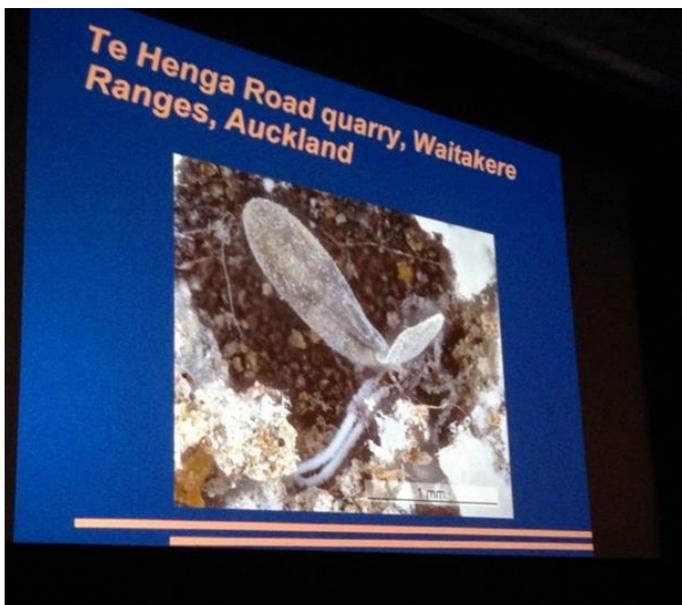
Right 3): Lecture overhead of pseudomorph of rhodochrosite after Miocene fauna



Rod Martin presented his talk: “New Zealand pseudomorphs (Volcanic)”.

The emphasis of his talk was on quartz after calcite pseudomorphs and how their occurrence assisted gold prospectors in the 1860s to 1920s around the Coromandel area in New Zealand to differentiate between barren reef and mineralized systems.

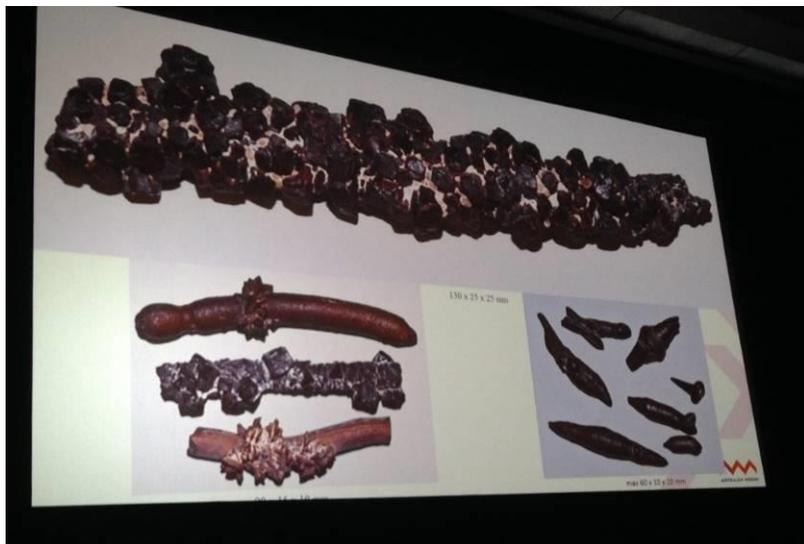
As a by the by, he talked about the possibility of minerals being able to pseudomorph just about anything. As an example Rod showed a photo of an insect having been replaced. Unfortunately, the specimen was destroyed due to careless handling.



Left 4): Lecture overhead of an Insect pseudomorphed by?

Ross E Pogson, a regular and well-loved presenter at seminars, from the Australian Museum provided the talk “Goethite pseudomorphs after marcasite, Farafra Oasis, White Desert, Egypt”.

Ross provided a geological background on the deposit under discussion with an explanation on how the pseudomorphs of goethite after marcasite may have formed. The talk was supported by a number of locality photos and photos displaying a variety of weird forms and shapes of these pseudomorphs.



Left 5): Lecture overhead showing examples of goethite pseudomorphs after marcasite.

Session 3 for the day was “Historical collections and their traps”. Dr Paul Carr was to have been the first presenter, but unfortunately Paul had succumbed to a stomach bug the night before so Ralph Bottrill from Mineral Resources Tasmania valiantly stepped in out of speaker sequence to fill the slot. Not surprising, for someone from Tasmania, his topic was “Pseudomorphs in the Dundas mines, Tasmania” covering pseudomorphs of a locality

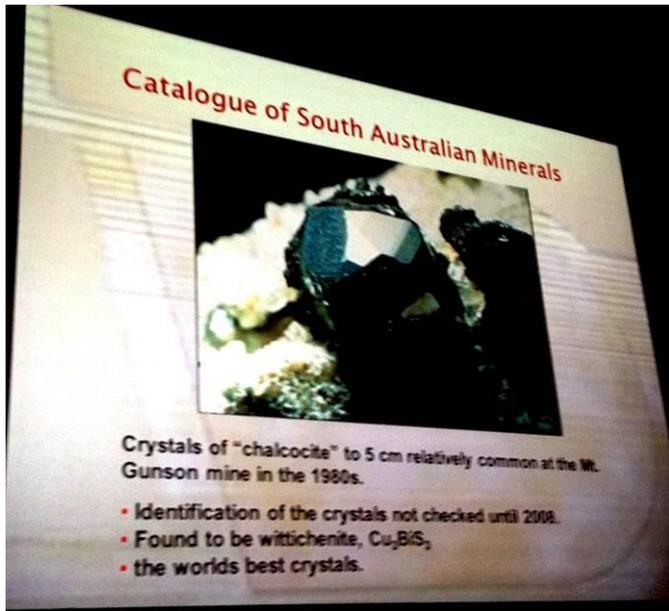


loved by every Australian mineral collector. Ralph discussed the source of the chromite necessary for the formation of crocoite. We were enthralled by the photos he presented of examples of pseudomorphs including dundasite after crocoite and in turn gibbsite after dundasite and many more.

Left 6): Lecture overhead of “Black” crocoite, Adelaide mine, Dundas

The strangest picture was one of black crocoite where the crocoite had been pseudomorphed by a black mineral, probably goethite.

Dr Peter Elliott from the University of Adelaide is known to many of us for his tireless work in collecting and identifying new minerals from Australian localities. His topic “A world of misidentified minerals” was an eye opener. It didn’t come as a surprise to learn that minerals have been misidentified in many forums as we are probably all guilty of having had, at some point in time, incorrect labels with some specimens in our own collections.

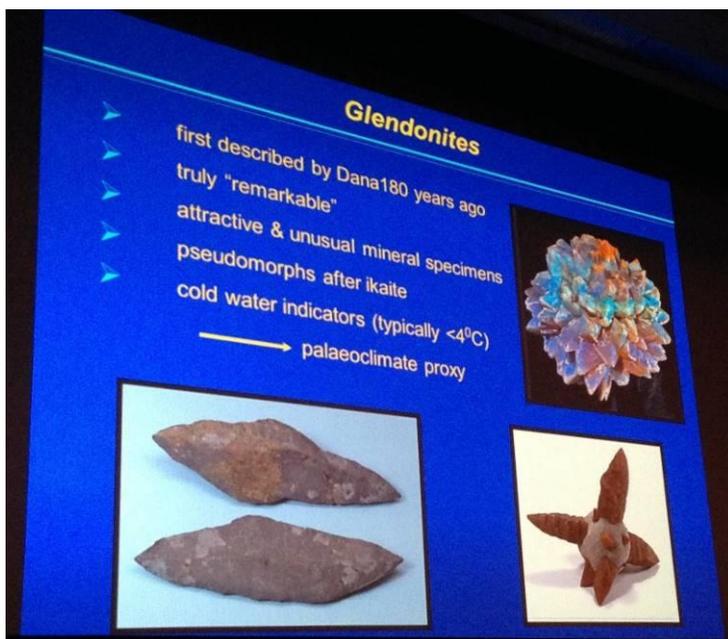


Left 7): Lecture overhead of the misidentification of wittichinite

What was surprising however was the apparent prevalence of such misidentifications (some deliberate) by mineral dealers, on web sites, in books, publications and even by scientific experts submitting to the IMA. So there is no need for amateurs to feel bad for having misidentified a mineral, or having a specimen in their collection incorrectly labelled.

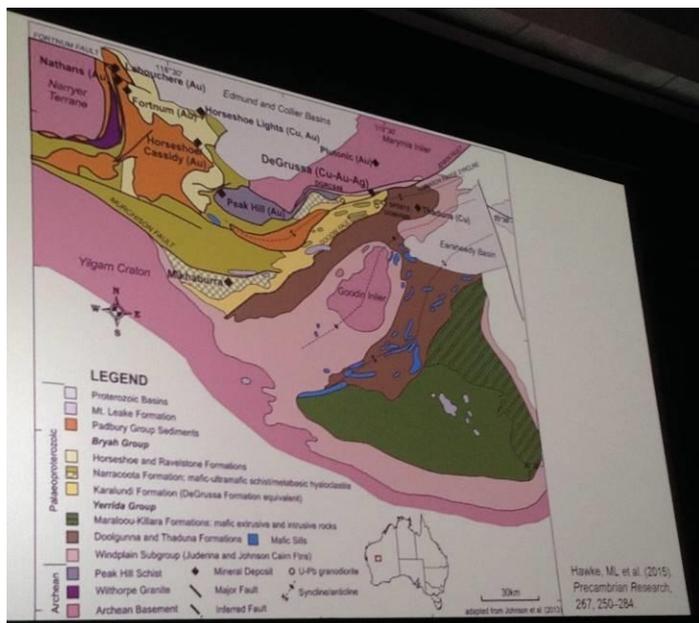
Thank goodness there are people like Peter Elliott around to help us get through the maze that is mineral identification.

Session 4 “Australian Pseudomorph localities” started off the second day and by then Dr Paul Carr had recovered sufficiently to resume and was able to be the first presenter of the day with his topic “James Dwight Dana’s visit to Australia, frozen prawns and the cool mineral connection”. His talk covered the travels of Dana, particularly his stint in Australia and his discovery of what were to be called glendonite after Glendon in the Hunter Valley. As Dr Paul Carr pointed out, the connection between ikaite and glendonite, where ikaite is the precursor for glendonite was not established until more than a century after Dana’s discovery of the glendonite.



The reference to frozen prawns is due to the fact that ikaite forms not only in extremely cold waters as may be found at the type locality of the Ikka Fjord in Southern Greenland, but more interestingly it can be observed as blotches on frozen prawns as they thaw and then disappear when the prawns have totally thawed out. Apparently it doesn’t affect the eating quality of such prawns.

Left 8): Lecture overhead on Glendonites

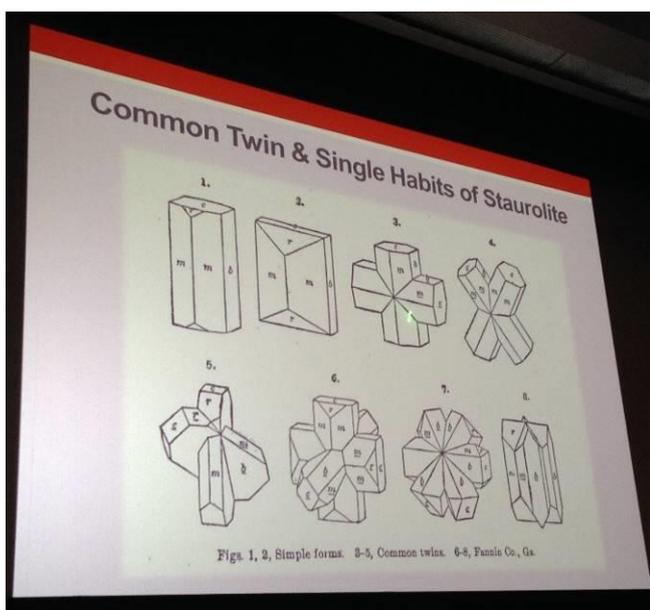


Dr Peter J Downes, curator of Minerals and Meteorites at the Western Australian Museum presented his topic “Mineral pseudomorphs from the DeGrussa copper-gold mine, Western Australia”. The preparation of the talk was with the assistance of Murray Thompson who is known to many of us from his days as a geologist at Sandfire Resources specifically the DeGrussa Mine.

The talk centred on the mineralization of the extensive oxide zone and the complex multi-stage mineralogical overprinting that occurred. This allowed the formation of many outstanding pseudomorphs the finest of which are native copper after cuprite crystals to 20mm in size.

Left 9): Lecture overhead of the DeGrussa mine geological setting

Susan Stockmayer from the GAA was the last speaker for session 4, and her topic was “Staurolite – a textural investigation”. This talk covered many aspects of staurolite. We heard of staurolite as religious objects in the 18th century as the Maltese crosses or St Andrews crosses.

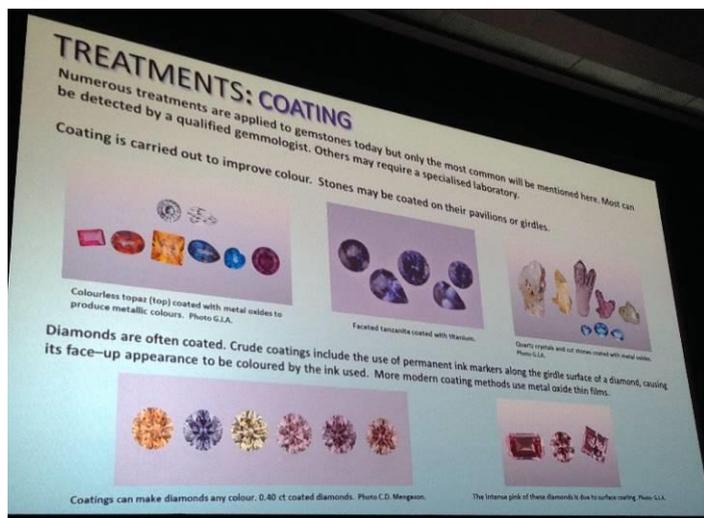


Because of its use in jewellery items, the need to eliminate fakes led to a series of tests. One of these showed an unexpected wide variation in SG from samples from various localities in Australia.

Left 10): Lecture overhead on Staurolite

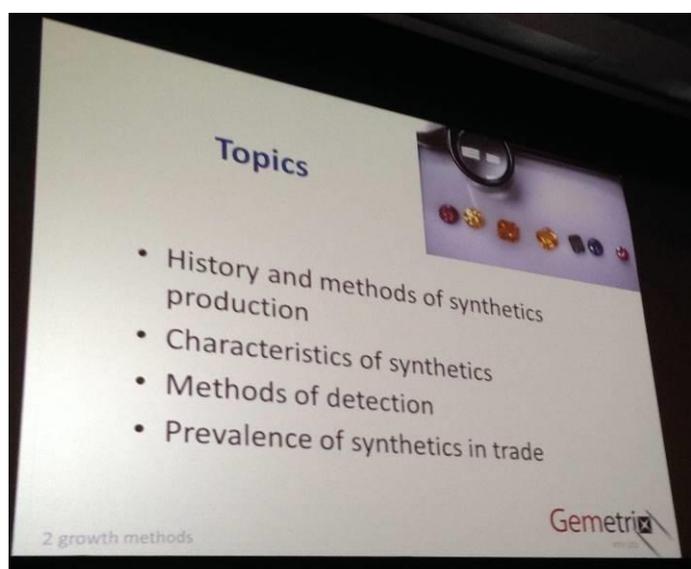
Session 5 had the theme “Gemmology traps”. Gayle B Sutherland, recently from the Australian Museum of Natural History, Sydney, spoke to this theme with her talk “An Overview of the Gem Trade’s Underbelly”. In this talk she discussed the increase in synthetics, imitations, composites and treatments, especially in gemstones but in some instances even in mineral specimens.

If we were not already aware of it, she made abundantly clear that the sophistication of such manipulation has reached new heights. It is such that only a qualified gemmologist with a specialized laboratory is able to verify if a stone is natural and unadulterated. Provenance is therefore of utmost importance to buyers and the old adage “buyer beware” is even more important these days of deliberate fraud.



Left 11): Lecture overhead on gemstone “Treatments: coatings”

Dr John Chapman presented the last talk of the session. His background has been in the diamond industry over 35 years mostly working with Rio Tinto Diamonds. He now heads his own company Gemetrix Pty. His topic was “Lab-grown diamonds – their creation and detection”.



He provided a historical background of artificial diamond growing. It started first with the growing of grit-sized crystals in the 1950's. With improvements in technology and sophisticated laboratories the ability to grow larger diamonds for the jewellery market developed.

Left 12): Lecture overhead on “Lab-grown diamonds”

This is presenting a challenge to dealers and gem laboratories to differentiate between natural and lab grown diamonds. Latest detection techniques rely on UV transmission and spectrometer analysis. So at this point in time it is possible to identify lab grown diamonds, but it is out of the reach of the amateur and in the domain of trained gemmologists with appropriate detection equipment.

The final session of the seminar had the theme “Gems, minerals and museums”. Dr Lin Sutherland, well known to everyone in mineralogy for his many years as the Curator of Geosciences at the Australian Museum and his numerous publications, including Gemstones of the Southern Continents, presented the first talk of the session “Traps for mineral museum collections and research”. The point that he was able to get across was that museums as recognized collectors face the same traps any collector faces. It is therefore of extreme importance that mineralogical staff are able to recognize the many traps.



Left 13): Lecture overhead on “Traps for mineral museum collections and research”

These traps not only include pseudomorphs, look-alikes, fakes and synthetics but also misinformation during acquisitions in relation to specimens.

Just before the final wrap up of the seminar, we were given the opportunity to once more view the entries to the photographic competition. All the photos were stunning with the photos of the micros having the most profound impact. The results were then announced with the overall winner being Dr Peter Elliott. Winners in all the categories and all the participants were also awarded and congratulated on their outstanding photography.

John Mill and Angela Riganti from MinSoc WA closed the seminar thanking all the contributors to this event. They then invited the representative from MinSoc NSW, Dieter Mylius to the podium. He invited delegates to the 2020 seminar in NSW. The topic will be “43 shades of silver” in reference to it being the 43rd seminar.

Conference dinner & auction

Delegates and guests attended the seminar dinner on the Saturday night at the Mercure Hotel. This was very convenient for many who had made the Mercure their place to stay during the seminar.

Seating arrangements and the catering was reminiscent of the dinner at the seminar in Ballarat in Victoria in 2018, which had also been at a Mercure Hotel. Trestle tables had been set up along two sides of the dining room on which items to be auctioned were displayed. Items included many mineral specimens from Western Australian localities, cut gems as well as some books and magazines. All up there were 76 lots up for auction, some for silent auction, and others for live auction.



Prior to the dinner many delegates took the opportunity to examine the items on offer and already make bids on the silent auction items.

Left 14): Delegates checking out the items up for auction

The live auction took place during a break between dinner courses. The auctioneer was John Mill, assisted by two scrutineers, Craig Bosel and Ralph Bottrill. The auction was a lively affair with good natured bantering and all in a good cause, to help offset the staging of the seminar.

Right 15): delegates at the dinner watching the auction

Judging by the prices reached for some items, the results of the auction must have been very pleasing for MinSoc WA seminar organisers.



Evening with Mark Creasy

On the Sunday evening, those who had previously registered to do so, had the privilege to see the private collection of Mark Creasy, the patron of MinSoc WA.

We were welcomed by Mark Creasy and his friendly staff to a catered evening. Over nibbles and drinks we wandered around the many display cases exhibiting some of the best mineral specimens of their type in the world.

As the exhibition had only just been set up, we were the first group allowed to view this display. Glass cabinets had been set up by various themes like country or continent with some show cases just for individual specimens. What was particularly noticeable was the fact that specimens showed the labels of the original owners wherever possible.

There were a number of items that made a special impression. One was what appeared to be an original copy of the book "De re metallica" by Georgius Agricola published in 1556. Then there were two mineral specimens with a special "Wow" factor. One was of a large plate containing some up to 15cm perfect text book ferberite crystals from Portugal; the other was a large plate about 50cm across totally covered with yellow cerussite (previously chrome cerussite) from Tasmania. The density of the cerussite was such that matrix was not visible when looking down from the top. My favourite display was that of minerals from the Ojuela Mine in Mexico.

Unfortunately, but understandably, photo taking was not permitted. This just goes to show that one needs to attend personally in many instances to get a real appreciation as not everything is on offer on the net.

Mineral Market

On Monday, September 2nd, some of the delegates went to a mineral market, set up for delegates and society members to sell some of their wares. The venue was at the WA Lapidary Club rooms in Rivervale, the same venue that some of us had visited for the Micro-mineral Workshop on the Friday prior to the seminar.



All sorts of minerals and rocks were up for sale from micro size to large cabinet pieces.

Left 16): Delegates checking out what is available from vendors or just chatting

I hoped to find a lot of minerals from WA but was a little disappointed in that regard as there was very little in the way of specimens from WA localities. The exception was a handful of specimens from Whim Creek, some micros of the rarer WA micro species and the gold specimens from DeGrussa brought along by Murray Thompson from Desert Fire Designs.

Specimens of note were what one delegate from New Zealand, had brought along.



Left 17): Calcite +, from New Zealand

Mathew Singleton had a number of small to medium cabinet sized specimens of calcite with thomsonite and chabazite from "Aladdin's Cave" Aranga Quarry, Kaipara District, Northland Region, New Zealand. Many specimens were 'floaters' with no apparent points of attachment. The primary calcite crystals were up to 3 cm long and these crystals and the matrix was all overgrown by micro crystals of thomsonite with some chabazite on the matrix as well. A second generation of clear 5 to 10 mm long doubly terminated glass clear calcites were sprinkled all over the specimens. (See Picture 17)

Desert Fire Designs – workshop tour

Some of us, including representatives from the Australian Museum, visited the 'Desert Fire Designs' workshop on the Monday. Murray Thompson the owner, well known for his previous work at the DeGrussa Mine, has established a lapidary workshop and display centre. This facility showcases the best lapidary material available from WA and the world as well as mineral specimens from the DeGrussa mine. He has been specializing in producing lapidary items from gold imbedded in clear and milky quartz.

Murray spent some time with us explaining some of the techniques he has developed to overcome the challenges posed by trying to work some of the material into beautiful pieces for jewellery.



Left 18): Showcase at Desert Fire Designs

He explained the need for him to build a niche market in competition to the mass production factories of Southeast Asia. His method is to source the best material and then spend whatever time necessary to study each piece of raw material with the aim to produce a unique piece every time regardless of the amount of material he may have to discard.

The visit to the workshop was very informative and it appeared that most delegates acquired something in the way of a lapidary item or mineral specimen.

Left 19): Audience listening closely to Murray Thompson talking about his work



Left 20): Work in progress. Unusual pattern tiger-eye. Gold in quartz

Summary

The seminar and associated activities which I attended were in my opinion a resounding success. MinSoc WA must be congratulated on organizing such an event, which from personal experience, is not all that easy. Of most importance, I had the impression that all delegates had a great time. Apart from a formal Thank You already send I would like to use this opportunity to again thank MinSoc WA as well as to the organizers of the peripheral events, including Crystal Universe's, the "Welcome to Perth" and Mark Creasy for allowing us to view his outstanding collection.

If this write-up has done anything at all, I hope it has enthused you to make an effort to attend the next seminar in 2020 being hosted by MinSoc NSW.

Micro-mineral workshop

A micro-mineral workshop was held on the Friday at the WA Lapidary Club Rooms in Riverdale. Alan Longbottom was the coordinator, ably assisted by Clive Daw and was well attended by over 20 people. Stereo microscopes were provided by Murdoch University and set-up with enough lights for each person, the only limitation being the small working distance to observe the specimen. There was a quantity of large 'rocks' available to break up for specimens from the 132 North mine, the Degruusa mine and several other WA localities, with hydraulic rock breakers and trimmers available to use on them.

Apart from looking at and discussing the numerous specimens that were brought along, it was a great opportunity to meet-up again with similar minded collectors of micro-minerals from around Australia and New Zealand.



Micro Group Report

by John Haupt. All photographs© John Haupt.

Meeting of the micro-mineral group, August 2019.

The topic for this meeting was minerals that crystallise in the isometric system. According to MINDAT there are approximately 600 species that crystallise in this system so there were plenty of specimens brought along to observe and discuss at the meeting. Some examples follow:

Of the elements there was crystalline gold with an octahedral crystal from Wedderburn and a fern shaped group from Hopes Nose, Devon, England; silver crystals from the Elura mine, NSW and specimens of copper crystals from Broken Hill, NSW and Mungana, Qld; & carbon (diamond) from the Argyle mine, W.A.

Specimens of cuprite and copper from Spring Creek, S.A.; gahnite from Broken Hill and fluorite from Rosebery, Tasmania.

Also from Broken Hill were attractive green bi-pyramidal crystals of pharmacosiderite and specimens of the silver halide minerals - chlorargyrite, bromargyrite and marshite.

Members of the garnet group included almandine from the Harts Range, N.T., andradite from Dookie, spessartine from Broken Hill and the green chrome garnet uvarovite from Outokumpu, Finland.

Other less common species were bixbyite from the Thomas range, Utah, USA, bright blue crystal of haiüyne from the In den Dellen quarries, Mendig, Germany and attractive red crystals of villiaumite from the Aris quarries in Windhoek, Namibia.

Above right: Fern-shaped crystalline gold, 6mm across, from Hopes Nose, Devon, England.

Right: Sharp silver crystals from the Elura mine, NSW. 10mm FV.

Below right: Reticulated branches of copper, 3 cm across, from Broken Hill NSW.





Above left: Copper crystals from the Red Dome opencut, Mungana, Qld. 15mm FV.

Above right: Fluorite cubes from Rosebery, Tas., 15mm across.

Left: Copper & cuprite crystals from Spring Creek, Flinders Ranges, S. A. 0.8mm tall.

Below left: A 2mm crystal of uvarovite from Outokumpu, Finland.

Below right: Bluish gahnite from 9 mile, Broken Hill, NSW, 8mm across.



Meeting of the micro-mineral group, September 2019.

This meeting's topic was minerals of the sulphate group (SO_4), with MINDAT listing 356 species in this group.

Again, there were plenty of specimens to observe, with possibly the best known species in this group being the lead sulphate, anglesite PbSO_4 , with many specimens from world-wide localities. Some of the more interesting being from the Mona mine, Anglesey, Wales (the type locality); Broken Hill, NSW and Dundas, Tasmania.

The calcium sulphate, gypsum, is usually seen in collections as cabinet size specimens, however there were attractive micro size crystals from the Burra mine, S.A. and Pittong, Victoria. Barite specimens were from various world-wide localities, including Australia with examples from Linke's lode, and Olympic Dam, S.A.; Mt Isa mine, Qld and Boulder Flat, Victoria.

The sulphate species from Broken Hill, NSW included antlerite, brochantite, christelite, gordaite, ktenasite, linarite & serpierite.

There were several specimens of the evaporite minerals including halotrichite with botryogen, Mt Isa, Qld, pickeringite, Bullangarook, Vic, and wupatkiite, Lorina mine, Cloncurry, Qld. and felsőbányaite from the Coimadai antimony mine, Bacchus Marsh

Less common species from overseas included caledonite, Grand Reef mine, Arizona, USA; celestine, Dundas mine, Ontario, Canada; langite, Botallack mine, Cornwall, England; leightonite, Chuquicama mine, Calama, Chile; posnjakite, Waterbank mine, Ecton, England; spangolite, Blanchard mine, New Mexico, USA; wroewolfite, Eaglebrook mine, Talybont, Wales.

We did not meet in October and November as several of our members were unavailable.

Below: Botryogen & halotrichite, Mt Isa mine, Qld. 3mm tall FOV.



Above: Anglesite on cerussite, Maestries mine, Dundas, Tas. 2mm tall FOV.

Below: Gypsum & pyrite, Pittong, Vic. 3mm tall FOV.





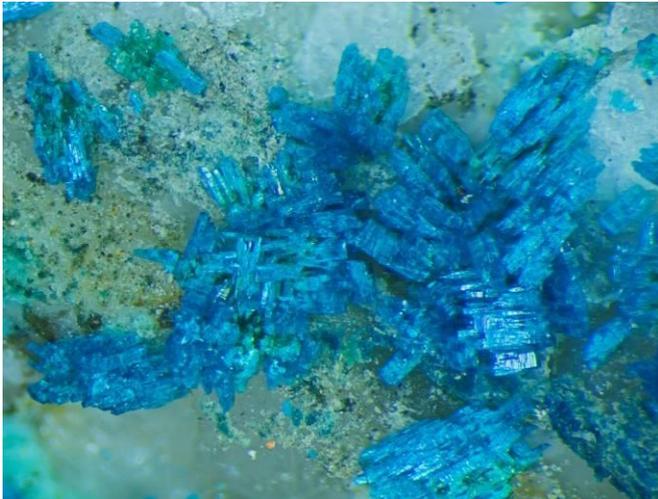
Above Felsöbányaites from the Coimadai antimony mine, Bacchus Marsh. 4mm FOV.

Below: Langite, Botallack mine, St Just, Cornwall, England. 6mm FOV.



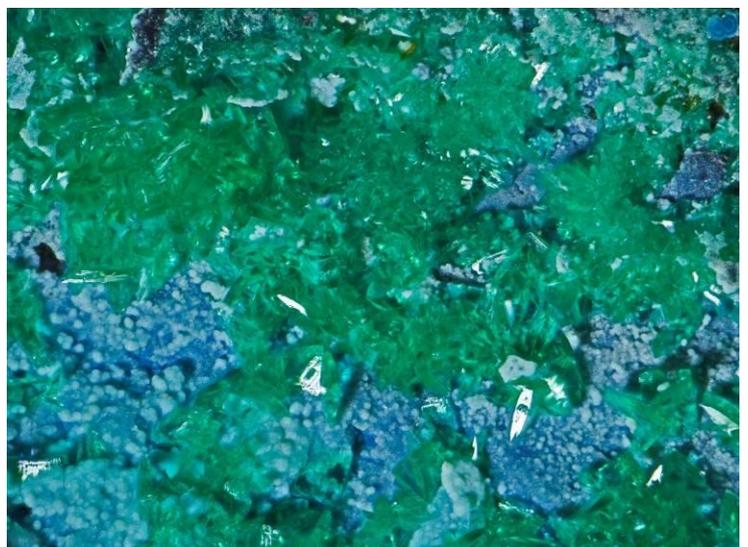
Above: Celestine, Dundas, Ontario, Canada. 8mm FOV.

Below: Spangolite, Blanchard mine, Bingham, New Mexico, USA. 10mm FOV.



Below left: Caledonite, Grand Reef mine, Arizona, USA. 5mm FOV.

Below: Brochantite and langite, Lodge Park trial, Llangynfelyn, Wales. 1mm FOV.



THE MINERALOGICAL SOCIETY OF VICTORIA INC.

A0001471E
PO Box 153
Lara Vic 3212

MEMBERSHIP RENEWAL AND APPLICATION FORM

Membership fees for the year ending 31 March 2021
are due and payable on 31 March 2020

Surname: _____ First Name: _____

Family Members: 1: _____ 2: _____

3: _____ 4: _____

Address: _____

Suburb: _____ Post Code: _____

Telephone: Home: _____ Business: _____

Email: _____ Mobile: _____

Signed: _____ Date: _____

MEMBERSHIP RENEWAL AND APPLICATION FEES

Membership application fee (new members) \$ 5.00 _____

Melbourne Metropolitan Membership Annual fee

Adult \$25.00 _____

Family (2 adults plus children 12 - 17 years) \$35.00 _____

Student \$15.00 _____

Country/Interstate Membership Annual fee

Adult \$20.00 _____

Family \$30.00 _____

Donation to Museum Victoria - Mineral Purchase Fund

(Optional Donation) \$ _____

Total Enclosed \$ _____

Fees can be paid by direct bank deposit or by cheque mailed to the above address

Bank: WESTPAC

BSB: 033 086

Account No: 484 747

Account Name: The Mineralogical Society of Victoria Incorporated

Please include your name in the comments section if paying by direct deposit and

please email advise of payment to our Secretary: fkaptein@bigpond.net.au