



Mineralogical Society of Western Australia Inc.

Newsletter - November 2019

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Mineralogical Society of WA, Inc.

Meetings held at the WA Lapidary & Rock Hunters Club rooms
31 Gladstone Road, Rivervale (corner of Newey Street)
Registered Society No. A1009304P

EDITORIAL

If any members have any requests or suggestions they would like to see in the newsletters please contact the Newsletter Editor. Contact details on last page of the newsletter.

Meetings

At all meetings the Society's microscope and UV lamp are available for use by members.

The General and Annual General Meetings of the Mineralogical Society of Western Australia Incorporated are usually held at 7.30pm on the **second** Wednesday of every odd month at the WA Lapidary & Rock Hunters Club rooms located at 31 Gladstone Road, Rivervale (corner of Newey Street).

Petrological Microscope

The Mineralogical Society of Western Australia committee is interested in viewing new or good second hand petrological microscopes with the idea of purchasing an instrument for use by its members.

The microscope needs to have all attachments for standard petrological studies of sections including a Bertram lens system, below stage polarizer, condenser, diaphragm, in built lighting system preferably with rheostat adjustment, stage with clips, analyzer system, wave plate, rotating head with low medium and high power objectives (X10;X20 and X40) and preferably binocular head fitted with X5 or X10 eyepieces. A trinocular head would be an advantage for use with a camera attachment.

If any member knows of a microscope fitted as described please contact a committee member.

RECENT ACTIVITIES

MEETINGS - General Meeting - Wednesday 18 September 2019

For full details of the meeting please refer to the Meeting Minutes.

An Ordinary Meeting was held on Wednesday 18 September and was chaired by President, Sue Koepke.

There were two door prizes September. First prize was a specimen of talc from the Three Springs Mine donated by Rod Berrell and was won by Tom Bateman. Second prize was a collection of rocks from the field trip donated by George Stacey via Tom Bateman and was won by Ida Newton.

Thank you very much to Rod Berrell and George Stacey for donating the September door prizes. We are always grateful to receive donated items for the door prizes. Please contact any of your committee members if you have suitable items you would like to donate.

Following the meeting Dr Francine Payette gave a presentation entitled 'Fantastic Feldspars'.

TALK - Fantastic Feldspars - Wednesday 18 September 2019

Dr Francine Payette gave a talk on feldspars after the General Meeting. The talk covered the well known feldspars, their conditions of formation and the different geological environment in which they are found. Francine explained their properties and special features and related this information to various gem varieties and brought some specimens for members to view after the talk.

SEMINAR - 42nd Joint Mineralogical Societies of Australasia Seminar

Perth, Western Australia - 31 August - 1 September 2019

(Summary extracts from Vice President, Angela Riganti's Seminar Report)

The 42nd Joint mineralogical Societies of Australasia Seminar held in Perth on 30 August - 1 September 2019 was the third hosted by the Mineralogical Society of Western Australia (MinSocWA). It consisted of two days of talks, a Micro-mineral Workshop, a Mineral Market, a seminar dinner with live/silent mineral auctions, sponsored social events, a photo competition and minor other activities. A field trip after the Seminar completed the proceedings.

Of the 102 participants there was an almost equal split of participants from Western Australia (51), and Interstate (46), with a small contingent from Overseas (5, of which four were from New Zealand and one from France). The number of delegates was comparable to or higher than prior recent Seminars, a particularly pleasing result considering the commitment required to reach WA.

Seventeen speakers contributed to the presentations, with a good selection of topics addressing different parts of the main theme *Traps in mineralogy – pseudomorphs, look-alikes, fakes and synthetics*.

The event was run by a committee of volunteers drawn from members of MinSocWA, with assistance from many others. Their hard work, dedication and commitment (in time and often personal expenses) over a period of nearly two years must be commended. Their effort made MinSocWA proud and contributed to the organisation of an event that once again raised the bar for future seminars.

Significant sponsorship, cash and in-kind donations were attracted largely through personal contacts. They contributed significantly to the positive financial outcome of the seminar.

The Seminar organising committee consisted of the following MinSocWA volunteers:

Coordinator	Angela Riganti
Treasurer	Lee Hassan
Field trip	Rodney Berrell Murray Thompson Peter Willems
Members	Allan Hart John Mill Sue Koepke Susan Stocklmayer Vernon Stocklmayer

As previous President, Stewart Cole attended some of the earliest meetings.

Summary of Seminar Events

Technical events			
<i>Event</i>	<i>Date</i>	<i>Venue</i>	<i>Attendance</i>
Micro-Mineral Workshop	Friday 30 August	WA Lapidary Club, Rivervale	30
Seminar	Saturday 31 August and Sunday 1 September	State Library of Western Australia	84
Mineral Market	Monday 2 September	WA Lapidary Club, Rivervale	21 tables open to the public
Field trip	Tuesday 2 – Monday 8 September	Murchison region	44

AJM AGM	Australian Journal of Mineralogy AGM, Sunday 1 September	Gascoyne room, State Library	Attended by representatives from each State and New Zealand
Social events			
Welcome to Perth	Friday 30 August	Crystal Universe, Subiaco (sponsor)	60
Seminar Dinner	Saturday 31 August	Mercure Hotel, Perth CBD	88
Closing Function	Sunday 1 September	Creasy Group (sponsor)	79 additional guests from host not included
Welcome to speakers	Thursday 29 August	Private residence, Lena Hancock	Three speakers (incl. host), most members of OC
Other activities			
Mineral Auction	Held during the dinner as a fundraiser for the Society		
Mineral Photo Competition	33 entries from 9 photographers		Prizes awarded at the conclusion of the Seminar
Visits to:	Western Australian Museum 2 sessions, Friday 30 August and Monday 2 September		16
	GSWA Perth Core Library Monday 2 September		5
	Desert Fire Designs Workshop Monday 2 September		Over 20

Micro-mineral Workshop - Friday 30 August

This workshop was organised and coordinated by Alan Longbottom, Clive Daw and Ted Fowler, although Ted could not be in attendance due to personal commitments. The workshop was held at the premises of the WA Lapidary & Rock Hunters Club.

Murdoch University (through Michael Taylor at the Lab Tech Animal Biology, College of Science, Health, Engineering and Education College) provided enough microscopes to ensure all participants had one to work with, and their contribution is gratefully acknowledged. Activities and demonstrations had been planned throughout the day but were forsaken as everyone was happily engaged in viewing and interacting making it a lively event, enjoyed by both veterans and newcomers.



Micro-mount Workshop (Photo by Allan Hart)

A Morning at the WA Museum - Friday 30 September and Monday 2 September

Two sessions in the morning of Friday 30 August and Monday 2 September, with a length of approximately 90 minutes. Led by Dr Peter Downes, WAM Curator of Minerals and Meteorites, this tour was designed to take participants behind the scenes to inspect rarely displayed parts of the mineral collections of the Western Australian Museum.

Welcome to Perth at Crystal Universe - Friday 30 August

Crystal Universe hosted the Welcome to Perth event at their premises in Subiaco. The excellent catering, beautiful displays of minerals on offer and warm hospitality by the hosts made for an excellent start to the formal social proceedings of the Seminar.



Welcome to Perth event at Crystal Universe (Photo by Allan Hart)

Seminar Lectures - Saturday 31 August & Sunday 1 September

The Seminar lectures were held at the Alexander Library which was a very suitable venue for the lectures and with plenty of space for socialising with other delegates during lunch and coffee breaks and the opportunity to look at some of the library exhibits including a display cabinet with DeGrussa minerals in the State Library Discovery Zone organised by the WA Museum in conjunction with the Seminar.

The Seminar commenced with a brief welcoming address from MinSocWA President, Sue Koepke. Sue provided an *Acknowledgement to Country*, welcomed delegates to Perth and the Seminar and acknowledged sponsors and contributions.

The Seminar was officially opened by Shannan Bamforth, Chief Geologist and Manager General Operation at Sandfire Resources NL. This was very fitting, considering the great support that Sandfire provided to the seminar's field trip.



*Left: Shannon Bamforth of Sandfire Resources opened the Seminar
Right: President, Susan Koepke, presenting Dr Putnis with his speakers gift.
(Photos by Allan Hart)*

Eighteen presentations from 17 speakers were offered over the two days of technical talks (nine on each day). Talks varied from 15 to 40 minutes, including question time. Additions to the technical talks included a presentation by Geert Buters on the newly launched Australian Journal of Mineralogy website and the results of the Photo Competition.

The mix of speakers was well balanced, with 7 from Western Australia, 8 from interstate and 2 from overseas (Rod Martin from New Zealand and Pavel Plechov from Russia). Of the 8 interstate speakers, 5 were from New South Wales, and one each from Tasmania, South Australia, and the Australian Capital Territory.

The speakers were grouped into six different sessions and chaired by the following:

- | | |
|--|-------------------|
| 1. Pseudomorph formation and experimental mineralogy | John Boxworth |
| 2. World-wide pseudomorph localities | Lena Hancock |
| 3. Historical collections and their traps | Steven Petkovski |
| 4. Australian pseudomorphs localities | John Haupt |
| 5. Gemmology traps | Ralph Bottrill |
| 6. Gems, minerals and museum | Susan Stocklmayer |

Allan Hart was the official photographer for the event and was seen snapping away regularly to record a good photographic record of the Seminar. George Stacey provided a long summary of the talks in his write up for AJM Volume 20(2). Look out for that edition of AJM for a detailed summary of the talks.



Lecture theatre at the Alexander Library (Photo by Allan Hart)

Seminar Dinner - Saturday 31 August

The Seminar dinner was held on the evening of the first day of talks at the Perth Mercure Hotel in the Perth CBD. The dinner was held in a function room at the hotel and a varied self serve buffet and bar were offered to guests.



Seminar Dinner (Photos by Allan Hart)

Auction - Saturday 31 August

A live and a silent auction were held in conjunction with the seminar dinner. John Mill coordinated the auction with the assistance of Vernon Stocklmayer. 21 items were offered for the live auction and 71 items were in the silent auction. The auction returned a considerable income that was well in excess of the set target of \$2000.

Items donated included mineral specimens, faceted gemstones, rough and polished slabs of gold, a drawing from Steve Sorrell, books and mineral magazines, a microscope and antique mining lamps.

Auction donors are acknowledged on page 10 of this newsletter.



Viewing auction items prior to the auction (Photo by Allan Hart)



Angela Riganti bidding at the live auction (Photo by Allan Hart)

Mineral Market - Monday 2 September

The market was coordinated by Allan Hart and was held at the premises of the WA Lapidary Club in Rivervale. Doors opened at 8am for sellers to set up and 9am for visitors and closed at 2pm. It was a public event open to everyone including lapidary club members and the general public. A pizza lunch for the table holders was kindly donated by Allan Hart



Mineral Market (Photo by Allan Hart)

Perth Core Library and HyLogger - Monday 2 September

Led by Dr Lena Hancock, this 40 minute tour of the Perth Core Library was to showcase cores from mineral exploration drillholes and how modern technologies (HyLogger) assist in mineral identification and exploration.

Desert Fire Designs Workshop Tour - Monday 2 September

An afternoon tour led by Murray Thompson, to visit his workshop showcased some of the finest specimens of Western Australian mineral and lapidary material.

Photo Competition

The Competition was open to members of all Mineralogical Societies in Australasia. The competition was coordinated by John Mill, with some assistance from Angela Riganti in preparing the PowerPoint displays.

There were three categories of mineral photographs in the competition based on the size of the specimen:

- Category 1 – Subject less than 5 mm
- Category 2 – Subject between 5 and 30 mm
- Category 3 – Subject greater than 30 mm

Entries were received from nine photographers. Seven entries were received for Category 1, twelve entries were received for Category 2 and fourteen entries were received for Category 3. Some of the entries were from members attempting mineral photography for the first time.

The standard of photos submitted for the competition was very high and some of the scores were indeed very close. Winners and runner ups were as follows:

Category 1

<i>Winner</i>	Peter Elliott	Almandine	Broken Hill, New South Wales
<i>Runner up</i>	Peter Elliott	Wulfenite	Broken Hill, New South Wales

Category 2

<i>Winner</i>	Peter Elliott	Mimetite	Broken Hill, New South Wales
<i>Runner up</i>	John Chapman	Gold	Coolgardie, Western Australia

Category 3

<i>Winner</i>	John Chapman	Tourmaline	Golconda, Brazil
<i>Runner up</i>	John Haupt	Crocoite	Dundas, Tasmania

Prizes for the winners and runner ups included bottles of wine from Single File Wines (one of the sponsors for the Seminar), camera cards donated by Allan Hart, and Australian Journal of Mineralogy T-shirts. All sponsors and supporters of the Photographic Competition are gratefully acknowledged by MinSocWA and the Seminar Organising Committee.

Closing Function at the home of Mark Creasy - Sunday 1 September

Mark Creasy, MinSocWA's patron, offered to hold the closing function at his private residence. The function consisted of a finger food and bar reception with the opportunity of perusing the newly set up cabinets with part of Mark's private mineral collection. Many of the attendees regarded this as one of the highlights of the seminar. The magnificent collection on display and Mark Creasy's famed hospitality made for an unforgettable evening.

Sponsors and Donors

MinSocWA would like to thank all the sponsors and donors for their support in making the Seminar and Field Trip possible and helped make it enjoyable and a great success.

Seminar Sponsors and In-kind Supporters:

- Bid Marketing Support funding from the Perth Convention Bureau
- Swick Mining Services
- Crystal Universe
- Mark Creasy
- Sandfire Resources NL
- Yankuang Bauxite Resources
- Geological Society of Western Australia
- Gemmological Association of Australia
- Singlefile Wines
- Allan Hart
- GSWA and Elsevier
- Anglo Ashanti Gold
- Geoscience Australia (GA)

Auction Donors:

Murray Thompson
Sandfire Resources
Craig Bosel
Ted Fowler
Manfred Mertinat
Lesley Daniels
Clive Daw
V and S Stocklmayer
Ken Ireland
Pete Willems
John Mill
Steve Turner
Des Lascelles
James Irvine
J Mill/S Stocklmayer
GSWA
Elsevier
S Weardon/M Singleton
Louis Pinilla
Angela Riganti
Lee Hassan
Anonymous
Sarah Bundesen
Frank Doedens
Steve Sorrell
Niels Dahl

42nd Joint Mineralogical Societies of Australasia Seminar

Field Trip Report – By Rod Berrell



42nd Joint Mineralogical Societies of Australasia Seminar delegates at Reward Open Cut Poona.

A post-seminar, ~3000 km-round, seven-day field trip to the Murchison region was organised in conjunction with the Seminar. Over 50 people submitted an Expression of Interest via the Trybooking site or the MinSocWA's Secretary, and of these 44 people took part, with some joining or leaving the trip at different times. Localities visited included both geological sites and mineral collecting sites, with the highlight represented by a visit to the DeGrussa copper–gold mine and Thaduna dumps held by Sandfire Resources NL. The company's hospitality in providing free accommodation and meals at the mine is gratefully acknowledged.

On Tuesday 3rd September 2019 with an extremely early start delegates made the drive north from Perth to Geraldton via the Pinnacles, Thrombolites and Three Springs Talc Mine, hosted by Imerys. All 44 delegates attempted to squeeze into the small board room for a briefing on the local geology.



A.



B.



C.



D.

Highlights from day 1.

A. Pinnacles National Park. B. Thrombolites at Lake Thetis.

C. Three Springs Talc Mine. D. Bruce Groenewald with Three Springs Talc Mine in the distance.

Day 2: (Wednesday 4th September) saw the 217 Kilometre drive from Geraldton to Mount Magnet via Jokers Tunnel and Orbicular Granite Quarry. Many delegates ventured through the tunnel with dust and bats creating a truly frightening experience. The rest of the day was spent at Boolgardie Station, hosted by Paul and Janet Jones. Paul took us out to the Orbicular Granite Quarry where he explained the history of the deposit and its exploration.

The afternoon was spent exploring one of the granite tors.



E.



F.



G.



H.

E. Participants at Jokers Tunnel with Angela and Bruce explain the trips geology so far.

F. View inside Jokers Tunnel.

G. Paul Jones explaining about this slab of Orbicular Granite.

H. Participants listening to Paul's stories.



I.

I. Exploring the granite tors of Boolgardie Station.

Day 3: (Thursday 5th Sept) delegates spent the day exploring the Poona Emerald Fields. First stop of the day was the Poona East Field where the majority of delegates found some nice beryls. A short visit to the AGA Khan Mine and headframe then the afternoon was spent at the Poona Reward Open Cut. Emeralds are rare here but, when found, have nice green emerald colour. On the way, home some of the delegates checked out Afghan Rock.



J.

J. AGA Khan head frame.



K.

K. Poona Reward Open Cut Mine.



L.

L. A large goanna at Afghan Rock.

Another early start with delegates leaving Cue for Sandfire's Degruessa Copper Mine. The staff at DeGrussa presented the geology of the deposit along with a delicious lunch. People found many amazing copper oxide minerals. This part of the trip was the real pinnacle for many.

New Mineral (?) 6/9/19

Suggested nomenclature BOOTEIITE

Written by Ida Newton with photos from Ida Newton, Tom Bateman

Identification

All specimens consistent with the identification of FeCCrMnNi (steel) in a distinctive partially globose shape of thin sheet formation encased in various later blends of organics (leather) or other manufactured chemical encasements (plastics, rubber, neoprene, laces) These coatings are accepted by the examiners as later external layerings and not pseudomorph in development.

The whole mineral conglomerate structure appears (at any point in time) to randomly exhibit a rapid, random and catastrophic exfoliation event which degrades the specimen severely. Specimens are frequently observed in roughly mirror image pairs which typically degrade concurrently.

History of the finds.

6 September 2019

The examination of this specimen pair has predated the submitted **Type Specimen** (see following page) but its origin was unconfirmed.

These post exfoliation specimens were examined within the Sandfire Degruessa mine access induction office. (See picture 1)

Evidence of the now almost depleted exfoliation event (debris) was later collected in the ladies toilet, walkway and lunch area.



Picture 1. The first seen specimen photographed in the De Grussa Induction room
Barbara Donati still wearing same. Owner Ida Newton

7 September 2019

The submitted **Type Specimen** pair was collected in the field at the Thaduna mine site adjacent to the car parking area. We identified 2 mirror image specimens during an almost concurrent actual exfoliation event.

(See picture 2)



Picture 2. The suggested **Type Specimen** showing exfoliation event in the field.

Location – Thaduna mine site. Owner Tom Bateman

8 Sept 2019

A pair of specimens (very roughly mirror image) were also identified at the Mt Farmer mine site. having been transported to the site from an area unknown.
(See picture 3)

When examined, these specimens showed slippage within the external layering during the exfoliation, possibly following partial fracture of the structure. This slip movement rather than complete exfoliation appears to have been assisted by the addition of encasing of foreign matter preventing the exfoliation material from detaching from the specimen.



Picture 3 - Specimens showing slippage of exfoliated material.
Sample supplied by Alan Hart

Subsequent to the trip, a further set of specimens was identified by Messers Bateman & Stacey. However, at the time of submission of this paper, details haven't been obtained regarding this event. This corroborating information may be submitted at a later date.

Day 5: Thaduna

Today delegates were able to have a bit of sleep in, getting going at ~8am. After an hour or so drive to the north east of DeGrussa. Thaduna was an old copper mine with plenty of azurite and malachite for people to find. One of the highlight finds was some Malachite pseudomorphs of Azurite. A bit of a long day in the end with the ~3-4 hour drive back to Cue.



M.

M. Malachite pseudomorph after azurite.

Found by Peter Willems specimen about the size of a 20-cent piece.

Day 6:

Today some people travelled via Walga Rock and then onto Dalgaranga Impact Crater, With the others traveling via Mount Magnet and then onto the Crater. After a bit of geographic misplacement, the Mount Farmer Pegmatite was found. Lots of fluorite, perhaps some topaz, feldspar, zinnwaldite, lepidolite and beryl were collected.



N.



O.

N. Possible topaz found by Barbara Donati.

O. Typical pegmatite minerals with a large beryl in the centre of view.

Day 7:

Today most of the field party departed for Perth. Those who are really keen mineral collectors went onto Carlaminda for Blue Lepidolite. After a country morning tea with Jam and Scones the party departed for the quarry. It turns out that the pit they headed for was not the correct one. After a few hours of driving the correct pit was located and blue lepidolite was collected.



SCHOOL OF ROCK - DR ROBERT MADDEN

Dr Robert Madden is an avid science communicator writing small geology vignettes, geology stories and educational resources on his social media account "School of Rock".

This segment of our newsletter shares some of Dr Madden's incredibly interesting articles and photos.

You can follow Robert's 'School of Rock' for more geoscience content on Instagram @drrhcmadden.

Salt Pseudomorphs

Pseudomorph, meaning "fake form" or "false form" is a common term in mineralogy and crystallography. At its most basic tenet a pseudomorph is substance, compound or mineral that has taken on the appearance of something other than its typical self. Pseudomorphs are then, the result of a process of replacement where a mineral or substance has kept its original appearance and dimensions but has an entirely new mineralogy.

Three main types of pseudomorph can occur: (1) substitution in which a material of one composition is directly replaced by another without changing any outward physical properties; (2) paramorphs or allomorphs in which a mineral is changed at the level of the mineral structure, such that the minerals chemical composition remains the same and the crystal structure changes; and (3) epimorphs in which a mineral is encrusted by another mineral and the original mineral is dissolved away.



In these photos of a fine grained calcareous-siltstone from the Jurassic Coast of Southern England there are fantastically preserved salt pseudomorphs. These pseudomorphs were formed in stages. initially halite crystals grew in fine sediments, during a period of aridity, as evaporite minerals. These crystals were later dissolved and their cubic imprints were infilled by continued sedimentation to form pseudomorphs. These pseudomorphs then could be described as substitution pseudomorphs as the original halite shape and dimensions are preserved but now represented by a new material. Because of the stage of halite dissolution in their formation it is arguable that these are also epimorphs. in any case, there is nothing fake about their form.



*Dr Robert Madden
Sedimentology research in Namibia.*

Dr Robert H.C. Madden has been looking at rocks and minerals for the last 17 years. Robert's specialities lie in carbonate sedimentology and petrology as well as exploration geology, particularly porphyry-epithermal and MVT systems.

He is also a Fellow of the Geological Society of London and a Member of the Australian Institute of Geoscientists with a rich, global portfolio of geological experience.

Robert is an avid science communicator writing small geology vignettes, geology stories and educational resources on his social media account "School of Rock".

You can follow Robert for more geoscience content on Instagram @drrhcmadden.

YOUNG ROCK COLLECTORS & SCIENTISTS

This section of the newsletter is designed for our younger rock and mineral enthusiasts. You may have children or grand-children who might be interested in this. It is designed to be fun and educational and spark an interest in Earth Sciences.

If there are any young enthusiasts who would be interested in a fun and educational children's workshop on 'Basic Mineral Identification' please register your interest with the Secretary, Lee Hassan at lee_notebook@msn.com and we will endeavour to schedule this workshop into our upcoming events calendar.

Find the Earth Elements in the word search puzzle below.

EARTH ELEMENTS

U	R	G	I	B	C	N	Q	M	J	L	F	Y	K	I
Z	M	U	O	M	E	O	U	Z	O	L	L	V	O	I
W	O	R	H	G	H	I	P	R	F	P	O	N	K	G
D	O	J	Y	P	L	Y	U	P	I	N	U	I	X	M
N	L	X	J	L	L	L	D	H	E	C	R	C	R	W
S	O	O	Y	I	I	U	N	R	T	R	I	K	Z	Z
R	I	R	G	T	J	W	S	N	O	E	N	E	D	Y
R	E	L	H	B	K	T	A	C	E	G	E	L	M	H
B	I	I	S	Z	Y	D	A	Y	S	M	E	R	U	K
I	U	S	A	Q	H	D	P	D	Y	W	Y	N	I	X
M	O	P	J	G	E	B	F	I	I	M	J	V	L	E
I	Y	T	R	K	F	P	I	A	V	U	Z	N	E	F
N	I	T	R	O	G	E	N	H	V	D	I	M	H	U
V	Q	I	C	V	I	S	B	V	P	C	H	A	P	O
C	A	R	B	O	N	M	U	I	N	A	R	U	W	Z

Find the following Earth Elements

BERYLLIUM
BORON
CARBON
COPPER
FLOURINE
GOLD
HELIUM
HYDROGEN
LITHIUM
NEON
NICKEL
NITROGEN
OXYGEN
SULPHUR
URANIUM

(Word search puzzle designed by Lesley Daniels)

INTERESTING ARTICLES

No articles were submitted by members for this edition of the newsletter so I have selected a couple of articles I read recently that other members may find it of interest.

Stromatolites – ‘Earliest signs of life: scientists find microbial remains in ancient rocks’

Link:

https://newsroom.unsw.edu.au/news/science-tech/earliest-signs-life-scientists-find-microbial-remains-ancient-rocks?fbclid=IwAR1tYznpRpVUNid0N-kt9Y5S_IrnziEMYdj3kEIBUddEHODHzZxIOIDJm7Q

Oolitic Sand – ‘The Mysterious Origin of Oolitic Sand’

Link:

<https://www.hakaimagazine.com/news/the-mysterious-origin-of-oolitic-sand/?fbclid=IwAR1mcPKHnVV57D885M-Z3aQWF6Ni7VM8TjpEGiN8sQwNhVfvAXAlcHTKD1o>

If any members have any interesting articles they would like to share with other members through the newsletter please email your submission to Lesley Daniels (Newsletter Editor) at lesleydaniels777@gmail.com.

MINERALOGICAL SOCIETY OF WA LIBRARY

The Mineralogical Society of WA library comprises numerous books, reports and journals that have been donated by members. Currently there are over 150 publications housed in a lockable cupboard in the Lapidary Club premises. To access the books please see the Librarian, John Mill. Members are encouraged to borrow books from our library. Donations are also appreciated. Please see John Mill if you have any publications you would like to donate to the library.

The Mineralogical Society of WA receives a complimentary copy of the Australian Journal of Mineralogy (AJM). These journals cover a wide spectrum of articles on mineralogy, ranging from descriptions of new minerals to book reviews, museum news and items of general interest to mineral collectors. MinSocWA members are regular contributors to the AJM.

If you like this month's 'Featured Book' from our library please borrow it and enjoy it.

The MinSocWA Committee is interested in adding the following books to the library:

- **A Guidebook to the Pegmatites of Western Australia - Mark Ivan Jacobson**
- **Minerals of Western Australia (Vol 1-3) – Edward S. Simpson (Hesperian Press)**

If anyone has copies of these that they would like to donate or sell to the library please email Librarian, John Mill at millrock@iinet.net.au.

FEATURED LIBRARY BOOK - Gemstones of Western Australia (2nd Edition)

Authors: J Michael Fetherston, Susan M Stocklmayer, and Vernon C Stocklmayer

Date Published: This second edition published 23 February 2017 is an updated version published in response to public demand following depletion of copies of the 2013 edition.

Publisher: Dept of Mines and Petroleum. Mineral Resources Bulletin 25.



An original collaborative project between the Geological Survey of Western Australia (GSWA) and the Gemmological Association of Australia (GAA) produced Mineral Resources Bulletin 25 Gemstones of Western Australia. This publication systematically organises and discusses the history and quality of virtually all known occurrences of gemstones and ornamental stones in Western Australia.

This essential reference book is a comprehensive resource on almost all gemstones and decorative stones used in jewellery and ornamental sculpture known in the State. The second edition has been updated and expanded to include additional occurrences of emerald, opal, agate, chalcedony, organic gems, tiger eye jasper, aragonite, cordierite, black jade, mookaite, fuchsite, jasper, Munjina and Print stones, together with numerous, new gemstone images.

Geographical locations are indicated where possible, and abundant references to earlier work given. While systematically sound and scientifically authoritative, the second edition of Gemstones of Western Australia is written not only for the professional geologist and gemmologist, but also with the experienced fossicker and amateur rockhound in mind.

(Reference: Geological Survey of Western Australia)

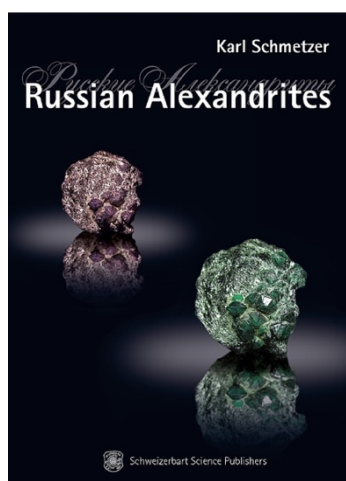
Missing Library Publications:

The following publications are still missing from the Society's library.

Could all members who have borrowed books please check to see if you have any unreturned books you may have forgotten to bring back.

Copper Mines and Minerals. Joint Mineralogical Societies of Australasia, 31st Annual Seminar, 3rd - 7th November 2008, Zeehan Tasmania. Pope M, Bottril R. 2008. State Mineralogical Society of Tasmania.

Russian Alexandrites. Schmetzer K. 2010. Schweizerbart Science Publishers: Stuttgart.



The Australian Geologist: Newsletter No 93, December 20, 1994. Geological Society of Australia Inc.

The Australian Gemmologist Vol. 24 No. 6 April-June 2011. The Gemmological Association of Australia.

UPCOMING EVENTS - MEETINGS & ACTIVITIES

MEETING - General Meeting - Wednesday 13 November 2019

TALK - Tucson Gem & Mineral Show - Wednesday 13 November 2019

John Mill will give a talk about the Tucson Gem & Mineral Show.

It's not just about the Tucson Gem and Mineral Show

I have been to the Tucson Gem and Mineral Show twice since 2015. On each occasion I was astounded by the vast array of minerals, rocks, fossils, gems, equipment and other things on sale there. Over a two week period, hundreds of venues of various sizes open all across the city of Tucson. These vary from the up-market Westward Look Show, where specimens are on sale for small fortunes, to small motel rooms occupied by single dealers from all over the world. The show period culminates in a single 3 day event, The Gem and Mineral Main Show, held at the Tucson Convention Centre.

I also make a point of visiting many of the other natural and man-made features in the immediate Tucson area and beyond. One can easily fill in a couple of months touring the remainder of Arizona, New Mexico, Utah, Nevada and California.

In the immediate area of Tucson there is the Pima Air and Space Museum. A vast collection of civilian and military planes are on display here from the smallest plane ever built to the huge Boeing 747. Just opposite is the 'Bone Yard' where over 4,000 military and commercial planes are stored in the arid Sonora Desert. Not far away is the Titan Missile Museum where 18 Titan missiles were aimed at the USSR during the cold war. A little further down the track is the wild west town of Tombstone with its infamous Boot Hill Cemetery. The now defunct Bisbee Copper Mine, home of some exceptional secondary copper specimens, is only a short distance away. The Bisbee Mining Museum is well worth a visit for its spectacular collection of copper specimens.

Further away, but not out of reach, is an incredible array of iconic National and State Parks, perhaps the best collection of natural wonders in the world. The ones which I visited include Yosemite, Death Valley, Grand Canyon, Zion Canyon, Bryce Canyon, Arches, Canyonlands, Petrified Forest, Goblin Valley, Antelope Canyon, Horseshoe Bend, Monument Valley, The Goosenecks, Sedona, not to mention White Sands, Carlsbad Caves in New Mexico. The cities of San Francisco, Las Vegas, Phoenix are also worth a visit.

MINERAL MARKET DAY - Sunday 10 November 2019 (9am-2pm)

The next Mineral Market Day will be held in our usual venue of the WA Lapidary & Rockhunters Club rooms. Any members wanting to book a sales table please email the Secretary, Lee Hassan at lee_notebook@msn.com. Cost of a sales table is \$5. Doors open for sellers at 8am and for buyers at 9am.

MEETING - General Meeting - Wednesday 13 November 2019

WORKSHOP - Micro-mounting - Sunday 1 December 2019 (10am-3pm)

Alan Longbottom will be conducting a workshop on the processes involved in micro-mounting your small mineral specimens. Bring any specimens you would like assistance with.

Alan will bring 5 scopes, a range of equipment, tools and mounting requirements, as well as various mineral specimens. Clive has offered to bring a larger rock breaker in case one might be needed.

The usual door charge of \$3 for members applies. Tea and coffee will be provided but you will need to bring your own lunch. Please contact Lee Hassan at lee_notebook@msn.com by 23rd November if you will be attending.

MEETING - General Meeting - Wednesday 9 January 2020

TALK - Wednesday 9 January 2020

Speaker to be confirmed.

WELCOME TO 2020 - Saturday 11 January 2020 (Time to be confirmed)

Susan and Vernon Stocklmayer have very kindly offered to host this event at their home to welcome in the new year. Further details will be emailed to members.

TALK - Wednesday 12 March - Munich Gem Show

Craig Bosel will talk about his visit to the Munich Gem Show after the General Meeting.

WORKSHOPS & TALKS Postponed -

Susan Stocklmayer's workshop on how to use a refractometer and measure specific gravity and the children's workshop on basic mineral identification have been cancelled. If there is sufficient interest, they will be rescheduled for next year.

Craig Bosel's planned November talk about the Munich Gem Show has been postponed to March 2020.

NEW MEMBERS

The Mineralogical Society of WA would like to welcome the following new members. Welcome to John Oonnunny.

Current membership to date now stands at 59 members.

COMMITTEE MEMBERS FOR 2019/2020

President	Sue Koepke	0417 990 688	minsocwa@hotmail.com
Vice President	Angela Riganti	9243 7472	angela.riganti@dmirs.wa.gov.au
Secretary/Treasurer	Lee Hassan		lee_notebook@msn.com
Field Trip Leader	Peter Willems	0467 040 409	pjwillems90@gmail.com
Newsletter Editor	Lesley Daniels	0432 322 659	lesleydaniels777@gmail.com
Committee Member	Vernon Stocklmayer	9291 9043	baobab46@dodo.com.au
Committee Member	Susan Stocklmayer	9291 9043	baobab46@dodo.com.au

Patron - Mark Creasy

LINKS

MinSocWA Web Page: <http://www.minsocwa.org.au>

MinSocWA Facebook Group Page: <https://www.facebook.com/groups/minsocwa>

MinSocWA Facebook Page: <https://www.facebook.com/MINSOCWA>

MinSocWA Instagram Page: <https://www.instagram.com/MINSOCWA>

ADVERTISING

Members may submit short advertisements free of charge. Additionally, commercial advertisements will be accepted for a nominal charge. If you are interested in submitting an advert to the newsletter please contact the Newsletter Editor, Lesley Daniels.