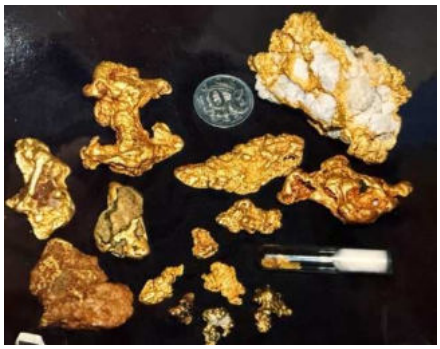
Mineralogical Society of Western Australia Inc.

To encourage mineralogical study by amateur and professional alike and, in so doing, discover, document and preserve the Earth's, and in particular Western Australia's, natural history.

NEWSLETTER 110
March 2025



CONTENTS

EDITORIAL

Welcome to the 110th newsletter for the first quarter of 2025. This edition contains some beautiful rock and crystal images from member Murray Thompson's workshop and others from our library.

The January talk was a fascinating recount of early days exploring in Kamchatka, while the March talk presented a mystery black diamond search. In February, a visit to Desert Fire Designs was well worth the effect, with a fascinating display of history, specimens and worked pieces.

Wendy H
Newsletter Editor

JANUARY 2025 TALK

The Ozernovskoe epithermal Au-Ag deposit, Kamchatka

Compiled by Grant Boxer

Dr Olga Blay from the Geological Survey of WA gave a very interesting talk on the Ozernovskoe gold deposit that she worked on in the late 1980s.

The Ozernovskoe deposit is located on the Kamchatka peninsula (KP), 600 km southeast of Magadan in the Russian Far East. The deposit lies in the Kamchatka Volcanic Belt which comprises the central mountainous core of northern Kamchatka. There are active volcanoes 190 km north and 50 km northwest of the area.

The mineralisation on the KP occurs within three late Mesozoic and Cenozoic volcano-plutonic belts (VB) associated with modern subduction zones of the Pacific "Rim of Fire". The Ozernovskoe deposit lies in the northern part of the Miocene age (23.0 – 5.3 Ma) Central Kamchatka VB. Prospectivity analysis combined with detailed geological mapping identified areas prospective for high and low-sulphidation gold targets.

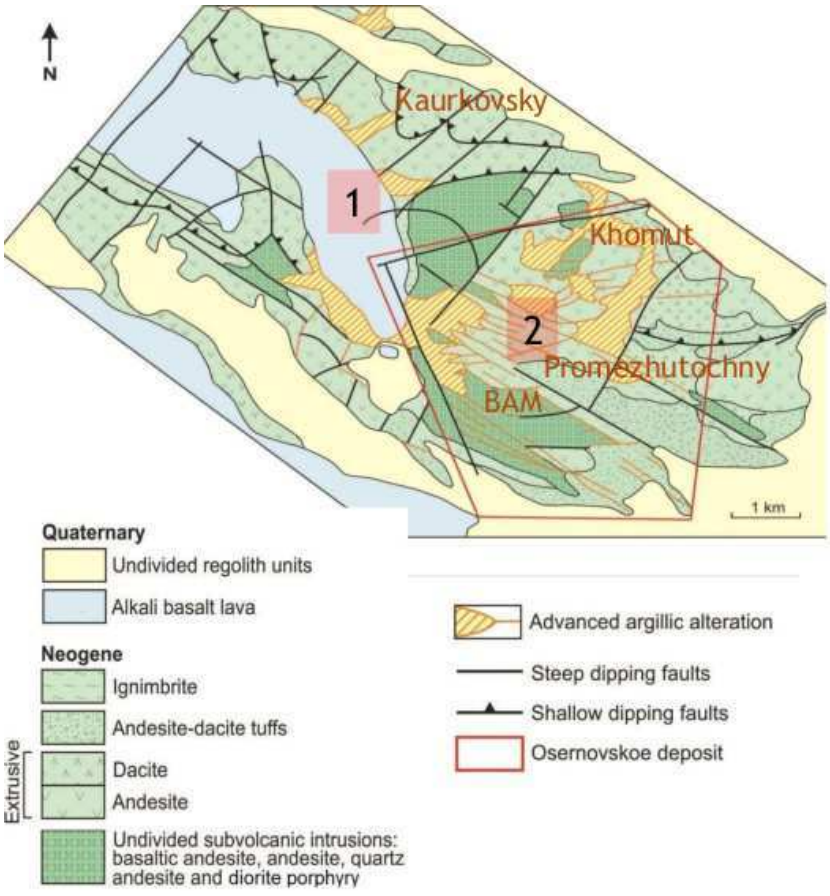


Figure 1. Structural geological setting for Ozernovskoe[1, 2]

The Ozernovskoe deposit is located within composite volcanic cones and associated hypabyssal intrusives. The volcanics comprise ignimbrite, andesite and dacite, and the hypabyssal rocks comprise multiphase lithologies of intermediate composition. Mineralisation is mainly hosted by subvolcanic basaltic andesite, diorite porphyry and andesite-dacite tuffs with mineralisation located along northwest trending faults.

Wall rock hydrothermal alteration occurs in linear zones up to 150 m wide and 3 km in length and comprises argillic and advanced argillic alteration styles. The alteration zones have formed along subvertical to shallow-dipping faults and fracture zones. K-rich alunite commonly occurs within linear

zones which are overprinted by pre-gold mineralisation quartz and pyrite. The Au-Ag(Se, Te) mineralisation overprints this earlier quartz-pyrite mineralisation event. These events have created a complex system of subvertical to gently dipping lenticular veinlets and lenses. The gold grades vary from 1.5 to 20 grams per tonne (gpt) Au with local bonanza grades to 700 gpt Au. Quartz is the main gangue mineral with gold hosted in pyrite, tennantite, tetrahedrite and goldfieldite.

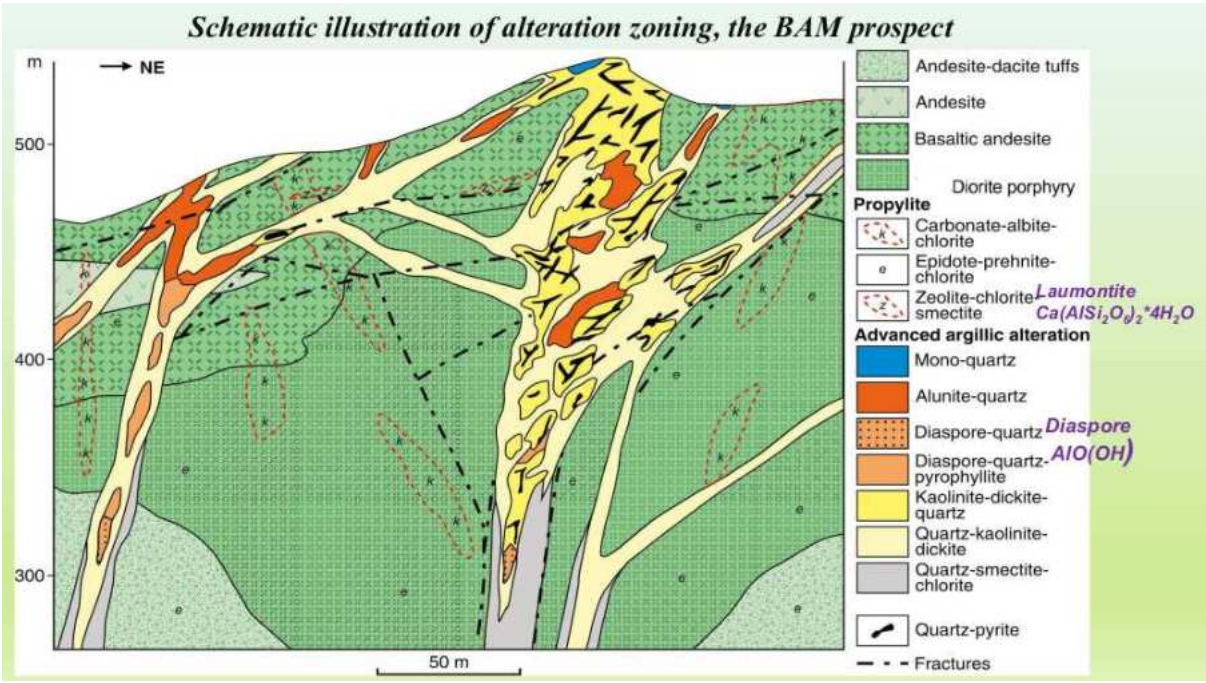


Figure 2. Alteration zoning of BAM prospect[1, 2]

Figure 3. Fieldwork at the BAM prospect

Olga described the plethora of exotic minerals found in the area, many only found in these KP deposits. A new classification scheme was developed for natural tetrahedrite minerals found in these deposits.

Olga states “In some rare cases, Ga (gallium) is present in Mn-bearing tetrahedrite-(Cu) and tennantite-(Cu) of up to 1.8%.”

There is also a large amount of Te-Se mineral phases dominated by selenides and sulphoselenites. Svetlandite (SnSe) is a new mineral phase occurring with a wide range of Sn, W and Mo-bearing sulphides and sulphoselenides, tellurides and selenotellurides. Another new mineral maletoyvayamite [$Au_3(Se, S)_4Te_3$] was discovered at the Maletoyvayamite deposit in 2019. Okrugunite (Cu_2SnSe_3) is a new mineral phase occurring as distinct Se-rich zones in Se-bearing mohite (Cu_2SnS_3) crystals or forming small (10 – 15 µm) crystal aggregates in quartz.

Widespread supergene minerals are also present.

Ore mineral phases [7]

Native elements	As, Cu, Electrum, Au, Ag, Te, Se, Se-Te alloy
Tellurides & selenides	Altaite, Calaverite, Clausthalite, Coloradoite,Bessmertnovite, Bilibinskite, Bohdanowiczite, Fischesserite, Galenoclausthalite, Guanajuatite, Hessite, Joseite, Kostovite, Krennerite, Kurilite, Laitakarite, Melonite, Montbrayite, Naumannite, Petzite, Rickardite, Rucklidgeite, Selenjoseite, Skippenite, Stuetzite Sulphotsumoite, Sylvanite, Tellurobismuthite, Tetradymite, Tiemannite, Vulcanite, Weissite
Fahlores	Goldfieldite, Tennantite, Tetrahedrite
(Ag)-Bi(Sb,As)	Aikinite, , Chameanite, Polybasite, Proustite, Schapbachite, Wittichenite
Sb-(As) sulfosalts	Bournonite, Chalcostibite, Enargite, Famatinite, Luzonite, Robinsonite
Sn, Sb, As sulfosalts	Colusite, Hemusite, Kesterite, Mawsonite, Stannite, Stannoidite
Sulfides	Acanthite, Arsenopyrite, Bornite, Chalcocite, Chalcopyrite, Covellite, Digenite, Galena, Jalpaite, Marcasite, Molybdenite, Pyrite, Pyrrhotite, Requisite, Sphalerite Uytenbogaardtite, Bismuthinite, Stibnite
Oxides	Cassiterite, Goetite, Hematite, Magnetite, Pyrolusite, Rutile, Paratellutite
Unnamed phases	$AgBi_3Se_5$, $(Ag,Fe)_3(As,Sb)(Se,S,Te)_3$, Ag_8Te_3Se, Bi_2SeTe, Te_3Se_4, $Bi_8Te_3Se_2$, Bi_2TeSe_3 $(Bi,As,Te,Se)_2O_3$

Table 1. Modified summary from publications from 1984-2015 due to the ongoing exploration of this site[3, 4, 5]

The Ozernovskoe epithermal Au-Te-Se deposit is of the acid-sulphate/high sulphidation type and is characterised by an unusual mineral composition with the widespread occurrence of selenotellurides, sulphoselenides and selenides.

The mineral assemblage is indicative of a high exposure level of the mineralising system with only minimal erosion.

References:

1. Vakin, M.E. and Naumova, O.N. 1994: Geological and structural position and localization conditions rich ores at the Ozernovskoye gold-silver deposit (Kamchatka), Rudy Met., no. 2, p. 97-104 [in Russian].

2. Vakin, M.E., Naumova, O.A. 1993: Ozernovskoe deposit, in the Atlas: Predictive−Exploration Models for gold, base metal, and diamond deposits, Moscow, TzNIGRI, Konstantinov, M.M, exec. editor, p. 13-17 [in Russian].

3. Vartanyan, S.S., Oreshin, V.Yu., Ershova, N.A., Naumova, O.A., and Vakin, M.E., Morozova, L.V., Katanskii, M.Yu., Guzman, B.V. 1991: Geological settings and mineralogy of the Ozernovskoe gold deposit, Report, Moscow, proceedings of TzNIGRI Central Research Institute of Geological Prospecting for Base and Precious Metals), 185 p [in Russian].

4. Spiridonov, E.M., Ivanova, Yu.N., and Yapaskurt, V.O. 2014: Selenium-bearing goldfieldite and fischesserite AuAg3Se2− Petzite AuAg3Te2 solid solution in ores of the Ozernovskoe volcanogenic deposit (Kamchatka) in Doklady Earth Science 458 (1): p. 1139-1142, September 2014.

5. Kovalenker, V. A., Plotinskaya, O. Y. 2005: Te and Se mineralogy of Ozernovskoe and Prasolovskoe epithermal gold deposits, Kuril–Kamchatka volcanic belt. Geochemistry, Mineralogy and Petrology, v. 43, Sofia, pp 118-123, Au-Ag-Te-Se deposits IGCP Project 486, 2005 Field Workshop, Kiten, Bulgaria, p. 14-19, September 2005

FEBRARY 2025 ACTIVITY

Desert Fire Designs' visit — Saturday, 22 February 2025

Murray Thompson opened the doors of his *Desert Fire Designs* (DFD) workshop on 22 February 2025 to MinSocWA members. For those who attended, the visit was a smorgasbord of experiences!

Fig. 1 Upstairs display at Desert Fire Designs currently featuring A South Australian Story

First, there was the opportunity of better understanding the processes of gem cutting, whether by looking at the phases of **fashioning a sphere**, the **gem cabbing** methodology, or how Murray **facets** a sparkling tourmaline. A short demonstration of the latest acquisition of the workshop, the Swiss-made **diamond wire saw**, was also conducted.

In attendance for the first time was **Julianne Karavitis**, recently returned from Kalgoorlie. In collaboration with DFD, Julianne has rendered new exciting designs for bespoke Western Australian gem material with diamonds and local emeralds for clients who have approached the company to produce rather special, one-off pieces of jewellery. She shared some of the design aspects that she needs to consider when undertaking this detailed process.

In the upstairs display area Murray has curated a 50-year long journey in **retail jewellery, prospecting/geology, and the art of presentation**. His family's passion for producing art, collecting/mining, and aspects of the jewellery trade are presented as **A South Australian Story.** It began when two families having just arrived by sailing ship from England and Scotland, met at Glenelg, South Australia at the end of December in 1839. The story continued from South Australia, on to Victoria, then New South Wales, and now Western Australia.

Fig. 2 Personally collected copper specimens with collecting diary from 2012-2013

Fig. 3 Impressive gold nugget and diary

Fig. 4 Murray's father's painting, with beautiful malachite

And, of course, everyone had time to feast their eyes on the variety of material Murray works with and admire some of the exquisite creations of DFD.

Fig. 5 Variscite from two Western Australian deposits

Everyone relaxed, mingling with Murray's team – **Jemima**, **Charmaine** and **Josh** – who had volunteered to assist throughout the time of the visit. A short bio for each is presented below.

All in all, this was an enriching and informative visit and everyone had a good time.

Thank you again to Murray for — once again — giving so generously of his time and opening the doors of his workshop, and to his team for volunteering their time to make this a special event!

Fig. 6 Native gold in highly mineralised dark quartz matrix

***JLK ARTISTRY FINE JEWELLERY* – Julianne Karavitis**, the mind behind **JLK Artistry**, is a distinguished Jewellery Designer, Gemmologist and Diamond grader, lending her expertise to some of the world's most esteemed jewellery houses in Australia and the USA. For over 20 years, she has specialised in helping clients create beautiful and desirable items to be worn and enjoyed for generations to come.

Jemima (Murray's daughter) is an Electrical Engineer with Worley on St George's Tce, Perth. Her work has been varied over the past decade. Presently she is part of the engineering team working on a solar array for a gold mining group on Lake Lefroy at Kambalda. Home life is frenetic with three very energetic children to co-care for with her husband Ian. (Ian is a Consulting geologist and has worked with Newexco, East Perth, for more than 12 years).

Charmaine has been Murray's indispensable assistant and logistics person (and sometime gem-cabber) for several years now, including two stints at PGMS. Charmaine brings a certain elegance, grace and calmness to Murray's impulsive work energy around the workshop. She has a big, friendly family, and they share a lot of laughs together throughout every working day.

Josh (Murray's son-in-law) is a dad of two, with over 15 years working in the mining industry in Western Australia. He is currently the Mining Sector Lead for WSP Australia's Earth and Environment Business Group and has an affinity for geology and earth sciences. When not at work, you'll find Josh (if you're lucky) running around in the bush or free diving in the sea.

Murray holds a BSc FGAA, is a Churchill Fellow 1987, and an Honorary Associate in the Dept of Earth and Planetary Sciences at the Western Australian Museum.

MARCH 2025 TALK

Black diamonds and carbonados: A mineralogical biography

Compiled by Susan Stocklmayer

On 12th March, Dr Léonie Rennie, semi- retired Curtin University physicist, past president of GAA(WA) and member of MinSocWA presented a talk about diamonds, specifically the black varieties.

Photo by Richard Rennie

Photo courtesy of Wikipedia (The Black Orlov)

Léonie's talk was a graphical summation based on two authored articles in recent Australian Gemmologist issues. The inspiration for research into black diamonds was initiated following viewing a large (93 ct) black diamond jewel, named the Anastasia, in the Natural History Museum in London. Black diamonds have become a desirable addition to the repertoire of diamond colours in fashionable jewellery of more recent times.

The talk introduced an historical endeavour covering aspects of mineralogy, gemmology, jewellery, plate tectonics, myth and legend, and mystery, appealing thus to a wide range of members' interests.

Three varieties of so-called black coloured diamonds were discussed. These comprise the monocrystalline diamonds which are representative of a small portion of mined diamonds, and depending on their qualities and condition, are those faceted in the jewellery industry. Boart is a polycrystalline carbon variety used industrially as an abrasive material. Both monocrystalline and boart diamond varieties are products of the Earth's mantle.

The third variety is the carbonado, which is an extremely rare and porous polycrystalline material of unproven and unknown origin. Carbonado material is also used as an abrasive.

Photo courtesy of Wikipedia Furniss, 1906 (The Sergio)

Black diamonds, as used in the jewellery industry, have a range of colours including grey and dark green (the image shown was production from the Marange diamond prospects in Zimbabwe) and are dominantly opaque or only marginally translucent. These would all be graded as fancy black diamonds. Opacity of these diamonds is dominantly caused by clouds and nano-sized crystal inclusions, chiefly graphite. The crystal lattices of opaque diamonds often have a high concentration of defects such as fractures and radiation damage that result in light absorption and scattering resulting in lower transparency. These diamonds show very finely pitted and striated surfaces resulting from the polycrystalline diamond inclusions and the activity of polishing, and these can be seen across the facet surfaces in reflected lighting.

A partially faceted black crystal (1.37 g). found at Kimberly (South Africa) in the late 19th century, and now in the collection of the Natural History Museum, was shown as an example that these black diamonds can occur as well-formed crystals.

Black diamonds of prominence were named and images and background stories of the Anastasia (93 ct), the Black Orlov (67.49 ct) and the Enigma (555.55 ct) black diamonds were shown. The Black Orlov has the longest and most legendary back story of these examples involving, theft, multiple suicides, royal connections and curses. These named diamonds can be researched on line.

Carbonados are a micro- and polycrystalline sintered carbon material; they are rare and have been sourced as an abrasive material only from Brazil (since the early 19th century) and more recently (~1925) from the Central African Republic. The discovery of carbonado from these two countries has led to theories about their origins and geological emplacement as these were neighbouring areas of the former supercontinent of Gondwana prior to the opening of the Atlantic Ocean. Neither location has a proven primary source.

Carbonados have an ultra-fine (sub-microscopic to approximately 1mm) and randomly orientated diamond crystal composition; they are distinctive in being porous (5 - 10% rounded void spaces), resulting in a range of specific gravity of 2.83 to 3.45 (lower than diamond 3.52) and have lustrous glassy surfaces. They are older than other diamond types ranging in age from 4.1 to 3.8 Ga whilst diamonds can be 3.5 to 3.3 Ga. In colour, they range from black, dark grey to brown. They have a different range of epigenetic inclusions (secondary minerals) but no syngenetic minerals such as the specific suites found in kimberlitic and lamproite sourced diamonds.

The story of the world's largest carbonado dates to 1895. It was found in river sediments in Bahia, Brazil and was named the Sergio, for the finder Sergio Borges de Cavaloo. It weighed 630 g (3150 ct) with dimensions reported as 3" x 3" x 3.5". Within six months of its finding it had been sold, at the time, for US$16,000, to a company based in Paris where it was examined by Henri Moissan (scientist, known for his experimental work on the manufacture of synthetic diamonds and carborundum). It was then resold

through a broker to Mr Gulland in London, who was responsible for breaking it into pieces suitable for diamond drilling purposes, and these were sold at the time for a total of US$40,000.

Details of the original Sergio carbonado were followed up by Léonie and her co-worker Robin Hansen, from the Natural History Museum, London, from a trail of documents recording details with images of the original specimen, one of which is an article by Henri Moissan describing the specimen in 1895. Ultimately, two cast metal models of the Sergio were discovered in the collections at the Natural History Museum, London. These had been acquired in 1911.

The final chapter to the story came from curator Francois Farges in Paris, where another model was discovered in the collection at the Muséum National d'Histoire Naturelle (MNHN); important to the story is that this metal model was manufactured by Henri Moissan.

Analyses (XRF) of one London model showed an alloy dominantly of copper (Cu (~88%), Zn (~8%) and Sn (2%)). Moissan's model analysed by the same method was dominant copper (75%), with Mg (4%) and Ag (14%). Both model analyses included surface coatings of paint.

Whilst both monocrystalline diamonds and polycrystalline boart have proven origins, carbonados, by contrast, present an enigma as they have no known origin.

Members are left with a mystery!

Recommended reading and bibliography

Haggerty, S, 2014. Carbonado: physical and chemical properties, a critical evaluation of proposed origins and a revised genetic model. Earth Science reviews. p. 49-72.

Haggerty, S, 2017. Carbonado diamond: a review of properties and origin. Gems and Gemology. V. 53(2), p. 168-179.

Hansen, R, Rennie, L, Burgio, L. Montgomery, W and Farges, F. 2024. The Sergio: An Exploration of the World's Largest Carbonado. Part 1. The Australian Gemmologist, 28(5), p. 268-276.

Hansen, R, Rennie, L, Farges, F. Burgio L and Montgomery, W, 2024. The Sergio: The life and times of the World's Largest Carbonado. Part 2. The Australian Gemmologist, 28(6), p. 308-318.

https://en.wikipedia.org/wiki/Sergio_(carbonado)

2024-2025 INTRODUCTION TO MINERALOGY

Session One of the Introduction to Mineralogy course – 13 July.
We talked about definitions of mineralogy, minerals and rocks, and the physical properties of minerals with some examples of their utilisation.

Session Two of the Introduction to Mineralogy course – 10 August at WAM Boola Bardip.
We talked about the periodical system of elements, chemical composition of minerals and their classification, and touched on crystallography. Thanks to Susan Stocklmayer (MinSocWA) and Erin Gray (GSWA) for their help with these difficult topics. Also, we visited the WAM Origins exhibition and saw beautiful minerals and rocks of WA. The display of mineral fluorescence attracted the most attention.

Session Three – 14 September at Toodyay.
The group had a splendid day looking at granites in the Perth Hills. Thanks to Tim Ivanic (GSWA) for help explaining the geology of Archean rocks and their mineralogy.

Session Four – 12 October – a browse and study of PGMS specimens and gems worth collecting.

Session Five – 9 November – A visit to the Perth Core yard.
DEMIRS / GSWA staff showing and discussing drillcore, mineral and fossil collections with some analyses using GSWA portable instruments.

Session Six – 14 December – A field trip to beach and Canning River outcrop.
Review mineral assemblages in sedimentary rocks while collecting beach sand - for the next session.

Session Seven – 8 February – A seminar at the Gemmological Association of WA. Introduction to gemstones and gemmology. Viewing the GAA-WA gemstone collection, microscope and portable instruments along with some analyses of the previously collected sand grains using microscope, UV and specific gravity (SG).

Session Eight – 8 March – A seminar at with MinSocWA.
Some revision and mineral quiz fun. Metallurgy and a special mineral research project.

MICROSCOPE CORNER

Investigating an Olivine Bomb

Submitted by Susan Stocklmayer

At a recent sale held at the Lapidary Club rooms, I purchased a curiosity for $3 - an olivine bomb (Figure 1). No data accompanied the rock, so it may or may not have originated as ejecta from a volcano from Australia's past. Under the microscope, the mineralogy proved to be simple with its dominant green portion formed by a saccharoidal mass of equigranular olivine.

Figure 1. Olivine bomb hand specimen. Source is unknown.

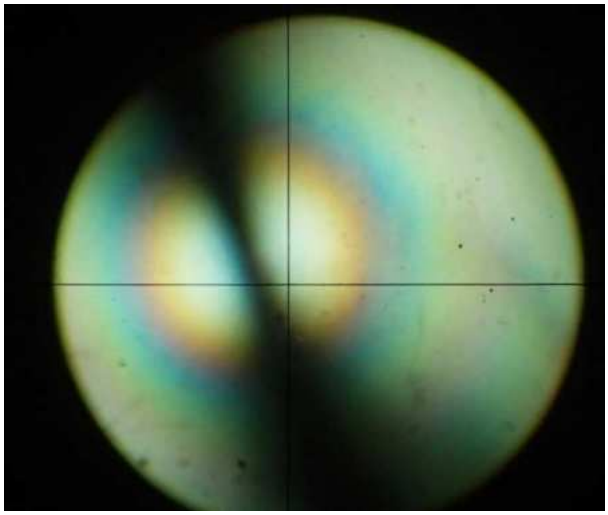


Figure 2. Optical interference figure shown of biaxial olivine from the bomb.

Olivine is well-known as the green-coloured gem mineral termed peridot. This has a composition of between 70-90% forsterite and, as single crystals, shows a range of colour from yellowish to brownish green. This colour variation relates to the ferrous iron content. The appreciation of peridot as gems has a long history.

Many of the largest fashioned stones as shown in museum and historical collections were likely sourced from the small Red Sea Island of

Olivine, first described as a mineral in the 18th century and named for its brownish to yellowish green colour, is now a group term describing an isomorphous series, with the two end members as the magnesian silicate, forsterite (Mg_2SiO_4) and the iron silicate, fayalite ($Fe_2 SiO_4$). Previously, members of the series were named according to the selected proportions of magnesium and iron using *variety* terms such as chrysolite and hortonolite. *Variety* terms are now discredited. Decorative "peridot" olivine used as a gem was termed chrysolite.

Identification of olivine by optical microscopy was achieved from a grain crush; using RI oil immersion methods and confirming its biaxial positive interference optical figure (Figure 2). All data indicates that it is forsterite.

Also present in the bomb are small groups of a black opaque mineral: this has a high, bright lustre, conchoidal fracture and, when crushed, has a brown colour, and is non-magnetic. It is most likely chromite. A portion of the bomb has a brown-coloured scoriaceous skin as shown in the image (Figure 1).

Olivine is a widespread, important rock-forming mineral in many ultramafic and mafic igneous rocks, particularly peridotites and dunites. It is also found extra-terrestrially, occurring in lunar basalts as well as in pallasite meteorites[1]. Rarely do olivine crystals of sufficiently large size and quality to be used as a gem develop in primary igneous rocks. There are exceptions such as the Kilbourne Hole volcanic crater in New Mexico where olivine bombs were found to contain some facet-grade olivine up to 128 ct in weight[1].

Figure 3. Tumble polished peridot grains from Arizona. FOV 6 cm.

Zabargad in Egypt where mining dates from about 1500 BCE[2]. The island is now a conservation area and popular diving centre.

Peridot, in the present time, is sourced from several countries including Myanmar, China, Norway and USA: campaign mining of basaltic mesas in areas of Arizona in the winter months has provided tourist-trade small-sized (less one centimeter) and inexpensive specimens of peridot, typically sold in small vials costing a few dollars (Figure 3). These tumbled gems often feature mineral inclusions of chromite, many with stress fracture haloes around them (Figure 4).

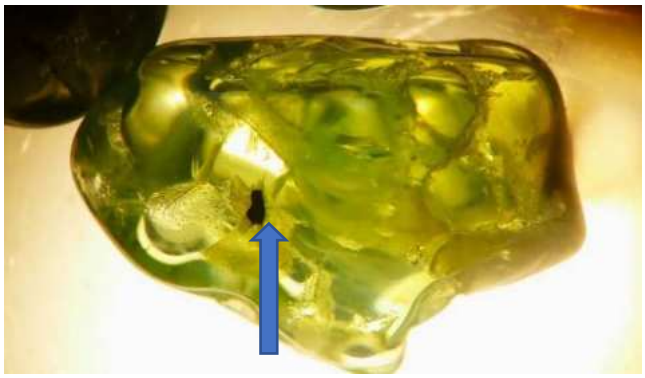


Figure 4. Chromite crystal in peridot (10 mm) from Arizona.

Figure 5. Magnified view of ludwigite needles in peridot from Pakistan. FOV 1.5 mm. GAA specimen.

Since the early 1990s peridot, as larger single crystals, have been produced from the area of the Sapat Gali, Kaghan valley in Pakistan, this is still an important source of the gem[3]. The peridot from this area occurs in veins and pockets within shear zones of the partially serpentinized dunite host rocks[3]. Mineral inclusions from this source of peridot comprise numerous fine black needles of the boron mineral ludwigite [$Mg_2Fe^{3+}O_2(BO_3)$] (Figure 5), the presence of these unique inclusions provide evidence for this provenance.

Bibliography

1. Fuhrbach JR, 1992. Kilbourne Hole peridot. *Gems and Gemology*, V 28(1), p. 16-27

2. Gubelin E, 1981. The ancient Peridot Island in the Red Sea. *Gems and Gemology*, V 17(1), p. 2-8

3. Kane RE, 2004. The creation of a magnificent suite of peridot jewellery from the Himalayas to Fifth Avenue. *Gems and Gemology*, V 40(4), p. 288-302

MinSocWA – 25 YEARS OLD in 2025

Next year is our 25th anniversary. Niels Dahl (currently travelling) has taken on the task of compiling an historical record of the past quarter century.

If you hold early records, photographs or ephemera, please make it known and available to Niels or anyone on the committee via Newsletter@minsocwa.org.au so that it can be included in our history.

MEMBERSHIP

The Mineralogical Society of WA has over 100 members. We have welcomed the following new members since December 2024:

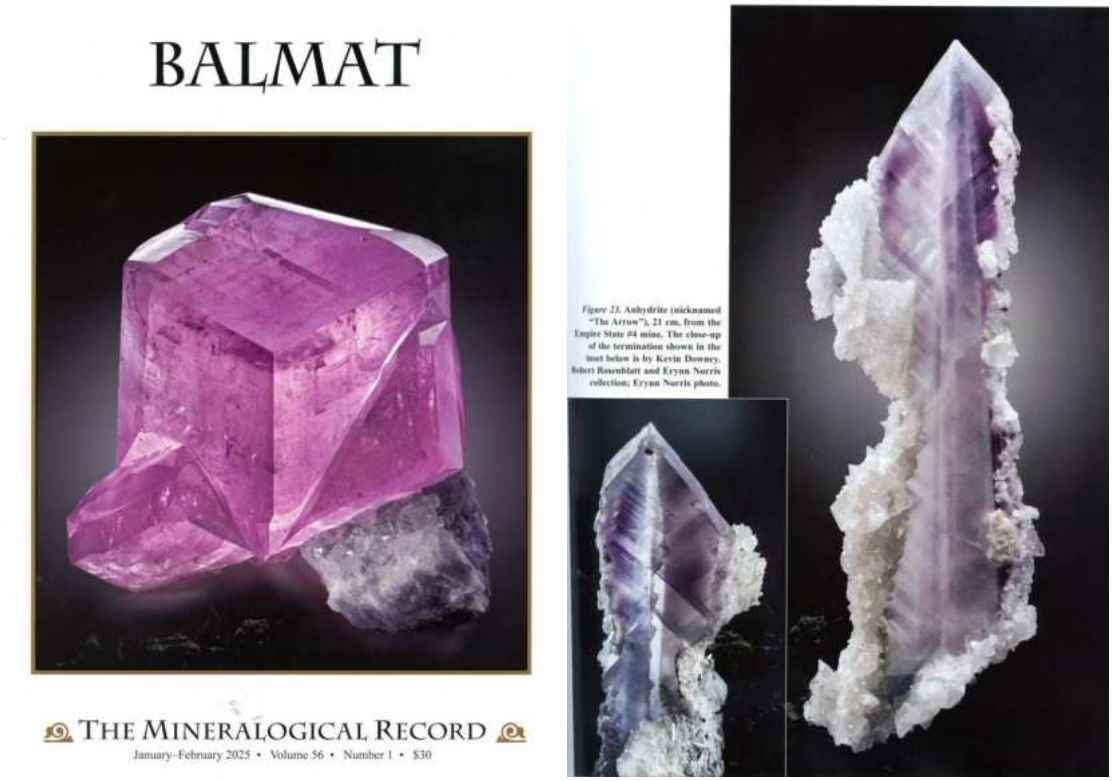
Derek Smith	Olive Johnston
Rainer Yeo Yu Ming	George Stacey
Samantha Wright	

All members are asked to ensure that their contact details are up to date with the Membership Secretary/Secretary. If you change your email address or phone number, please let us know so that you continue to receive all MinSocWA communications – membership@minsocwa.org.au

FROM YOUR LIBRARY READY TO BORROW

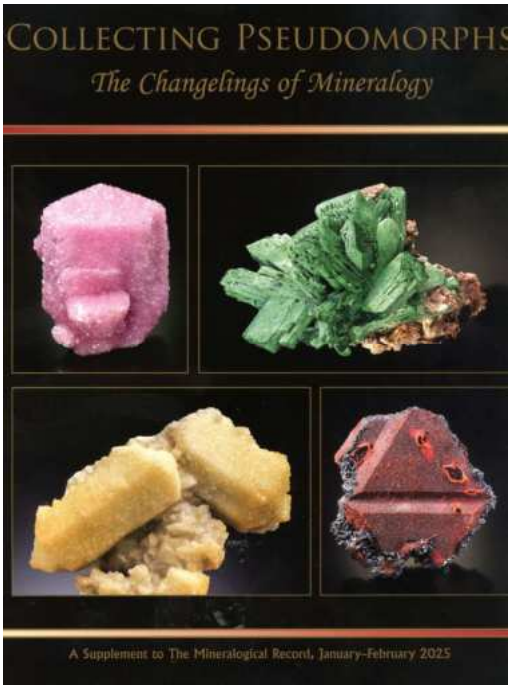
The MinSocWA Library has recently received the following items:

Mineralogical Record - January-February Volume 56 Number 1



Anhydrite crystals from the Balmat Mine

And the supplement section is lavishly illustrated with many images of pseudomorphs:



Rocks and Minerals Volume 100 No.2

This volume leads with an article titled:

'Minerals of the Turner Mine: A Little-known phosphate-rich granite pegmatite located at Marlow, Cheshire County, New Hampshire'
by Kevin M. Czaja

UPCOMING EVENTS

MinSocWA Mineral Market– Saturday 12 April 2025 at 9:30 am - 4:00 pm.

To be held at Main Hall, Forster Community Centre,
278 Keane St., Cloverdale, Perth — Just off Abernethy Road.

Entry is $5. Free for children 16 years and under.

A great opportunity to buy/sell or swap anything related to minerals, mineralogy, geology or mining!
View the flyer Mineral Market_12 April 2025

May Mini-talks – Wednesday, 14 May 2025
Lapidary Club Hall

7.30pm (venue open from 6.30pm for socialising)

Craig Bosel Discovery of turgite and thousands of quartz crystal at the Tallering Peak Mine 2007-2009

Steve Turner Minerals of Fukushima Prefecture, Japan

The Perth Gem and Mineral Show (PGMS)
7th – 9th November 2025
https://www.perthgemmineralshow.com/

PGMS
Perth Gem & Mineral Show
Proudly presented by the Mineralogical Society of Western Australia

The Perth Gem and Mineral Show (PGMS) sub-committee is pleased to report that planning of the inaugural show is going ahead smoothly. The event will showcase many of the wonders that the mineral, gem, fossil and geoscience communities have to offer, with a special focus on Western Australia's mineral heritage.

COMMITTEE MEMBERS FOR 2023/2024

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PGMS Secretary	Peter Willems	pgms@minsocwa.org.au

Patron - *Mark Creasy*

Meetings

Meetings of the Mineralogical Society of Western Australia Incorporated are usually held at **7.30 pm on the second Wednesday of every odd month** at:

WA Lapidary & Rockhunting Club rooms 31 Gladstone Road,
Rivervale (corner of Newey Street)

The venue will be open from 6.30 pm for refreshments and socialising.

MinSoc WA LINKS

Web	http://www.minsocwa.org.au
Facebook Group	https://www.facebook.com/groups/minsocwa
Facebook Page	https://www.facebook.com/MINSOCWA
Instagram	https://www.instagram.com/MINSOCWA
YouTube Channel	https://www.youtube.com/channel/UC0S2TFVFIBLU-2zlEzE5VNA

Mineralogical Society of WA, Inc.
Registered Society No. A1009304P