



THE MINERALOGICAL SOCIETY OF NEW SOUTH WALES INC

Website: www.minsocnsw.org.au

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

NEWSLETTER DECEMBER 2022

CHRISTMAS SOCIAL and SWAP n' SELL

The December Meeting is the Society's Annual Christmas Social and will be held from 11.00 am to 3.00 pm on Saturday the 3rd of December in the clubrooms of the Parramatta and Holroyd Lapidary Club at 73 Fullagar Road, Wentworthville.

The Social will comprise the sale or exchange of mineral specimens and mineralogical material, books, magazines and equipment. Food and drink will be provided and members will be charged \$10 to attend the Social. Since the Lapidary Club has installed a BBQ facility members are invited to bring in their own meat to cook but all other foods, hot and cold drinks, plates and utensils etc will be provided. There will be a lucky door prize awarded by raffle. Tickets will be issued to each person as they arrive and pay their \$10.

Depending on the weather, tables with the food and drinks will be set up in the Club carpark near the BBQ griller and therefore car parking cannot be allowed on the Club premises. Members with sale material are asked to arrive from 10.00 am to set out their sale items and may drive into the car park to unload but must then move their cars outside the grounds where street parking is available nearby.

Sale tables will be set up inside the Lapidary Club room and outside in the car park, either location to be used depending on the preference of the seller and first come, first choice. Members intending to sell are recommended to book a table by notifying the Secretary, George Laking, on (02) 9636 7145, Mobile 0468 387 899 or e-mail bglaking@tech2u.com.au

Members are reminded that the Society Committee has previously determined that anyone attending the Christmas Social who was not currently financial may buy but would not be allowed to sell minerals. Any members who were unsure of their current financial status could just pay their subscriptions for 2023 from now on and they would then be taken as financial.

Members are asked to avoid offering cash payments for membership subscriptions at the Social since this would necessitate the writing of receipts by the Secretary who would prefer to be looking at minerals and everyone is recommended to pay subscriptions by direct-debiting.

FORTHCOMING MEETINGS and PROGRAMS

2023: The first Meeting in 2023 will be on February the 3rd. Meetings will be held at the Parramatta and Holroyd Lapidary Club on the first Friday of each subsequent month through the year except in April when Good Friday is on the 7th and the Meeting would be held on the second Friday.

February 3rd 2023: Ross Pogson, Curator of Minerals at the Australian Museum will deliver a lecture on 'Mineral Icons of the Australian Museum' which will be introducing the New Mineral Gallery.

March 4th : Program to be confirmed.

April 14th : (Second Friday). Program to be confirmed

May 6th . Annual Mineral Auction.

2023 Society Membership Subscriptions

Society Membership subscriptions are due from January 1st. Members are recommended to pay their subscriptions by direct debit only which should be the most convenient method of payment and which also provides a bank record of the transaction for both the payer and payee. Receipts would not be issued for direct debit payments. The payer should be sure to enter his or her name into the description or memo line in their bank account direct debit window so that the Society will know from whom the payment has been made. The phrase '*Minsoc sub*' would not be sufficient to identify the member.

According to the Society Constitution memberships are valid until March 31st in any year. Members currently financial and wishing to renew could do so at any time up to the end of March.

Fees are as follows :	- Adult membership, Sydney metropolitan area	\$30
	Adult membership, country or interstate	\$25
	Child/youth (under 18 years), or student member	\$20

Family members (spouse/partner and children only) can be admitted for membership at the additional cost of \$5 each. The name of the family member should be provided for the record, (unless already provided), and members are recommended to fill in a Membership Renewal form if any of their details, e-mail addresses etc, have changed since last year. Renewal forms are available on the Society Website and one will accompany this Newsletter.

To direct-debit the Society account the details are: - Commonwealth Bank
 Account Name: - Mineralogical Society of NSW Inc.
 BSB: 062016 Account number: 28023647

The SOCIETY COMMITTEE

PRESIDENT:	Dieter Mylius	Tel: (02) 9477 1060
	E-mail:	<i>dieterm@internode.on.net</i>
VICE-PRESIDENT:	John Chapman	Tel: (02) 9808 3481
	E-mail:	<i>chapmanjr@optusnet.com.au</i>
SECRETARY:	George Laking	Tel: (02) 9636 7145
	E-mail:	<i>bglaking@tech2u.com.au</i>
TREASURER:	Graham Ogle	Mobile: 0400 683 574
	E-mail:	<i>quartzandsirius@hotmail.com</i>

COMMITTEE MEMBERS:	Haley Bambridge	Mobile: 0413 100 344
	Peter Beddow	Tel: (02) 8810 8446
	David Colchester	Tel: (02) 9449 3862
	Geoff Parsons	Tel: (02) 9548 3289
	Mark Walters	Mobile: 0421 012 647

The NOVEMBER MEETING

The November meeting was opened by the President, Dieter Mylius, and attended by about twenty members and a similar number by virtual mode. There were no announcements to be made and after a few minutes the President introduced the speaker for the evening, Society member Lee Spencer.

‘The Emperor Gold Mines’

Lee Spencer

The speaker initially described his introduction to Fiji when he was at the University of NSW and his lecturer was the late Professor Laurie Lawrence who had done a lot of work on the Fijian geology. For his lecture this evening Lee Spencer intended to first present a brief overview of the history of the country then describe the geology and mineralogy and the development of the gold mining. The lecture was thoroughly illustrated by a series of images, of the geography of the islands, of the early prospectors, the business men, including Sir Frank Packer, who set up mining syndicates, copies of gold mine shares and newspaper clippings of the gold rush which developed and views of the mine, the miners and the mining. Due to Fiji’s proximity to Australia the prospectors, financiers and business men were almost entirely Australian.

There were also charts showing mining instability over the 1980s to 2000s due to various factors including miner’s strikes, the price of gold, political instability and mining company re-organisation. This time was a low point in the mine’s operation with it being closed for periods. Then from 2008 operations were revived, modernization provided and gold production resumed. Diagrams were shown of the geological origin and formation of the mine deposit, and cross-sections showing the geological features and major gold-bearing veins. Then to the mineralogy which in the Emperor mine is substantially tellurium-based. Workers in 1987 and 2003 had listed 47 minerals associated with the ore of which 13 or 28% were tellurium species. Laurie Lawrence in 2001 had listed 28 metallic minerals of which 9, or a similar proportion at 32%, were tellurium species. Finally the series of images showed a number of mineral specimens, some with visible gold and specimens with crystals of the various tellurium/gold/silver minerals displayed.

The mine is still operating, with short breaks, after almost 80 years and is one of the ten largest epithermal gold/silver systems in the world. It has produced over seven million ounces of gold so far with an estimated 4.2 million still in reserve. Exported gold rose from 23,893.59 ounces in 2020, to 27,420 in 2021; Exported silver rose from 11,241.47 ounces in 2020, to 17,296.41 in 2021 and revenue jumped from \$89,247,111 in 2020, to \$101,177,836 in 2021.

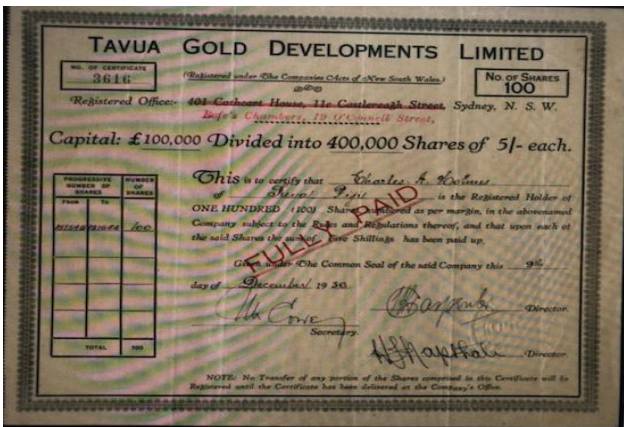
The Emperor Gold mine is situated about ten kilometers from the north coast of Viti Levu, the larger of the two main islands in Fiji. The Fijian archipelago actually comprises 330 islands and 540 islets amounting to 3,000,000 square klms although only 100 of the islands are inhabited and about 85% of the population lives on the two main islands. The Fiji islands were first sighted by Europeans in the person of Abel Tasman in 1643. Captain Cook visited in 1774 and William Bligh in 1789. From that time trade developed for commodities such as sandalwood in 1801, cotton from 1866 and sugar from 1873. A British colonial government was set up from 1858 and remained in place up to 1970 when Fiji was made independent. After independence a democratic government system was in place for a number of years up to 1987 after which there have been a series of military coups.

Gold was first discovered in 1872 in the Nasivi River but not in significant amounts until 1932 when Scottish prospector Bill Borthwick discovered gold in commercial quantities near Vatukoula, then a small village. With initial funding from Pat Costello, a publican living in the capital, Suva, Borthwick started working and within a year had extracted over 1,000 ounces of gold by hand methods. A gold rush “The Staking Rush” on what was being called the Tavua Goldfield ensued. (Tavua is another small town a few kilometers to the north of Vatukoula). Gradually more investors came in, prospecting companies formed and claims were consolidated. There was a boom in mining stocks with ‘Wild Trading’ on the Australian Stock Exchanges and large share flotations being made.

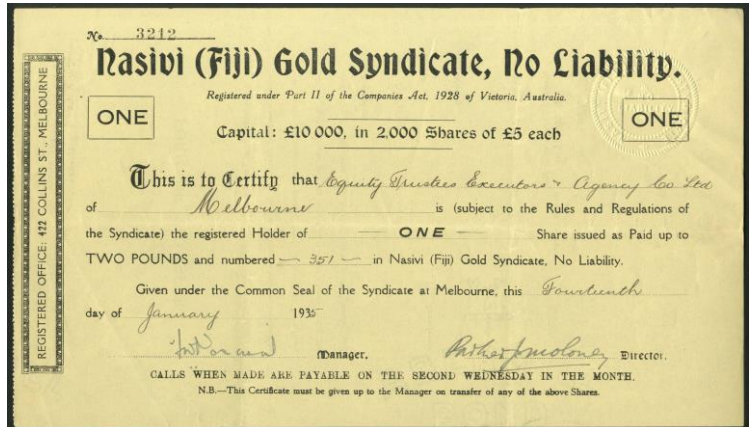


Tavua Goldfield 1934- “The Staking Rush”

Inevitably perhaps, a scam developed in the first few years of the mining when the Nasivi (Fiji) Gold Syndicate Company was listed in March 1935 selling 2,000 shares at £5 each. With initially very favourable reports of gold assays of 15oz of gold per ton of ore the shares rose to £57 by June. Then with other assays showing low gold content the shares crashed to 10/- each by September in the same year.



A typical Share Certificate



The Scam Certificate



The Pacific Islands Monthly 1935



The Scam exposed. Pacific Islands Monthly March 19 1936

The early personalities involved in setting up the first mining syndicates were described, images of some of the significant people of the time being displayed. Ted Theodore had been the premier of Queensland from 1919 to 1925 and was later federal Treasurer but resigned from politics to have a successful business career as a partner of Frank Packer. He helped fund the early prospecting and took an initial option over the Emperor mine from Pat Costello and Bill Borthwick to form the Prospecting Syndicate with Frank Packer and other investors, P.F.Cody and John Wren. He eventually became managing director of the Consolidated Vatukoula Mines, the Emperor, the Loloma and the Dolphin.

Over the period 1935 to 1956 the mine produced very high grade gold but by the 1970s the gold price had dropped considerably and operations slowed down with the mine being subsidized by the Fijian government, mainly to keep the miners employed. With the low gold price and other factors such as mining strikes the mine ceased operations altogether for periods in the 1980s and 1990s, the EGM (Emperor Gold Mine) Company entering into joint ventures with the Western Mining Corporation and then the South African DRD, (Durban Roodepoort Deep) companies. In 2008 the gold price went up and EGM, by then named VGM, (Vatukoula Gold Mines), was bought out and is now wholly owned by Chinese interests.

Initially more than one mine was operating, notably the Emperor and the Loloma but eventually these were amalgamated. By 1939 after only a few years of operation the mines were producing 100,000 ounces of gold a year. Up to 1942 most ore was sourced from open cuts but mining gradually moved underground. From 1946 50% of ore was sourced from underground and from 1953 bulk ore was derived from three shafts. The mine is located in an ancient caldera of about five klm in diameter which formed only 4.6 million years ago followed by a collapse of much of the structure and infiltration by hydrothermal fluids.

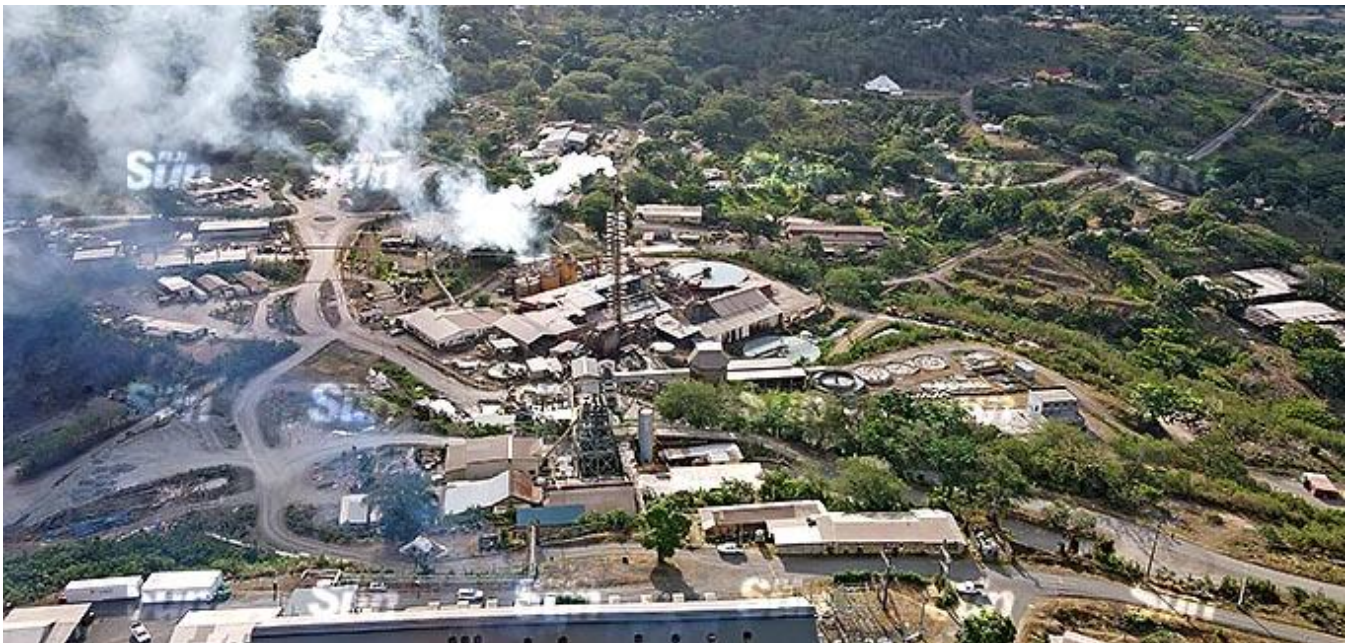
Lee Spencer finally showed a series of images of mineral specimens including a specimen of wire gold although noting that native gold was uncommon in the Emperor deposit. Identifying and naming the telluride minerals can be difficult for the mineralogist who would have to resort to XRD methods. Many of the specimens shown were originally from Laurie Lawrence's collection and have been mostly re-photographed by John Chapman.



Freibergite ($[\text{Ag}_6]^{4+}((\text{Cu},\text{Ag})_4 \text{Fe}^{2+}_2)\text{Sb}_4\text{S}_{12}\text{S}_{0-1}$)
Emperor Mine: Fov 6mms – L.K.Spencer Collection,
ex L.J Lawrence, Photo John Chapman



Wire Gold: Level 7 Emperor Vein 5 cms
L.K.Spencer Collection, ex L.J.Lawrence
Photo John Chapman



The Emperor Mine in November 2021 –still going!

FORTHCOMING EVENTS

The Carlingford Gem & Mineral Expo

Being held over Saturday & Sunday the 26th and 27th of November from 9.30am to 5.00pm on Saturday and 9.30am to 4.00pm on Sunday in the Roselea Community Centre, 645-671 Pennant Hills Road, Carlingford.

The Carlingford Show is hosted by the Australian Gem & Mineral Expo's featuring displays and sales of jewellery, gemstones, beads, opals, carvings, gem rough, lapidary cutting rough, fossils, meteorites, and crystals as well as mineral specimens from Australia and all over the World. Entry fee \$8.

Information from www.agamexplos.com.au or contact Peter on 0412 333 150.

THE MINERALOGICAL SOCIETY OF N.S.W. INC.

MEMBERSHIP APPLICATION / RENEWAL

Membership fees are due from January 1st

Please provide your full name, postal address, telephone number/s and e-mail address (if available). Members with e-mail capability will receive the Newsletter and other information only by e-mail.

NAME:

POSTAL ADDRESS:

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Telephone (ah)..... (bh).....

(mobile).....

E-mail address

FEES: Adult membership, Sydney metropolitan area \$30

Adult membership, country or interstate \$25

Child/youth (under 18 years), or student member \$20

Additional family members (spouse/partner and children only) can be admitted for membership at the cost of \$5 each (after the first member's costs as per the list above). If applying for additional family members, please list the name(s) here:

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New members joining from May 1st in any year are deemed to be financial for both the current and the whole of the following year.

Options for payment

1). ***Direct Credit / bank transfer to the Society's account***

The account details are: -

Commonwealth Bank:

Account Name: Mineralogical Society of NSW Inc.

BSB: 062016 Account number: 28023647

Please put your name in the Memo line when making a direct debit/bank transfer so that the Society will know who the payment is from. If any of your address or telephone details have changed you should provide those details on this form and return it to the Treasurer - either : -

1) at the next General Meeting,

2) by e-mail to *quartzandsirius@hotmail.com*

3) by post to the address below

2). ***Cheque or Australia Post Money Order sent with a completed renewal form to : -***

The Mineralogical Society of New South Wales Inc.

58 Amazon Rd,

Seven Hills,

NSW 2147

3). ***By cash or cheque delivered to the Treasurer, or in his absence the Secretary, at any General meeting.*** Members however are strongly urged to pay subscriptions by direct debit only as this will provide bank records of the payment for both the member and the Society.