



The Mineralogical Society of Queensland Inc.

NEWSLETTER

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UPCOMING MINSOCQ MEETINGS

MinSocQ meetings are held on the last Wednesday of each month, excepting December, at the Mt Gravatt Lapidary Society (**MGLS**) clubrooms, formally starting at 7.30pm. Anyone interested in minerals and mineral collecting is most welcome, at any meeting.

(The clubrooms are located at the very end of Carson Lane, which is off Logan Road, Upper Mt Gravatt, on the left as you are heading north towards the city, directly opposite McDonald's. There is plenty of parking available adjacent to the clubroom, at no charge.)

October 29: *Minerals of Broken Hill and environs:* various speakers. Bring your minerals from Broken Hill, Silverton, the Triple Chance quarry, other collecting sites around Broken Hill, and from the Olary Province (across the border in SA).

November 26: *Reports and Recollections of the Annual Meeting of the Joint Mineralogical Societies of Australia Zeehan, plus field trips and the Zeehan Gem and Mineral Fair.* Minerals of the month will be Tasmanian specimens – bring any from the field trips, acquisitions from the Zeehan Fair, and from Tassie in general.

As part of the November meeting, the Bob Taylor Trophy will be awarded to the member who has collected the best specimen on a MinSocQ field trip.

In addition, do wrap and bring a nice specimen for a Secret Santa Mineral Lucky Dip (to the value of around \$5). If you don't bring one, you don't get a chance to dip (and you just may be hounded from the meeting by the forces of Darkness and Evil).

In anticipation of the **Auction Mineralia** at the December barbie (below), we ask you to bring as many items as you can to the November MinSocQ meeting. Please note that you may place a reserve price on your donated item(s), and if the reserve is not reached in the bidding, you get to keep the item(s).

December 13th: End of year barbie – to be held at the home of Andy and Helen Toole, 62 Barter Avenue, Holland Park. The function will start around 12 noon. This will be a BYOE or bring your own everything event, with *swap, share and eat*; desserts especially welcome.

The '**Auction Mineralia**' will follow the barbie, with the silver-tongued Ron Young as auctioneer. Bring any last minute 'stuff' to auction – it's all for a great cause, namely, to replenish the coffers of MinSocQ!

January 28, 2009: *Tasmanian minerals* will be the topic, with various speakers - if you have 'em, please bring 'em.

February 25, 2009: *Topaz* will be the topic, presented by Theo Kloprogge; not surprisingly, topaz will be the mineral of the month – so bring yours in to be ogled.

MINSOCQ MGMT. COMMITTEE MEETINGS

Commencing at 6.00pm, prior to the MinsocQ meetings, 26 November 2008, 28 January 2009, 25 March 2009, 27 May 2009.

2008 MICROMOB MEETINGS starting 10am

A reversal of order to these meetings has evolved. The morning's activities will comprise 'problems', swaps, brags and 'scope work, punctuated by cups of tea. The afternoon activity will comprise the chosen topic - with presentations – and more 'scope work.

November: no meeting due to the Annual Meeting of the Joint Mineralogical Societies of Australasia at Zeehan (see below).

December: No meeting, but the annual MinSocQ barbie will be held on the Saturday the 13th

January 10, 2009: at the MGLS clubrooms, the topic will be *Tasmanian Micros – from Tasmania!*

February 14, 2009: at the MGLS clubrooms, the topic will be *Topaz – from anywhere*

Annual Meeting of the Joint Mineralogical Societies of Australasia, hosted by the Mineralogical Society of Tasmania - November 6 & 7

The venue will be the Gaiety Theatre, Zeehan, Tasmania, and the theme will be *Copper Mines and*

Minerals. The Annual Seminar will be preceded by field trips on 3 to 5 November. **The Zeehan Gem and Mineral** fair will be held post-seminar on 8 & 9 November.

For more detail, go to Tony's website – *The Australian Mineral Collector* at www.mineral.org.au, and click on the *Joint Seminar* link (in yellow on the left of the home page). There should be a good MinSocQ presence, and Tony Forsyth will be presenting *Wolfram Camp – a Classic Australian Locality*. If you've not registered so far, please do so now.

2008 & 2009 SHOW CALENDAR

For updates and more details, see www.mineral.org.au

October 25 & 26: Toowoomba Gemfest, Centenary Heights High School, Ramsay St., Toowoomba

November 8 & 9: Bundaberg Gemfair, Bundaberg Civic Centre, Bourbong Street, Bundaberg

November 15: Suncoast Gem Show, Buderim Mountain State School, 8-42 Main St., Buderim. This is a good show with which to end the year, not too hot and not too cold. More importantly, BK Minerals (Bill and Yvonne Kettley) will be there. In past years, they have had a great range of minerals (and 'fozzils'), and excellent end-of-year deals.

2009

February 28 & March 1: North Brisbane Gem and Jewel Festival, Aviation High School, Widdop St, Hendra

March 13-15: Minerama, Glen Innes & District Services Club. Arguably the best show in NSW, with over 70 traders offering the best range of minerals and gems available. There will be tailgaters galore, with some offering top class specimens. As usual, there will be organized field trips.

March 21: Bill and Yvonne welcome everybody interested in minerals to the BK Minerals, 'Back from Tucson Extravaganza', 9am to 5pm; 104 Koorringal Rd, Munruben, Qld 4125; Ph: 3802 1186.

WHAT'S BEEN HAPPENING

The Annual General Meeting of MinSocQ was held at the MGLS on 27 August – some of the highlights follow:

EXTRACTS FROM THE PRESIDENTS REPORT: AUGUST 07 TO AUGUST 08

The Society has continued to meet at the Mt Gravatt Lapidary Society clubrooms in Carson Lane, Upper Mt Gravatt. We are grateful to the Mt Gravatt Lapidary Society for allowing MinSocQ to continue to use their facilities. Despite having a varied and interesting

program there has unfortunately been no appreciable increase in the number of members attending meetings. It is encouraging however to see two younger members Dirk and Justin attending and actively participating at our meetings.

We have been especially fortunate this year to have received an excellent presentation from Dr Paulo Vasconcelos titled *Anahi ametrine revisited*. Paulo is a very hard person to access because of his work commitments and it was good to see that his presentation was well attended. In addition presentations from Tony Forsyth, Dr Theo Klopogge, Dr Steve Dobos, Ron Young and myself were given at the monthly meetings. We greatly appreciate the time and effort taken by those members to share their vast knowledge of the various aspects of mineralogy with fellow members.

The micromount group is continuing to flourish under the leadership of Sue Ericksson with numbers attending the meetings varying from 6 to 16. The morning session generally consists of a workshop at which all members are invited to participate by researching a nominated topic and to present their findings whilst the afternoon session comprises the microscope session with emphasis on the nominated mineral(s). Meetings continue to be held in rotation between the homes of members in Brisbane, Casino and Toowoomba and at the Mt Gravatt clubrooms.

Over the past year members have participated in field trips to the University of Queensland Experimental Mine and the Julius Kruttschnitt Mineral Research Centre at Indooroopilly and the Toowoomba Pilot Tunnel stockpile. These trips were all well attended.

One of the milestones achieved this year was the long overdue review of our constitution. This document has now been redrafted and submitted to the Department of Fair Trading for ratification. Our thanks go to Ron Young for his work in pulling together the comments from members, arranging for the document to be retyped and for submission of the paperwork to the Department of Fair Trading for approval.

I was fortunate to attend (together with 6 other members of our society) the 30th Annual Seminar of the Joint Mineralogical Societies of Australia which was held in Te Rau Aroha, Waihi Beach, New Zealand in October 2007. The Seminar was held in conjunction with the micro-mount symposium which is held annually in New Zealand. Although the delegate numbers were a little less than at previous seminars I believe that New Zealand has established a place in the annual cycle for future seminars. Following this success it was proposed that there be a name change for future seminars to reflect the inclusion of New Zealand into the cycle and that the seminars now be termed Seminars of the Joint Mineralogical Societies of **Australasia**.

According to our records there are no additional members eligible for 10 year membership of MinSocQ due at this time. Once again I wish to thank the management committee for their support over the past

year – your assistance and encouragement have made my task much easier.

In closing I would like members to welcome the incoming management committee and to afford them the support given to the past committees. Russell Kanowski

MINUTES of the MEETING of the TRUSTEES of the MINERALS HERITAGE MUSEUM HELD TUESDAY 8 JULY 2008 AT 5:00 PM, at the COMALCO BUILDING, ELIZABETH & CREEK STREETS, BRISBANE

All four trustees were present, namely Ron Young, Bob Bryan, Jim Harrison, Tony Forsyth (as MinSocQ's appointed representative). It was agreed that Ron should chair the meeting. Tony had advised that he would be a little late. Meeting began at 5:20 pm.

Ron showed the others a fine specimen of adularia and smoky quartz from Torrington which has been donated to our MHM by Caleb Yue, a nice (repaired) smoky quartz and amazonite from Pikes Peak, Colorado, loaned for long term display by Caleb Yue, and a specimen of very bright, clear, canary yellow sulfur crystals from Bolivia, bought from BK Minerals.

Bob, Tony and Ron had seen and approved of a large magnetite specimen from Biggenden bought from BK Minerals on 31/1/08. The specimen weighed 8.7 kg so Ron had not brought it in, but forgot to mention it to Jim.

Ron had purchased a small (5 x 5 x 4 cm) but classic botryoidal gem quality malachite from the Monster Mine, at Burra Burra, South Australia from Don McColl for the specific purpose of donating it to the MHM. Receipt from Don for \$150 and MHM Catalogue No. 89 are both dated 21/5/08. Ron regrets having forgotten to mention this donation, but the specimen exists for all to see and will soon be in the 61 Mary Street display.

Ron then quickly ran through the minutes of the most recent meeting of the trustees which had been held on 19 July 2007.

Business arising included:-

Tony and Ron related how the matter of the reopening of the Wolfram Camp area had developed. Alistair Barton has the rights to all specimen material and is prepared to donate to our MHM. Tony, Trevor Kitto, Bill Kettley and Ron had all been involved to the extent that Alistair visited the Tuscon show and, with guidance from Bill and Trevor, got a feel for how the show works and the possibilities for marketing specimens. Our MinSocQ member George Brabon, who is a very experienced mineral collector, is now employed by Alistair at the mine for the purpose of finding, preparing, preserving etc. whatever specimens are located.

Tony has received no response after having emailed details of our MHM collection to the Earth Science or Geology masters at all G.P.S. schools.

Ron has cleaned several more of the shelves in the 61 Mary Street display and has cleaned and reinstated the specimens resident on those shelves. A rotational cleaning procedure involving the four cabinets should ensure that the display is fairly pristine at all times.

The matter of completing an audit of the cataloguing and whereabouts of all MHM specimens has not proceeded at the anticipated pace but Ron assured that it is not forgotten and is expected to be finalised pretty soon.

Ron had been contacted again by the Sunnybank Hills library with a view to making another presentation of beautiful mineral specimens in that venue. The display was in place for the entire month of April 2008 and the library people judged it to be a big success. On this occasion Steve Dobos prepared all of the labels.

The matter of the refurbishment of the Comalco foyer and the possibility of including a stunning display of mineral specimens was discussed. There are several possibilities including the use of the red granite pedestal cabinets (ex Enertrade building at 61 Mary Street) or a specifically designed presentation to fit in with the refurbishment.

It was agreed that Ron should make contact with "the powers that be" at 61 Mary Street to feel out the possibility of enlarging the presentation in that foyer.

Whatever new or additional presentations might be made, it is desirable that many of the specimens presently located at "Broadlands Farm" should be included.

Tony had researched the availability of a supplier for more acrylic name-stands and Ron followed up and obtained 500 suitable "blocks" for \$300. Not as good as the first lot which were free but 500 should last for several years.

Thanks to all trustees for their interest and input and thanks to Jim for making the considerable effort to be present. Meeting closed at 6:00 pm.

Ron Young, Trustee, Minerals Heritage Museum

OTHER AGM and GENERAL MEETING NOTES

The results of the election of office bearers for MinSocQ for the year 2008-09, resulted in the office bearers listed at the beginning of the newsletter. There was no change from the previous year, except that Steve Dobos was elected to replace George Brabon on the Management Committee.

A copy of Steve Sorell's most recent edition of *The Australian & New Zealand Mineral Collector Magazine*, was available for inspection. All agreed that it is a much more friendly publication for the mineral fraternity than our AJM, the last edition of which was pretty well incomprehensible to anyone except highly qualified academics.

To the 'powers that be' at AJM – please include at least some 'ordinary' material that will be of interest to most of the average MinSoc members, who have no aspirations to academic insight. Please take note of this request, as AJM is too good and noteworthy a publication to be allowed to die the same slow death as its predecessors.

Bill Kettley will firm up a date for a field trip to Keith Berlin's museum in Kingaroy.

The Department of Fair Trading has accepted our re-written Constitution.

For the general meeting following the AGM, Theo Kloprogge gave a nicely balanced presentation on pseudomorphs. He had lots of illustrations to show the various ways pseudomorphs can form. Members had brought a good selection of appropriate specimens to complement Theo's presentation, which I think everyone thoroughly enjoyed. Ron Young

MINSOCQ MANAGEMENT COMMITTEE MEETING, 24 September:

Started with the usual minutes and correspondence, and carryovers from the AGM. Steve Dobos was welcomed to the Management Committee and told to take his own notes on deliberations from here on in, for inclusion in the Newsletter.

MinSocQ will host next year's Annual Meeting of the Joint Mineralogical Societies of Australasia, over the Queen's Birthday Weekend, June 7-9, 2009. It was resolved that there will be no single topic, but rather "Speaker's Choice" to provide a range of eclectic topics that should maintain the interest of the attendees. (After all, 20 presentations on *hydrowhoopyite* might even put academics to sleep!) Your ideas and input are most welcome; please contact any member of the management committee.

On the same topic, Ron Young has managed to secure the venue at the Queensland Museum, at a much more realistic price than initially indicated – this is quite a coup, and needs to be locked in! Give that man a large quartz crystal!

There was discussion regarding field trips, with the Pilot Tunnel at Toowoomba and the Indooroopilly Experimental Mine for starters. The management committee welcomes suggestions for other field trips, and additional 'events'.

It was noted that it was about time that there should be a trophy for the MicroMobbers to parallel the Bob Taylor trophy for the 'MacroMobbers', with same criteria applying (best micro collected on a MinSocQ field trip). It was resolved that the inaugural presentation would be made at next year's November MinSocQ meeting.

The topic of Newsletter content was raised; as in previous years, contributions from members have been few and far between. Suzie Ericksson, Ron Young, and Russell Kanowski have comprised 'the old faithful', with

occasional articles from Eric Stevens, Bill Kettley and Sue Wearden. Unless readers provide feedback, and articles, the content will continue to be at the mercy of the editor – and we all know about *that!*

Feedback (both direct and indirect) on the mineral quiz in Vol 52 ranged from 'devilish and devious' to 'too hard and too academic'. Several members did however spend a few nights on it, and scored, they believe, some 50%. These members will go to heaven! Answers to the quiz appear later in this Newsletter. The next quiz (in Vol 54 next year) will be simpler, with fewer and easier questions – but, dear reader, if the editor writes a quiz for which every answer is *quartz*, what really is the point?

MICROMOB REPORTS

August 9th in Casino

The meeting was held at the home of Lloyd and Glenys Sinclair, in, you guessed it, Casino, NSW. It was a small gathering with Russell, Philip and I being the only Queenslanders attending due to illness, funerals and other life-altering factors.

The day commenced with a cuppa and discussion on the hobby in general. The theme was levyne with some very unusual specimens being shown. The afternoon passed swiftly as we viewed more very nice specimens found on the post-Gemboree field trips. Lloyd kindly put out a lot of local and not so local specimens for the taking which were swooped up rapidly!

September 13th in Microland

We met at the MGLS at 10am. The basic format of the day was reversed so that we could arrive gradually, as happens given the distance that some of our members have to travel to get there. This allowed for the usual cuppa catch up and excitement to pass.

Sue and Ted gave us an account of their recent trip out west and beyond and had some beautiful amethyst to show. Then it was into problems and swaps before lunch; quartz and siderite from the Normanton area, plus calcites that were found on the outer crust of a bivalve fossil near Lawn Hill.

Pseudomorphs had been in conversation in the morning, so after lunch Theo was able to give us a better understanding of the subject with a very good PowerPoint presentation on the why and how of pseudomorphs. Theo's talks are informative and most helpful so we always appreciate his efforts. It was a pleasure to welcome a new MicroMobber to our midst - Wayne Sengstock - with his new microscope that turned a few of us quite green.

October 11 at the MGLS

We met at 10am, for the obligatory cuppa, accompanied by lashings of tongue pie. Sue and Ted had travelled from darkest NSW to attend, and Russell motored down from the far west.

Steve started the proceedings with an exposé and handouts for the calculation and calibration of magnifications and microscopic fields-of-view, and the extension of these to the determination of absolute dimensions of crystals in images from photo-micrographs.

Steve went on to demonstrate the use of a 'digital USB microscope camera', on several 'scopes. (MinSocQ hopes to acquire one of these, and other related equipment, via an application for a grant from the Gambling Community Benefits Fund).

Theo then gave a presentation of fluorescence (and phosphorescence), and how these phenomena apply to minerals. This was followed by a viewing of fluorescent minerals in the MGLS display, and other UV related phenomena. This was the last MicroMob meeting for 2008, and concluded with a compilation of topics for next year, to be announced in the December MinSocQ Newsletter.



Chrysocolla after malachite from Whim Ck, WA; Sue Wearden specimen, Sue Ericksson photo; FoV is 4.5 x 3.375mm



Levynite and erionite from Laidley Creek; Keith Cheadle specimen, Sue Ericksson photo; FoV is 4.5 x 3.375mm



Limonite after pyrite from Chambers Gorge, SA; Sue Ericksson specimen and photo



Cuprite needles from the Great Australia Mine, Cloncurry; Lloyd Sinclair specimen, Sue Ericksson photo; FoV is 2.25 x 1.69mm

MINSOCQ LIBRARY

Sue and Phil Ericksson and Steve Dobos have commenced to re-catalogue the MinSocQ Library, which is now under lock and key at the MGLS, along with MinSocQ equipment. All are available for loan to MinSocQ members in good standing. Sue has become the *de facto* keeper of the **Great MinSocQ Property Book**, to record loans and returns.

A number of initiatives are underway, such as the conversion of newsletters to scanned Acrobat or .pdf files, to guard against older periodicals decaying to silverfish food, and to conserve space; lockable space is at a premium. To begin, over a period of four days, Theo has scanned all the older MinSocQ newsletters, and Steve will turn those available digitally into the same format. When completed, the run of all MinSocQ publications will be available on DVD, and they will be kept up-to-date.

With the help of our sister organisations, we wish to do the same for the other states and NZ. Archiving like this

will free up a lot of space, and preserve the documents; the DVDs will of course be available for loan.

We will publish our periodical holdings, and other one-off documents and images, in newsletters to come. We may call upon members to donate, or to loan for scanning and/or reprinting, the missing copies of the *Australian Journal of Mineralogy* and other periodicals, so that we might have complete sets. Currently, we know we do not have Vol. 1 No. 2 of *AJM*, so if you can help, please let us know.

We will gratefully accept donations of books and periodicals, especially older ones. Donations of course will be acknowledged in the newsletter, and elsewhere. Old publications are a treasure trove of locality information, and over the years, MinSoc members from across the country have built up a great knowledge base that we wish to make more freely available, both within MinSocQ, and between MinSocs.

As a start, we list below all our current books, so that you may borrow at your leisure at member's meetings, through the services of the *Library Goddess*.

A journey through stone (*the Chillagoe story*): Plimer, 1997, Reed

Catalogue of South Australian minerals: Noble, Just & Johnson, 1983, SA Dept. Mines

Die Mineralien der Eifelvulkane (Minerals of the Eifel Volcanics, Germany): Hentschel, 1987, Lapis

Encyclopedia of minerals: 1st edn: Roberts, Rapp & Webber, 1974, van Nostrand Reinhold. (*This is a large but very handy single volume encyclopedia, with numerous photomicrographs; the data for each mineral are limited to summary form in the interests of brevity, and locality data are even more limited, and largely US focused; it is nevertheless a quantum jump above the Glossary of Mineral Species; highly recommended to the MicroMob*)

Glossary of mineral species 4th edn: Fleischer, 1983, Mineralogical Record Inc

Glossary of mineral species 6th edn: Fleischer & Mandarino, 1991, Mineralogical Record Inc

Minerals of the Burra mine: Dept. Mines & Energy SA, 1971

Minerals of the world: Duda & Rejl, 1986, Spring Books

Phosphate minerals of Victoria: Birch & Henry eds, 1993, MinSoc Victoria

Queensland mineral index: Dunstan, 1913, Hesperian reprint, 1985. (*A treasure trove of Queensland mineral localities and related data, up to 1913; it is a reprint of Queensland Geological Survey Publication No. 241. It is especially recommended if you wish to fossick in an area new to you, or for your next adventure in the bush,*

or to research an old mining province. It's a great pity it has not been updated).

The mineral deposits of New South Wales: Geol. Survey of NSW, 1974

The Queensland fossickers guide: Dept. Mines & Energy, Queensland

The volcanic earth: Sutherland, 1995, Univ. NSW Press

Zeolites of Victoria: Birch, ed., 1989??, MinSoc Victoria

NEWS FROM THE FRONT - by newsletter special correspondent, *Kettles-the-Magnificent*

Kaloundra Gem Expo - Yes, I know it should be spelt Cerloundra, that's the 'ook!

The Gem expo was held on the 27th and 28th of September at its new venue 'The Caloundra Indoor Sports Stadium'. Wipe away those ghastly memories of the gaggle of tarp covered traders, wistfully whiling away lonely hours whilst gradually being covered in a thin veneer of fertilizer, compliments of the dancing front end loaders at the garden nursery next door. Many times I have come from there smelling worse than a sack full of dynamic lifter.

The new joint is magnificent, probably the best venue in the whole wide world. Huge and well lit with air conditioning (which wasn't turned on).

The captain of the Kaloundra Klub Mr Gary Kam(p)bell and his entire krew are enthused and work tirelessly to happily create a friendly and optimistic ambience. The place screams 'POTENTIAL' - such a nice change from the norm. What it lacked was enough cash carryin' public to make it viable.

Next year there's talk of bringing the tailgaters inside and having the air conditioner running to increase our comfort. I seriously urge all and sundry to make the effort to support this show in the future. Our 'industry' (for the want of a better word) needs upward momentum, and this club is heading in the right direction.

By the way: another Nacre of Knowledge from the Caloundra show. (*It is a silent K you now, and follows the nue fonetic speling rools!*)

No need now to go to Broome; read on

"Akoya pearl oysters are grown inside Hervey Bay. Pearl oysters are grown in bags and frames at these locations which provide optimal conditions for pearl production. It is in its pilot stage and has been progressively operational over the last 3 to 4 years. The shell being farmed is the 'Pinctada Fucata' more commonly known as the 'Akoya' Shell." If you want to

know a bit more, visit their website on the net, at <http://haighsjewellers.com.au/fraser-island-pearls>

Here is the next installment of **Notes On Some Early Australian Geological Scientists**, compiled by Eric Stevens:

ARCHIBALD LIVERSIDGE (1846 -1927)

Pre-Eminent Mineral Chemist, and Science Advocate



A. LIVERSIDGE was one of the greatest mineral chemists of the 19th century. His academic studies in chemistry and mineral science in England equipped him admirably for his passion. His efforts in advocating science and its teaching in Australia ranks him a leader of his times in these efforts.

He was born at Turnham Green, London, and educated privately. He later entered both the Royal School of Mines and the Royal College of Chemistry, becoming a royal exhibitor in 1867 and an instructor in chemistry at the Royal School of Naval Architecture. In 1870 he won a scholarship to Christ's College, Cambridge (M.A. *honoris causa*, 1887) and became demonstrator in chemistry in 1872, but resigned to take up an appointment as 'Reader in Geology and Assistant in the Laboratory' at the University of Sydney, becoming Professor of Geology and Mineralogy in 1874.

He initially had about ten students and two rooms in the main building and one of his first aims was to gain proper recognition of science in secondary and tertiary education. Science had become a matriculation subject in New South Wales in 1873 but there was still inadequate teaching. In an address to the Royal Society of New South Wales in 1900 he commented that 'it would be appropriate if the community turned over a new leaf with the new century by insisting on better provision for science teaching in schools'. He also advocated technical education, being an original member of the Board of Technical Education. In 1880 he published his *Report Upon Certain Museums for Technology, Science and Art* after visiting Europe on a study tour in his capacity as a trustee of the Australian Museum. On his return he helped to establish the Industrial, Technological and Sanitary Museum and became a member of its first management committee.

In spite of strong opposition from the Arts, he persuaded the University of Sydney Senate to open a Faculty of Science, being its first dean from 1879-1907. He was one of the minority who agreed to admit women to the university. He founded a School of Mines at the university in 1892 and was a Fellow of the University Senate from 1878-1904. In 1872 he joined the local

Royal Society, being its honorary secretary in 1874-84; virtually re-establishing it and editing its *Journal and Proceedings* for many years. His fellow secretary, Dr C. A. Leibius is quoted as saying: 'We never got a move on until Liversidge came'. He was president in 1886, 1890 and 1901.

In the early 1880s Liversidge canvassed the idea of asking the British Association for the Advancement of Science to visit Australia but in vain - he then conceived an Australian association. Through his friends, Captain F. W. Hutton and Sir James Hector, he won the support of New Zealand and after much planning the Australasian Association for the Advancement of Science (AANZAS) held its first congress in 1888. Liversidge was its honorary secretary until 1909 and president in 1898. In 1902 Liversidge founded the Sydney section of the Society of Chemical Industry and formed a National Academy of Science with headquarters in the federal capital. He also tried to start an Australian equivalent to the English journal *Nature* and printed a prospectus for an Australian scientific journal.

When he arrived in Sydney he wasted little time in contributing to colonial mineralogy, reading papers to the Royal Society on:

'The Deniliquin Meteorite' (December, 1872)
'Notes on the Bingara Diamond District' (October, 1874)
'Iron and Coal at Wallerawang' and *'Nickel Minerals from New Caledonia'* (December, 1874)

He became professor of Mineralogy and Chemistry in 1882. His famous book *The Minerals of New South Wales* was first published in 1876; a second and enlarged edition appeared in 1882 and the third, larger, edition coincided with the centenary of the colony in 1888. This book was widely reviewed as his major contribution to science. His main interest was the chemical composition of minerals; the absence of detailed crystallographic and optical properties led to some criticism that it limited the usefulness of his book.

Liversidge was one of the first to detect gold and platinum metals in meteorites and was also interested in dusts suspected to be of meteoritic origin. He was an early demonstrator of the occurrence of gold in sea-water - in fact it could be said that he held a fascination for precious metal nuggets. He contributed over a hundred research papers to the Chemical Society, Royal Society of New South Wales and the Royal Society of London. His work was widely recognized and at least thirteen universities and scientific bodies gave him honorary degrees or memberships. He was a fellow of the Royal Society, the Chemical Society, the Royal Institute of Chemistry, the Geological Society, the Linnean Society and the Royal Geographical Society of London.

He was a somewhat shy and retiring person and never married. He was not a fluent speaker but as a lecturer at the university and in public, gave successful and impressive practical demonstrations. When he retired in 1907, the chemistry department had grown to seven

lecturers and demonstrators and some 200 students, and the university conferred on him the title of *Professor Emeritus*. He returned to London where he continued his interest in chemistry and worked in the Davy - Faraday research laboratory of the Royal Institution. In 1910-13 he served as vice-president of the Chemical Society, London. In his last years he lived at Fieldhouse, Kingston Hill, where he entertained many of his old colleagues and friends from overseas and enjoyed his motor cars. He died from a heart attack on 26 September 1927.

His peers claimed that *'The late Professor Archibald Liversidge ... was certainly the greatest organiser of science that Australia has seen and surely no-one in that country ever worked more unselfishly and with greater singleness of purpose than he to serve science for its own sake'*.

When he died, he made bequests to the University of Sydney, the Australasian Association for the Advancement of Science (ANZAAS) and the Royal Society of New South Wales, to be used for encouraging research in chemistry by means of special lectures. His portrait by John Collier, R.A., is in the University of Sydney and his name is remembered in the ANZAAS Liversidge Lecture which has been given since 1928 at each Congress by a distinguished scientist in some related field.

Select Bibliography

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ANSWERS TO THE MINERAL QUIZ in V52.

Despite the open invitation to contribute obscene amounts of money for a preview of answers to the quiz, the editor received not a penny. Ah well, it was worth a try. So here then are the answers:

- 1: quartz
- 2: crocoite
- 3: cloncurryite
- 4: biotite
- 5: muscovite

- 6: feldpsar(s)
- 7: davidite (Sir T W Edgeworth David)
- 8: kyanite
- 9: ilmenite (Ilmen Mountains, Russian Federation)
- 10: calcite (not however in gel toothpastes)

- 11: petewilliamsite
- 12: wodginitite (from Wodgina, WA)
- 13: fersmanite (Alexander Fersman)
- 14: hauyne (René Just Haüy)
- 15: quartz
- 16: stichtite
- 17: chrysoberyl.
- 18: thortveitite (Olaus Thortveit)
- 19: quartz
- 20: (native) copper
- 21: quartz
- 22: aragonite (Aragon Mountains, Aragon Province)
- 23: zeolite
- 24: malachite
- 25: azurite
- 26: ('dog tooth' crystals of) calcite
- 27: tourmaline
- 28: olivine (peridot)
- 29: pyrite
- 30: muscovite (muscovy duck, Muscovy, the old name for Moscow)
- 31: apatite
- 32: paragonite
- 33: autunite
- 34: pentagonite
- 35: garnet
- 36: sieleckiite (Robert Sielecki)
- 37: jadeite
- 38: andalusite, sillimanite, kyanite
- 39: vivianite
- 40: scholzite (Adolph Scholz)
- 41: bazzite (a scandium-bearing beryl)
- 42: danalite (Prof. James Dwight Dana)
- 43: spodumene
- 44: rutile, brookite, anatase, all TiO₂
- 45: danburite (Danbury, Connecticut)
- 46: hexatestibiopanickelite (yep, really!)
- 47: celsian
- 48: gypsum
- 49: crocidolite (an asbestos mineral) – Peter Garrett, Minister for the Environment: (bald=chrome-dome=chrome-pated) Midnight Oil song *Blue Sky Mining* – about the asbestos mining in WA, and the scandal arising from the denial of funding to ex-workers with mesothelioma (cancer) – it's been in the news again recently
- 50: *achroite*: elbaite (a tourmaline)
- 51: phenakite
- 52: dolomite
- 53: calcite
- 54: cerussite
- 54: witherite (a barium carbonate, cousin to barite, the more common barium sulfate)
- 55: polybasite
- 56: pyrargyrite, proustite and miargyrite
- 57: cassiterite

- 58: corundum
- 59: gahnite
- 60: magnetite
- 61: antlerite (deer have antlers)
- 62: chalcocite

- 63: phillipsite
- 64: tugtupite (Tugtup intrusive complex, Greenland, *tugtup* is a Greenland Inuit word for reindeer blood)
- 65: chlorite (*chloros* or *khloros* is Greek for green; chlorine is a green gas, but chlorite usually contains no chlorine or chloride ions)

The editor is prepared to enter into correspondence regarding the above answers, or the quiz in general; contributions are always welcome.

The next quiz will appear in either the December issue (V54) or in the new year (V55), depending on what article contributions are at hand for the newsletter at the time of publication. In response to feedback from some readers, the next quiz will be less 'academic', somewhat easier, and will be limited to 40 questions or thereabouts.

WANT TO BUY, SWAP, OR SELL?

In previous issues, we have occasionally devoted a small amount of space to items for sale by members, as some other MinSocs do. We are happy to continue to do so, and will also include 'want ads', all free of charge, as a service to members, on a non-commercial basis. Please contact the editor to include *want*, *swap* or *sell* items in the newsletter.

For Sale – Binocular stereo zoom 'scope, in very good working order, surplus to needs. Nikon SMZ 2B on large 'A type' Nikon focussing stand; zoom range of 0.8x to 4x; with the 10x eyepieces included, this gives magnifications in the range 8x to 40x. Contact Steve Dobos (see first page of newsletter for contact details).

Make an offer – MinSocQ has a Canon EOS single lens reflex (SLR) 35mm **film camera**. It is equipped with a 90mm Tamron Macro lens, capable of 1:1 reproduction. Purchased in 1998, it is in very good working condition, but is now surplus to the Society's needs. Contact Steve Dobos or any member of the Management Committee for details (see first page of newsletter for contact details).

JUST ANOTHER REMINDER To bring a nice specimen for a Secret Santa Mineral Lucky Dip (to the value of around \$5), to the November MinSocQ meeting. If you don't bring one, then no Mineral Lucky Dip for you. Also, for the December barbie **Auction Mineralia**, we ask you to bring your items to the November MinSocQ meeting. Please note that you may place a reserve price on your donated item(s), and if the reserve is not reached in the bidding, you get to keep the item(s).

THE EDITOR'S ANNUAL SPRAY

Like previous newsletter editors, the current editor bemoans the general lack of feedback regarding newsletter content.

You are invited, as you have been previously, to provide positive or negative comment, by whatever means you wish, at any time. You do not have to 'eyeball' the editor (he may bark, but will not bite, except on the full moon). The Management Committee, and the editor, wish to publish that particular balance of content which appeals to the greatest number of readers, but if you provide no feedback, then we continue to work in a vacuum.

If there is something you would like to see, or if you wish the newsletter to cover new, different or additional topics, or even to omit certain types of articles, please let us know. You are invited to provide ideas, and articles.

There will continue to be at least some 'exotic' articles from time to time, to challenge and/or broaden the mind. When all is said and done, if we don't hear from you, we will assume all is well, and you are likely to get more of the same.

On a different tack

The newsletter will continue to be published four times a year. It will be emailed in **glorious colour** to those of you that have email and wish to get it in that format (the Acrobat or .pdf files are typically around 0.3 to 0.6 megabytes or 300 to 600 kilobytes in size). In addition, hard copies in **not-so-glorious black-and-white** will be mailed out to all financial members.

We will also be publishing special editions, principally via email, which will have higher resolution colour photographs and photomicrographs. These will have larger file sizes, in the order of 2 to 5 megabytes, and will be targeted at those that have broadband internet connections. These special editions may be available in black-and-white hard copy, by request.

So, if you are not receiving MinSocQ newsletters via email, and would like to do so, or if your email address has changed, please let the editor know, by whatever means; we will even accept small pieces of paper via Australia Post!



Name

Email

Yes I'd like newsletters via email (big tick here)

Yes / No I'd like special editions via email (cross out)

The maximum email attachment size that I'm happy to download is kilobytes or megabytes

