

# BRITISH MICROMOUNT SOCIETY



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## NEWSLETTER NO. 54    OCTOBER 1999

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## **LETTER FROM THE CHAIRMAN**

**Roy Starkey**

As newly elected Chairman I felt that I should set out a few thoughts and perhaps try to promote some feedback.

The general informality and friendliness is a hallmark of the BMS that all of us must treasure, and I am anxious to see us maintain a high level of active members as we move forward into the next Millennium. There was some debate during this year's Symposium about whether or not we want to see an expansion of the membership, and to what extent we should promote and publicise our activities. As a personal point of view I believe that we would not serve the interests of our membership by going out on a recruitment drive, this running the risk of simply adding to the administrative burden of running the Society, but perhaps not leading to a greater level of active participation and contact between members. The BMS has succeeded in maintaining a remarkably stable and active membership over a sustained period, and I believe that like-minded souls who are seriously interested in micromounting will, and do, seek us out. That we should welcome them with open arms goes without saying and I have no doubt that this will be the case. Several newcomers to this year's Symposium commented to me that they had found everyone so welcoming - a refreshing experience. In this connection it was decided not to proceed with developing a BMS Web Site, since we might be overwhelmed with applications from "sleeping members". The situation will be kept under review and, should we detect a decline in membership, no doubt we will consider the position again. Meanwhile, if you have any views on this subject, or any other topic relating to the BMS, please let me know.

It was clear from a straw poll at the Symposium that many members now have email addresses - please let us have them so that we can promote this most effective means of rapid communication. Please email your details to me at:-

ROYSTARKEY1@compuserve.com - I look forward to hearing from you.

Finally, much has been said about the problems of access and discussions taking place regarding the future prospects for mineral collecting in the Caldbeck Fells. It is my intention to pick up where Mike Rothwell left off and I will do what I can to promote a positive dialogue with the various parties involved. Meanwhile, please **DO NOT** collect from any localities within the Caldbeck Fells area, and discourage anyone else with whom you are in touch - the long term future of collecting in this classic area is a stake. Your cooperation and restraint is appreciated.

## **SYMPOSIUM '99 - AS IT HAPPENED**

**Roy Starkey**

The Faithful were gathering in the car park outside the Geology Department long before the official opening time of 8.45am, but at least this year contractors were not digging up the roadway - only erecting lamp-posts! Frantic carrying in of microscopes, specimens, books and other goodies heralded the start of the 18th British Micromount Symposium (yes, it really is 18 years!). Welcome cups of coffee greeted members arriving from all over the country, before Roy Starkey (Acting Chairman) opened the proceedings. He recorded the Society's heartfelt sorrow at the loss of Chairman Mike Rothwell, and announced that the Memorial Fund had reached a tremendous total of £17,000. (A short statement from Mike's widow Nancy appears elsewhere in this newsletter).

A special welcome was extended to Bob Symes, recently retired from the Natural History Museum, and guest speaker for this year's Symposium and Dinner.

Peter Braithwaite took the rostrum to review this year's Micromount Competition entries, somewhat disappointing at only three entrants and six specimens. Having been allotted a 30 minute slot Peter decided to entertain the audience with a rib tickling tale of his early days with Rolls Royce and a trip to London in which he experienced being chauffeur driven to a meeting but dropped off at a bus queue due to traffic problems. As he alighted from the car, a cheery " Good day m'lord", from the driver, drew admiring comments from the queuing commuters and unwelcome attention from two "ladies of ill repute" looking for passing trade! In response to the question "Are you really a Lord guv?" Peter, perhaps unwisely replied "Of course". One of the ladies approached him, saying "I've never had a Lord! How about a quickie?" Our hero of course declined the invitation, but from here on, things only got worse. Another onlooker enquired as to whether Peter, being a Lord, "had one of those valets" to help dress him. "Of course", said Peter, now in deep water up to his neck. "Well, I'd sack him", said the chap, "Look! You've got one brown shoe and one black!" "Ha! said one of the ladies - if he'd played his cards right he could've had a blonde and a brunette!" Delivered with Peter's characteristically dry tones and perfect timing the delegates were in hysterics as he passed on to the proper business of the day - a review of the packaging methods utilised by the entrants in getting their treasured specimens to him for judging! Anyway, the winning entry was eventually declared to be Richard Bell's splendid monazite - well done Richard!

The first lecture of the day was from Alan Edwards, titled "Mineral reactions". This was presented as a "non-chemist's view of simple geochemistry" and it was clear to all that Alan had spent a great deal of time and effort in thinking through how to present the subject. The full text of the talk will appear in a future BMS Newsletter.

After a break for coffee, slightly complicated by the fact that a Geology Department Re-Union was also going on - and they were drinking OUR coffee and eating our biscuits (we did get to eat some of their sandwiches and nibbles later in the day!), we returned to the lecture theatre to hear Bob Symes.

Bob's talk "The Sir Arthur Russell Collection - a sum of its parts" was a fascinating review of the life and times of the famous mineralogist and collector, looking not only at the fabulous legacy of specimens in his collection, but also the methodology though which he approached collecting. Sir Arthur was perhaps one of the finest "networkers" of his time - developing links and relationships with mine and pit owners up and down the country to ensure that he got the best material, whenever or wherever it turned up. Bob's reminiscences of his days at Swallowfield Park with the late John Fuller, boxing up and sorting the collection prior to transport to the Natural History Museum brought the whole story to life. The extent to which Russell engaged in real detective work in tracking down old collection and classic British material was another area which Bob was able to shed light on, with some fascinating examples, and he was keen to highlight the part played by other famous British collectors such as Phillip Rashleigh, John Hawkins, Baroness Burdett Coutts, Dr Edmund Pearce and others, in providing much of the source materials for the Russell Collection. (N.B. it is hoped to be able to publish a fuller account of Bob's researches into Sir Arthur at a later date).

Demonstration workshops were staged by David Green, Richard Bell and John Dickinson (on Dolyhir Quarry), and Micromounting Techniques (by Peter Braithwaite), and both were well-supported. The usual hectic afternoon of talking, swapping, buying and selling seemed to pass all

too quickly, and it seemed scarcely possible that 5.0 O'clock had arrived when it was announced that the auction would commence in a few minutes. Trevor Bridges made an able job of getting through the sixty or so lots, and about £165 was raised for Society funds.

Members retired to the Stonecroft Hotel and Reynards Bar for a pre-dinner chat and drink, before enjoying an excellent meal and very polished service from the Team at the hotel. The dinner was voted a great success and it is planned to return next year.

Once everyone was suitably full of food and drink, Bob Symes was again pressed into service, delivering a highly entertaining account "Confessions of a Curator" - reviewing his progress over more than forty years, from Temporary Scientific Assistant, to Keeper of Minerals, and some of the amusing experiences and incidents along the way.

Finally, Ken Luff treated everyone to his now traditional mineral quiz, with it's usual banter about what answers could be accepted and whether the questions were correct or not! Many thanks to Ken for another entertaining half-hour or so.

Sunday morning kicked off with a free hour to follow-up on the previous day's swapping and workshop activities, before we were all herded into the lecture theatre for the AGM. The Acting Chairman declared his intention to see the proceedings over in a shorter period than the previous year, but in the event we only managed to shave off about 20 minutes - next year's target is under 60 minutes!

David Roe stepped in to fill the "What's about on the tables?" slot, and some of his choices are summarised below:- Doug Morgan's fabulous faceted fluorites; Gwynfynydd gold shown by Ken Beeson; Australian minerals (Mike Leppington); a super straw-coloured zircon from Skye (Richard Bell); stunning cerussite twin from Tynagh (Peter Wallace); thomsonite (Peter Braithwaite); unusual slag minerals from the Gannel Smelter (Melissa and Andy Banthorpe); various super specimens from Dolyhir Quarry - Messrs. Green, Dickinson and Bell; cotunnite from Clevedon (Trevor Bridges); a "half-decent" monazite (Chris Jewson), and others. David also commented that he had been disappointed by nearly a third of people he had spoken to confessing they "hadn't had time to sort or bring anything" - we need to get our priorities right and start spending some "Quality Time" with our minerals was his message!

The final formal section of the day was for Austin Lockwood to report on the Micromineral Competition which had been supported by 16 entries, and evaluated by a slick panel of judges who were able to get the results finalised by 2pm on the Saturday - well done! Third place went to Pam Parlanti with a quartz and cosalite; Second place to George Fletcher - mimetite with plumbogummite; and the winner was Chris Jewson with a spectacular micro-vug of pyrrhotite with cuprite and anatase from South Crofty Mine, Cornwall.

The crowds gradually thinned after lunch as good-byes were said and goodies were carted down to waiting cars ready for the (in some cases) very long drive home. See you all again next year!

### ***FOUND - AFTER THE SYMPOSIUM***

*The Symposium organisers carried out their usual clean-up as we all left. They found several copies of the programme, one of which contained some five pages of detailed notes covering Peter Braithwaite's instructive session on Micromounting techniques. If this is yours, please contact Richard Belson to secure its safe return.*

**MINUTES OF THE ANNUAL GENERAL MEETING OF  
THE BRITISH MICROMOUNT SOCIETY HELD AT  
THE UNIVERSITY OF LEICESTER ON SUNDAY 19TH SEPTEMBER 1999.**

Acting-Chairman Roy Starkey opened the Meeting at 10.05a.m. There were 56 members present. Secretary Shirley Adrian.

**1. Apologies for absence,**

Apologies were received from Max Wirth, Malcolm Southwood, Frank Ince, Dorothy and Cyril Merritt, Ken and Sigrid Luff, Steve Plant, Jamie Nelson and Kelvin Tiltman.

**2. Minutes of the AGM of 20<sup>th</sup> September 1998.**

It was proposed by Trevor Bridges and seconded by Chris Jewson that the minutes be taken as read, and this was agreed by the members.

**3. Matters arising from the Minutes.**

The Group Photo suggested last year had been taken the previous day.

**4. Treasurer's and Membership Secretary's Reports.**

Sidney Freeman presented both reports.

On Pearl's behalf he reported that membership had been stable for the past 3-4 years. There were 202 memberships including 29 Family memberships. There had been 2 deaths and 11 non-renewals, offset by 13 new members.

Referring to the Receipts and Payments Account Sidney said that the Society's finances were satisfactory with an apparent surplus of approximately £870 over the previous year. The Symposium last year had been successful and it should be possible to keep the cost to delegates next year at this year's level.

We had received a legacy from Colin Horstman to be used for the purposes of the Society and it had been decided to donate this to the Leicester University Geology Department for the purchase of an item of equipment in Colin's name.

Sidney explained that the increased costs of the Newsletter were partly due to an actual increase in producing the Newsletter and also to an overlap in receipts and payments.

Roy Starkey warned that the facilities at the University were liable to cost more in future.

Sidney thanked Mike Leppington for auditing the Accounts and proposed that he be asked to continue as Auditor for the Society. This was seconded by Trevor Bridges, agreed by the meeting and also by Mike.

## **5. Chairman's Report,**

As Acting Chairman Roy Starkey said that it was very sad to have lost Mike Rothwell.

An obituary had appeared in the last Newsletter and the Symposium was being dedicated to Mike's memory. His wife Nancy was being supported by her family and friends and was keeping busy with setting up the fund to establish a prize for science students interested in a career in industry. He also reported that Cynthia Peat had died a few weeks ago after a long illness; her husband Jim had been unwell but was now on the mend. Derek Ling of Ipswich had also died.

The BMS display at the Sussex Mineral Show had been very successful thanks to Elsie Hansford and her helpers. The display was to be used again at the Bakewell Rock Exchange and help there would be appreciated.

Roy said it appeared that some delegates had missed out on buying tickets for the Raffle, and it had been suggested that payments could be included in the registration fee. The meeting felt there was some doubt as to the legality of this.

Roy concluded by saying that he would appreciate any feedback or ideas from members.

## **6. Other Reports.**

### **Newsletter Editor.**

Mike Dannatt thanked all contributors and pointed out that the Newsletter was a means of sharing experiences. More reports from group co-ordinators about their activities would be welcome.

### **Curator.**

Max Wirth was unable to attend the Symposium but had sent a report which Roy Starkey read to the meeting.

Max reported that the Reference Collection had reached 2175 specimens and the demand for postal loans totalled 15 requests over the past year. A few specimens had become detached in the post and he was trying a better package in padded envelopes. There had been no serious damage. A third cabinet had been acquired. To avoid the possibility of original record slips being lost Max had transcribed the information into his computer and will in future send a printout for the relevant specimens. He asked contributors to give more information on their record slips - references, crystal habit, associations, rarity or anything else of interest. Max said he enjoyed acting as Curator but anyone who would like to replace him should contact the committee. He recommended a CD-ROM called 'Minerals of the World' distributed by Science Education Software Ltd., P.O. Box 2, Grange-over-Sands, Cumbria LA11 7GN as having useful information on 400 minerals and being reasonably priced at £11.50.

It was agreed that a sheet of record slips should be sent out with the Newsletter.

### **Archivist.**

Alan Edwards reported that the Rashleigh was out on loan. Two volumes of Goldschmidt were also on loan but the remainder were available here as was a copy of Oneta Wilson's thesis on the Zeolites of Great Britain and many volumes of 'Mineralogical Magazine'.

Alan had been asked to make available copies of his talk on mineral reactions. He was intending to write this up for the Newsletter.

A vote of thanks to Alan, Max and Mike was proposed by Peter Braithwaite.

### **Branch Reports.**

Mick Wolfe said that the 4<sup>th</sup> meeting this year of the Northern Branch would be at Bircotes Library, Bawtry, in November. Jean Spence had had her operation 3 or 4 months ago and was on the mend. The meeting sent best wishes.

Kevin Johns reported an attendance of between 6 and 12 members at the monthly meetings of the Norfolk Branch. He thought they probably made up two thirds of the International Slag Collectors membership.

Dick Smith reported that the Midland Branch had had to cancel one of their two planned meetings but the next was due in November. The Branch had 10-12 members and could be said to be alive if not kicking.

Austin Lockwood reported that the South-East Branch meetings continued to be well attended at the Ringway Community Centre. The expected refurbishment of the centre seemed to have been postponed. There had been no new members this year. A donation of £200 had been sent to Nancy Rothwell for the Mike Rothwell memorial fund. He thanked Peter Wallace for acting as treasurer and June Lockwood for organising the refreshments.

Harry Critchley said that the Warrington group probably made up the remaining third of the International Society of Slag Collectors. The group met on the 1st and 3rd Tuesdays of the month in conjunction with the Warrington Lapidary Society. Isabel Geldart was now back with them after a long illness.

Chris Jewson reported that the newly formed Devon and Cornwall Branch had had its first meeting during the previous week in the Liskeard Public Rooms, (3 West St.). The group planned to hold informal quarterly meetings.

### **Symposium Organisers.**

Kevin Johns reported that the Raffle had raised only £74. Efforts would be made next year to ensure that all delegates knew when tickets were being sold. The Auction had realised £165, which was also less than last year. It was felt that a greater proportion of "rocks" was needed.

Kevin asked for opinions on the meal at the new venue (Stoneycroft Hotel). Members thought the meal had been excellent but would prefer not to have a pianist. It had been decided to return next year. The Symposium dates (probably September 16<sup>th</sup> and 17<sup>th</sup>) would be confirmed in the next newsletter. He asked that Registration slips be returned sooner.

Kevin wished to record his thanks to the Geology Department especially Dr. Roy Clements and the Administrator.. He also thanked Roy Starkey for acting as Chairman, those who had acted as judges for the competitions, Nigel Hoppe for his microscope clinic, and all other helpers. He said that anyone who had any special ideas to mark the millennium should contact the Organisers.

Doug Morgan asked that name badges be made available next year.

## **Directory.**

Mick Wolfe reported that updated information had been requested in two issues of the Newsletter but only 14 replies had been received. On that basis he and Mike Rothwell had agreed that a new Directory was not justified. He asked for an opinion on how often a new issue was needed. 5 years was suggested but 3 years was felt to be better, and it was decided to produce one next year.

## **Projects.**

### **Database.**

Harry Day was not at the Symposium. Roy Starkey undertook to ask him about the present status. The information could be loaded into Access by those who had it, and Martin Stolworthy or Mike Dannatt could give advice to anyone having difficulty with the procedure.

### **Occasional Papers.**

John Pearce said that David Green had asked for his sabbatical to be extended a further year. The Papers are now published by Tony Brittain, who sells them to non-members while John sells to members. Two new papers were now ready - "A Select and Personal Bibliography from the Mineralogical Magazine" by Roy Starkey and "The Periodic Table" by John Pearce and Austin Woodbridge. Comments on how useful members found the Occasional Papers would be welcomed.

Vicki Packard said she had found them very useful.

### **Development of a BMS Web site.**

Roy Starkey said that this was to have been Mike Rothwell's project. He asked whether anyone else was interested in setting it up. He said that such a site would need regular maintenance to keep it up-to-date.

From a show of hands it was apparent that a large proportion of those present had PC's and Internet access. Mick Wolfe will include e-mail addresses in address listings.

It was felt that the project should be postponed for the time being.

## **7. Founder's Cup,**

Roy Starkey said that this year's recipient was a mineral collector who had been involved in the BMS for many years. He had been a prolific author of articles on mineralogical topics, and a frequent visitor and researcher at the Natural History Museum - Andrew Clark probably wondered what life was like before this individual started to bury him with enquiry specimens for analysis. He donated the first 22 specimens to the Reference Collection and had given 144 specimens in all - 7% of the total. His published work included 14 contributions to Mineral Kingdom/Mineral Realm, 24 to the UK Journal of Mines and Minerals and countless contributions to the BMS Newsletter. Perhaps his finest hour was the discovery of sweetite and a range of other rare zinc hydroxide minerals from Ashover in Derbyshire. It was often said that if you found a big hole in a mine tip in Wales, at the bottom of it you would find ..... Steve Rust!

[As Steve arrived at the Symposium too late for the AGM, having been digging other holes on the Isle of Skye, the Cup was presented to him in the laboratory after the Meeting.]



## **8. Election of Officers.**

The Secretary Shirley Adrian, Treasurer Sidney Freeman and Membership Secretary Pearl Freeman had agreed to serve for another year. No other nominations had been received. They were re-elected unanimously.

Roy Starkey had been nominated for Chairman by John Pearce and seconded by Sidney and Pearl Freeman. No other nominations had been received.

Roy was elected unanimously.

## **9. Geologists' Association Millennium Exhibition.**

Austin Lockwood said that the Earth Alert Conference in Brighton from the 28th to the 31st of May, 2000 was to be a Festival of Geology.. The Russell Society would be holding its AGM on the 28th. There would be displays by clubs including the BMS. Help would be needed to “man” the stand. Rockwatch would be there, as well as representatives of the Natural History Museum and the Dinosaur Society. Further details would be published in the Newsletter.

John Pearce said that sponsorship had been requested. The application for Millennium funding had been unsuccessful. The Sussex Mineral and Lapidary Society and the Harrow and Hillingdon Geological Society had agreed to sponsor items in the Proceedings. After some discussion Austin Lockwood proposed that the BMS sponsor the Proceedings in the sum of £250. This was seconded by Peter Harrison. The motion was carried with 22 votes in favour, 20 against and 14 abstentions.

## **10. Any Other Business**

### **Caldbeck Fells.**

Mike Leppington reported that Peter Davies representing the Lake District Park Authority, Brian Young from the BGS, plus representatives of the Cumberland Geological Society and English Nature had decided that applications for collecting would be required by December although they had not yet decided what would be allowed.

Richard Belson had attended the recent meeting and had felt that mineral collectors had been outvoted.

Mike Leppington said that it had taken the group 6 months to arrange the meeting in June and the Minutes had still not been published. He felt this was not at all business-like.

Mike Dannatt said a case had been made against collecting as such, with a let-out clause for research and educational purposes. Oneta Wilson had been given a permit from the Peak District National Park Authority to enable her to complete her thesis.

Roy undertook to make approaches in his new position as chairman, and emphasised that for the time being there should be NO collecting.

Roy Starkey asked whether a Vice-Chairman should be elected, but the idea did not find favour with the meeting.

He told those present that there was a National Arts Collection Fund to which an annual subscription gave free entry to many museums and could prove very cost effective.

Richard Belson thanked Roy for stepping in to front the Symposium, and the meeting closed at 11.30 a.m.

***Date of next Symposium:** Will members please note that the next Symposium will be held at the usual venue on the 16<sup>th</sup> and 17<sup>th</sup> September 2000. These dates are now confirmed.*

**THE MIKE ROTHWELL FUND**  
**"THANK YOU FOR YOUR CONTRIBUTIONS"**

I would like to thank everyone who contributed to the fund. As a result of donations from friends, family, fellow mineral collectors, Unilever Research and Lever Brothers, and with the sale of Michael's mineral books and equipment, over £17,000 has been collected. Michael would have been quite touched by your generosity.

With the help of Fran Carter, who put me in touch with Dr. Hart, head of the Industrial Chemistry Department at the University of Bristol, it has been agreed that the money will be passed on to the University as an endowment. This means that, although earmarked for the department, it can be invested together with other University funds earning a higher rate of interest. As I am also a taxpayer, Dr. Hart said monies could be reclaimed, making the value of the fund closer to £20,000. The interest will then be used to annually fund two prizes in Michael's name:

a £250 prize for the best MSc student from a 4 year course  
with a placement in industry

a £250 prize for the best MSc student from a 3 year course  
with a placement in a European university

The remaining interest will go towards an annual symposium, which will also bear Michael's name, at which students returning from placements in industry and representatives from the firms which employed them will come together.

I think this is something which Michael would have welcomed and I appreciate your support in making it happen.

Nancy

## **BARITE, SIDERITE AND OTHER IRON MINERALS IN FLINT NODULES FROM NORFOLK**

**Martin Stolworthy and Bridget Belson**

Flint has been used in the Norfolk and Suffolk areas since Neolithic times, as tools and weapons, and with other local stones, as building materials.

Quartz and chalcedony is frequently found amongst gravel and from beach and quarry deposits. Pyrite and marcasite has been found at beach deposits of the chalk.

During the summer of 1994, Bridget Belson of Norwich collected from the Stone-Bed at Sidestrand, Norfolk, (TG 256 405) specimens of flint that she had broken on the beach. Examination with a hand lens, revealed the presence of small glassy, clear crystals and a suite of other minerals, from small cavities of eroded sponges and fossils, from within the flints.

Samples of the minerals were sent to Mike Rothwell, who confirmed them to be barite, siderite, and hematite. Other specimens have since produced pyrrhotite, marcasite/pyrite, calcite and gypsum.

In some of the cavities sponge spicules and fish vertebrae were found, with some of the spicules encrusted with siderite.

The original location of the flint nodules is hard to prove as the stone bed lies on top of a raft of chalk which is usually covered, with sand.

Since the first occurrence, Andy Castleton of Norwich, has found a similar suite of minerals in flints from the rubble piles at Caistor St. Edmunds Chalk Pit, near Norwich (TG 239 049)

These two locations are believed to be the first recorded British occurrence of these minerals from this type of matrix. Work is being carried out at both locations and at other sites around Norfolk to try to find the origin of these minerals.

Both locations have bands of flints running in parallel layers, through the chalk.

### **The minerals:**

|                  |  |
|------------------|--|
| Barite           | Small groups and single clear prismatic flattened blades, growing into the centres of the cavities |
| Calcite          | As tiny clear white single crystals coating the sides of cavities.                                 |
| Gypsum           | As small clear bladed crystals   |
| Pyrrhotite       | As single brassy hexagonal plates and rosettes with siderite and barite                            |
| Pyrite/Marcasite | As brassy yellow crystals on barite and as coatings on the sides of cavities.                      |
| Siderite         | Tiny pale yellow to brown rhombohedral crystals on walls of cavities and coating barite crystals.  |

## **NEW CARBONIFEROUS LIMESTONE LOCALITY**

### **Don Blake**

Rock samples recovered by Mr. D. Greenwood, Mr. D. Mackie and the author, as a result of a Westmorland Geological Society field trip, yielded evidence of lead/copper mineralisation. The site lies on private land to the east of Carnforth (SD 524678) on the eastern side of a shallow N-S valley in a small gully eroded out at the top of a crag which is about 10metres high and 0.25kms long. The rock is a pale, poorly bedded, fine grained 'reef' limestone, forming a fault-bounded periclinal inlier in the Pendle Grit Formation and is isolated from the main outcrop of Urswick Limestone which is quarried some 0.75km away on the western side of the valley near the villages of Nether Kellet and Over Kellet.

The gully, mentioned in the book "Underground in Furness" by Eric G. Holland (Dalesman Publications 1967 – 2<sup>nd</sup> edition), is described as a natural cave some 25ft deep called Swantley Pot. It has been infilled with huge blocks of local sandstone erratics by the farmer to safeguard his animals, the mineralisation appearing on the south face just above the boulders. A subsequent visit was made by Don Blake and Max Wirth to examine the crag in more detail. Apart from some small quartz and calcite crystals the base metal sulphide deposits appeared to be confined to the south face of the gully, the heavily weathered zone of mineralisation being extremely thin and patchy. There was no evidence of mineral veins or of any human attempts at extraction.

It is reported that in the nearest quarry, lying 0.75km on the other side of the valley, and now used for stock piles of gravel, vugs and depressions are to be found in dolomitised sections along with thin coatings of sulphide minerals. The gully itself has obviously been eroded along a line of weakness, possibly a small fault, and the crag immediately above the gully shows a pronounced dip in the ground running west to east. The evidence appears to indicate a typical limestone host situation where permeability has been increased by dolomitisation and fracturing but only on a small scale, producing tiny veinlets and thin coatings. This does not preclude the possibility of there having been larger deposits which subsequently were removed by erosion or are now hidden by the infill, but the quarry evidence seems to suggest otherwise.

The dominant minerals are malachite and good crystals of azurite.

The full list of minerals found and so far identified is as follows :-

Azurite; calcite; chalcopyrite; chenevixite(?); galena; goethite; manganese sp.; malachite; quartz.

The author wishes to thank the farmer, Mr. E. J. Ward, for permission to access the locality.

## BMS OCCASIONAL PAPERS

John Pearce

These papers were initiated in the early 1990s so that members could share their knowledge and experience with BMS members and other mineral collectors. Two new papers (12 & 13) were launched at this year's Symposium and a summary is given for each of these two papers

(prices in brackets are for non-members):

|  |                   |       |         |
|--|-------------------|-------|---------|
| 1. An Introduction to Micromounts                                      | Roy Starkey       | £1.00 | (£1.50) |
| 2. Determining the Optical Properties of Minerals                      | Max Wirth         | £1.50 | (£2.25) |
| 3. Minerals are Chemicals  | John Pearce       | £1.50 | (£2.25) |
| 4. Paper Chromatography  | Max Wirth         | £1.00 | (£1.50) |
| 5. Using the Mineralogical Literature                                  | Roy Starkey       | £3.00 | (£4.50) |
| 6. Stereomicroscopes   | Mike Edwards      | £2.00 | (£3.00) |
| 7. Photography of Minerals through the Microscope                      | Elsie Hansford    | £1.00 | (£1.50) |
| 8. A Guide to Micromounting: Part 1, Collecting                        | Peter Braithwaite | £1.50 | (£2.25) |
| 9. A Guide to Micromounting: Part 2, Micromounting                     | Peter Braithwaite | £1.50 | (£2.25) |
| 10. A Guide to Micromounting: Part 3, Cataloguing.<br>(In Preparation) | Peter Braithwaite | Tba   | Tba     |
| 11. Chemical Testing of Mineral Grains                                 | David Green       | £2.00 | (£3.00) |

*The following select bibliography on British Mineralogy will be of interest to amateur mineralogists and mineral collectors. The references are all taken from the Mineralogical Magazine 1876 - 1998 and the selection is the author's.*

|  |                                 |       |         |
|--|---------------------------------|-------|---------|
| 12. A Select and Personal Bibliography from the Mineralogical Magazine | Roy Starkey                     | £2.00 | (£3.00) |
| 13. Minerals are Chemicals Part 2: The Periodic Table                  | John Pearce & Austin Woodbridge | £3.00 | (£4.50) |

*This last paper is divided into two sections. The first examines some of the early attempts in the 1860s to unravel a universal law to explain the relationship between the elements. Consideration of how atoms of different elements are built up from protons, neutrons and electrons establishes the fundamental concept of atomic number. The chemistry of elements depends on the outer electrons in their atoms, and this concept is used to explain the formation of ionic, covalent and metallic bonds and the stability of the noble gases.*

The second section focuses on the construction of the Periodic Table in terms of the increasing atomic numbers of the elements and identifies groupings of elements with common properties. Periodicity is considered, based on the changing size of atoms, the ease with which they lose or gain electrons, valency (combining power), metallic character, reactivity and the acidity and basicity of various oxides. Finally Group IV (C, Si, Ge, Sn and Pb) is used to illustrate how the Periodic Table can be used to interpret the properties of elements and their compounds, illustrating the value this can be to mineralogists.

*If you are interested in purchasing any of the above papers, please write to :*

*John Pearce: 7 Condor Way Burgess Hill West Sussex RH15 9QB, cheques payable to BMS please, or*

*Tony Brittain, Endsleigh Books Unit 2B Tharston Industrial Est. Long Stratton*

*Norwich NR15 2PD ( chequers to Endsleigh Book Co) adding p & p at the rate of:*

*Up to 3 copies 75p; 4 - 10 copies £2.00; 11+ copies £3.50*

The Sussex Mineral & Lapidary Society is proud to have its own web-site on the Internet, but less proud that it took us three years to achieve this. However, we thought it might be useful to share some of the reasons why we thought it was worth the effort:

- It was a useful exercise to decide what we wanted to say about our Society and its activities and what image we wanted to project to people, particularly those who were not members.
- We wanted to communicate some of the key land marks in the Society's development to some of our newer members. .
- We recognised that many local people do not know of our existence despite the Society having started 26 years ago, our details being in the libraries and social directories and our annual Sussex Mineral Show being well advertised. We hope that our web-site will be one more powerful means of advertising ourselves.
- We felt the need to make available details of our annual Show on a world-wide basis. We have often been asked by people overseas to advertise our Mineral Show in their various journals so they can synchronise it with their visits to the U.K.. This is not easy and details on the web-site may help to overcome this problem.
- The Internet is clearly having considerable influence in all sorts of situations and we wanted to be involved so that we can take advantage of new opportunities as they arise.

Now we have a basic web-site we can start to think about how we can develop and expand it to attract web surfers to return to our site for new information and ideas.

So please visit our web-site and let us know what you think.

### **WE ALL STAND CORRECTED**

**Max Wirth**

It was wonderful to get some feedback to the curator in the Newsletter No.53. I just hope more members will cast stones at me. It is the best way to improve our collection records.

Kemp Meikle pointed out that his specimen No.336 is andradite, not just garnet. It was entered as garnet - melanite. Melanite is an obsolete name and there was no supporting reference which should have been Horne and Teall, 1892, Trans. Roy. Soc. Edin., 37,pp.171,173. Yes, it is andradite and the database has been corrected.

John Betterton was astonished that his woodwardite was not listed. Specimens Nos.772 and 773 were both entered by him as birnessite, with no mention of woodwardite. Our Newsletter No.28 described the woodwardite on his specimens and I would willingly have changed the database if asked. Please could I now have another birnessite specimen, No.773 has crumbled to dust!

Talking about woodwardite, Chris Jewson sent me a specimen entered as this from the South Caradon mine. It gelled with HCl and is therefore a silicate, chrysocolla. The moral is, let me know, my address is in the membership list.

I record the optical properties of the less usual specimens if I can do so without noticeable damage.

It would still be nice if members filled in a record slip when sending specimens for the collection.

## **1999 MICROMINERAL COMPETITION**

### **Austin Lockwood**

This popular event, now in its fifth year, was again held during the Annual Symposium at Leicester University. Judges were appointed from five branches of the Society and our thanks are due to Vicki Packard, Harry Critchley, Martin Gale, Rusty Waughman and Mick Wolfe who kindly gave up their time to examine, and award points, for each of the 15 specimens entered for the Competition.

As a judge, you have the opportunity to examine carefully each specimen, without distraction, and the general view of the judges was that this year's entries were again of a high standard. Those members who took the opportunity to examine the specimens after the AGM on the Sunday morning will, no doubt, confirm this.

As members may recall, judging is based on a maximum of 50 points awarded by each judge for features such as perfection of crystals, overall cleanliness, rarity of species and dramatic appeal. Part of my job as the Competition Administrator is to check the marking and to work out the average points awarded by the five judges. Perhaps next year I will remember to take my calculator with me!

Chris Jewson clearly submitted the best entry with a specimen from North Tincroft Lode, South Crofty Mine, Cornwall collected in 1998. The specimen contained, within a vug, a pyrrhotite crystal with cuprite crystals growing on it, the vug itself being lined with small anatase crystals. Four of the five judges awarded this the highest number of points, the average score being 46.6, the highest ever scored in the Competition.

George Fletcher's beautiful specimen of mimetite crystals, exhibiting a campylite habit, on plumbogummite from Drygill Mine, Caldbeck Fells collected in 1973 came second with a score of 44.8. It was very pleasing to see Pam Parlanti taking the third place with a score of 43.8 for her specimen of cosalite crystals within a vug in massive quartz and collected in 1989 from the Carrock Wolfram Mine, Cumbria.

There were many other specimens that scored over 40 points including Peter Wallace's strontianite on calcite from Penarth Beach in South Wales; Mike Leppington's plumbogummite from Dry Gill Mine and his corkite from Iron Crag, both in the Caldbeck Fells; Pam Parlanti's second specimen, this being sphalerite with greenockite coating hemimorphite from Straitsteps Vein, Wanlockhead; and, finally, George Fletcher's sweetite with hydrocarbon, chalcopyrite, sphalerite and fluorite from Fall Hill Quarry, Milltown, Ashover, Derbyshire.

Following the announcement of the results on the Sunday morning Roy Starkey kindly presented Chris Jewson with the Maurice Grigg Micromineral Trophy to display at home until next year's Symposium and a small trophy for Chris to keep to mark his success in this year's competition.

Whilst the number of entries was a little down on last year's Micromineral Competition it is encouraging to see this so well supported and I would like to thank all those who entered specimens. I will remind you all in good time about next year's Competition and, perhaps, when you are sorting through your finds over the next nine months or so, you will put something special aside for this.

## **BRANCH NEWS**

### **SOUTH EAST BRANCH**

Our last meeting, held on Sunday, 8 August 1999 at the Ringway Community Centre, Grove Park was reasonably well attended and there was no fighting over table space for the microscopes.

The possibility of a major development of the site has now gone and we shall, fortunately, be able to enjoy the benefits of the inexpensive accommodation for a few years more.

There was a considerable number of excellent specimens on display from Ireland, notably from Tynagh Mine which had been visited by the members of the Sidcup Lapidary & Mineral Society during May of this year. We all agreed that whilst it was a long way to go, the visit was well worth while, and some of the azurites and mimetites were quite beautiful.

Following discussion, in view of the healthy state of the Branch finances, it was agreed that we should donate £200 to the Trust Fund being set up by Nancy Rothwell in memory of Mike. A cheque was accordingly sent.

The next meeting of the South East branch will be held at 3.00pm on Sunday 14 November 1999 at our usual venue.

### **NORTHERN BRANCH**

The next meeting at Bircotes Library has been arranged for Saturday November 27<sup>th</sup> from 2pm until 5pm. As at recent meetings, food will not be available due to the continuing indisposition of Jean Spence; please make alternative arrangements. Anyone requiring directions should give Jean a ring on 01302 710244. We hope to see you there.

### **DEVON AND CORNWALL BRANCH**

This new branch plan to hold meetings early in March, June, September and December each year. The next meeting will be at 1:30pm on 4<sup>th</sup> December 1999 and the venue will be the Public Rooms, Liskeard.

*"Visitors welcome - please bring cash to purchase the amazing bargains."*

### **WEST MIDLANDS BRANCH**

The next meeting will be held at 2:30pm on 28<sup>th</sup> November in St. Ninian's Church Hall, Solihull.



## HILDERSTON SILVER MINE

Kemp Meikle

Further rare species are confirmed occurring at Hilderston Silver Mine. These are uraninite and a U-Cu-As phase considered to be the copper uranium arsenate zeunerite.

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My Hilderston paper of 1994 referred to the occurrence of small lustrous globules, >3mm, of radioactive hydrocarbon as possible albertite.

Later Geiger counter examination of selected specimens indicated radioactivity levels in excess of 100 counts per second.

Detailed microprobe examination of a single shiny brittle globule in one of these specimens, by Dr John Parnell of Aberdeen University, identified two discrete uranium minerals indicating high radioactivity. These were uraninite and a U-Cu-As phase considered to be the copper uranium arsenate zeunerite, and the spectrum of the latter confirmed a very high uranium peak.

This, of course, supports the earlier findings (Meikle 1994) and helps to bring closer the relationship between Hilderston and the Alva occurrence, but the identification of zeunerite has, perhaps, greater significance, being only the second known record of the species in Scotland. This further significance appears also to indicate a relationship with the mineralisation of the Solway Firth and its radioactivity - viz. Needle's Eye, Marbrue Cove etc.

Acknowledgement and thanks are due to John Parnell for the microprobe information.

### EDITOR'S NOTE

My thanks to all contributors are recorded in the minutes of the AGM but I would like to take just a little space to thank everyone who takes the trouble to write for the Newsletter - no matter how short the article. When I took over from Malcolm Southwood there was a strong hint that I could expect to have to *beg* for contributions and that my telephone bills might escalate as I chased promised but overdue contributions. There was also the promise that I would find it the quickest way to get to know a wide range of members. So far only this last promise has proved to be correct --thank you again to everyone concerned!

That is no excuse for relaxing. I still need new articles. Branch secretaries, please help me to let other members know what your branch is up to, when does it meet and where? Individual members, what are you up to? (Mineral related activities only please!) If there is enough interest I might even find room for relevant advertisements. Would you like to share your surplus material with other members?

Finally, I would like to say what a pleasure it is to be a member of the BMS. Being the local contact, I had the privilege of showing one of Elsie Hansford's carousels of micromounts on the BMS stand at the Bakewell Show. Why does that make it a pleasure to be a member? I have never before had so many other members so willing to give of their time. Thank you to everyone who offered to give me a break - it was much appreciated.

### **MRS. CYNTHIA PEAT 1925-1999**

Cynthia Peat, a very accomplished mineral collector, passed away peacefully at home in Toronto on August 22, 1999, after a long and courageous battle with Multiple Myeloma.

Cynthia was born in Henley-on-Thames, and lived in Kent as a girl. During WW2 Cynthia served as a Wireless Operator, and a Radar Mechanic, in the W.A.A.F., 1943-1947. Married Jim Peat in 1948, and together with their two boys emigrated to Canada in 1957.

Cynthia became involved in minerals in much the same way that many of us did, by being attracted to their beauty and wanting to know more about them. Her interest was first piqued by visiting a mineral shop in Maine in 1960. Cynthia became an avid collector and involved the entire family in collecting trips. Her knowledge of minerals advanced while assisting Prosper Williams, who some will remember as being the principal dealer of quality minerals in Canada in the 1960's. Cynthia was compensated with mineral specimens and spoke fondly of the excitement of opening consignments from Tsumeb and unwrapping one treasure after another.

Still thirsting for more knowledge, Cynthia approached the Department of Mineralogy at the Royal Ontario Museum (R.O.M.) and asked for a job. Then, as now, the R.O.M. had little in the way of funds but there was a lot of work to be done cleaning and cataloguing specimens.

Cynthia worked at the R.O.M. for over twenty years, learning to use the analytical equipment and becoming an x-ray technician. These were exciting times at the R.O.M. as it was very involved in the analysis of the huge array of both rare and totally new minerals that were being discovered in the Yukon Territory and at Mont Ste. Hilaire (MSH), Quebec. When Jim retired in 1986, Cynthia was retained on a part time basis as the manager of the mineral exchange collection at the R.O.M.

Perhaps because most minerals from MSH are tiny, Cynthia became a collector of micro-minerals. Cynthia missed few opportunities to collect at MSH since her first visit in the mid-1960's and became very knowledgeable about minerals from this location. Cynthia will be remembered by many micro-mounters for the MSH material, most of which contained some of the rarer species or morphologies, that she made available at the annual Canadian Micro Mineral Association conferences, and other workshops.

Many of us will miss her knowledge and willingness to help identify minerals. I will miss not being able to talk to Cynthia about minerals in general and MSH specimens in particular. I wish that I had known her better and longer, but feel fortunate to have been able to call her a good friend.

*Tony Steede - (Forwarded by email from Canada by Cynthia's husband, Jim Peat).*

### **DAVID BAKER 1950 - 1999**

The mineral world will be saddened to learn of the loss of David who died on 28th September 1999 aged 48, after a long illness.

David was born in Watford, Hertfordshire and after schooling in Rickmansworth he went onto Southampton University and studied mathematics, with emphasis on computing. One little known, and perhaps amusing fact is that David, while at University, represented England in the sport of 'winks', which apparently was taken very seriously by the University.

His love of minerals started in his early teens when on family holidays to Devon and Cornwall, here he encouraged and coerced all the family to help him in the finding and collecting of specimens. His love and fascination of Cornish and Devon minerals continued until his death.

Following University David worked for a number of Government departments and in private industry. In 1988 David was made redundant from the vehicle manufacturer, Scammel. It was at this time that he decided to become a full time mineral dealer. He established a niche market in this country by dealing in meteorites, especially polished sections and also diamonds.

David had a number of other interests. Philately was one, specialising in stamps from the Channel Islands but perhaps, more closely associated with minerals was that of photography where he had a number of his mineral photographs published in books and other publications.

Outwardly David was a quiet man but those who knew him and met him found him to be a knowledgeable, determined and a tenacious man. His knowledge of Cornish minerals and meteorites was second to none.

Our condolences go to his father, sister and two brothers.

*David Hacker*

**New members:**

|              |   |               |
|--------------|---|---------------|
| Jimmy Miller | 125 Crewe Road North, Edinburgh,<br>EH5 2PA               | 0131 539 6906 |
| Jane Randle  | 1 Bell Close, Cassington, Witney, Oxfordshire,<br>OX8 1EP |               |

**Please note the following changes of address details:**

|                  |   |               |
|------------------|---|---------------|
| Elaine Beswick   | 7 Church Lane, Ashton-on-Mersey, Sale,<br>Cheshire, M33 5QN | 0161 973 0858 |
| John Bodemeaid   | 92 Ribblesdale Road, Sherwood, Nottingham,<br>NG5 3GU       | 0115 926 4706 |
| Kevin Johns      | 'Cutlers', Mill Road, Hempnall, Norfolk,<br>NR15 2LP        |               |
| Trevor Wolloxall | 28 Sharon Way, Hednesford, Staffordshire,<br>WS12 5NF       | 01543 424176  |

**Other changes:**

|              |                          |
|--------------|--------------------------|
| J Dickinson  | Postcode: CH60 3SY       |
| P S Harrison | Telephone: 0116 270 0481 |

**New, or change to, E-mail address:**

|             |                         |
|-------------|-------------------------|
| John Pearce | john-pearce@lineone.net |
| Peter Smith | treep@cwcom.net         |

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Please note that the deadline for articles for Newsletter 55 will be 1st February 2000. Please let me have contributions as soon as possible. Articles or reports on PC disc are particularly welcome. Articles sent by E-mail can either be "attached" or part of the body of the E-mail message. Clearly printed documents are acceptable and can be scanned and read into the PC automatically.