

GEM & JEWELLERY News

Volume 11 Number 4
September 2002

TERRY DAVIDSON FGA

Appointed to Gem-A as Chief Executive Officer

Gem-A is delighted to announce the appointment of Terry Davidson as the new Chief Executive Officer.

Terry will be well known as a familiar face at Gem-A, having served on the Council of Management since 1995. He brings a magnificent résumé of his many contributions to the industry. His career has encompassed diverse skills and his breadth of knowledge and experience will be of enormous value.



Terry Davidson

His father, who was silver buyer for 25 years at Bentleys, Bond Street, played an important role in influencing Terry to enter the trade. Terry's career started at the bench in 1952, when he was an apprenticed diamond moulder to Waters & Blott, in Shaftesbury Avenue, London; this was his first job following a pre-apprenticeship course at Central School of Arts & Crafts. In 1957 he became a Freeman of the Goldsmiths' Company and was given the Freedom of the City of London, and in the same year he was required to do two years' National Service serving with the Royal Corps of Signals. Returning to the trade in 1960 he spent the next 17 years at Philip Antrobus, Bond Street, starting as a trainee valuer, progressing to retail manager then director of the company.

From 1977 Terry spent the next 20 years with Cartier, 175 Bond Street, where he progressed to becoming retail director and director of the workshops, he was also responsible for the high jewellery and archives. He saw and handled some of the most precious jewels in existence. One memorable event was a particular trip to India where he inspected some magnificent emeralds laid out on a trestle table in an outdoors quadrangle, surrounded by four soldiers armed with rifles, watched from above on a surrounding building by dozens of inquisitive peering faces. The trip

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continued to a Maharaja's residence in Delhi to see further splendid jewels, one being a large diamond that could only be viewed in the washroom where there was something close to European northern light! The next leg of the journey was to Kathmandu for a Royal audience with the King of Nepal. Finally, the ultimate wonder to behold at Agra, the Taj Mahal; Terry was very moved by its beauty and symbolism. Another momentous

Cont. on p. 65

Distinguishing between general knowledge and true professional skill

I have complained before about the simplistic ineptitude of modern management methods, and the way in which they tend to spurn the deep learning and expertise that can only be achieved over a long period. Contemporary resources such as the Internet can be cited in support of this view, providing, as it does, quick access to almost any kind of information.

Don't get me wrong: I am a serious fan of the Internet. Using it is like having a vast library right in one's study. A while ago I wanted to look up the relatively recent usage, in social anthropology, of a term that originated in linguistics, and is now creeping insidiously into some of the more self-consciously pretentious work on Roman provincial archaeology. The usage is far too recent to have made it into any published dictionary, but I found what I was looking for within less than five minutes of searching on Google. It was just what I needed for my purpose.

This is all wonderful and exciting. It is a research tool to be fully enjoyed and exploited; but it does not replace the deep-seated skills that can only develop in an individual who has devoted his or her life to a subject. Knowing about a

currently trendy term in social anthropology has not turned me into a paid-up anthropologist, or anything remotely approaching it.

People who are not experts in anything (except, perhaps, interfering with other people's work) evidently find it impossible to distinguish between this quickly acquired, journalistic knowledge and the kind commanded by those who have devoted a lifetime's study to a subject. They are impatient with the idea of employees who spend decades in the same institution, who write scholarly books on arcane topics, who study the same narrowly specialized field for years on end. Such things are boring and elitist, and not a good use of resources! Catalogues that take a dozen years to write, another five to publish, and will only be used by a handful of other experts, are thought to be a waste of time.

This view is dangerously decadent. The contempt for real knowledge and wisdom now common in many places of power is a danger to everybody's future. We must retain the ability to distinguish between general knowledge and true professional skill. The latter requires time, practical as well as theoretical experience, and the special insights

absorbed through contact with older experts.

Let me illustrate what I mean with an example. Any intelligent person with some general knowledge of the decorative arts could find out enough about Fabergé from the Internet and other resources to speak sensibly and confidently on the subject for a little while; I could probably do it myself. But the knowledge of that topic commanded by the late Kenneth Snowman was of a different order entirely, representing the devoted scholarship of a lifetime, and involving not just facts assimilated intellectually, but the indescribable subtleties of visual and tactile memory and the unique perceptions that are gained from original research.

All readers of this newsletter possess special, sometimes very obscure, types of knowledge, and I know I am preaching to the converted. We must do everything we can to ensure that specialized skills are not denigrated in an increasingly superficial and hurried world. The Internet will not save us when all the true experts are gone.

Catherine Johns

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Diamond grading harmonization – new standards

The International Standards Organization (ISO) papers on diamond grading harmonization have at last been published and been sent to the participating countries to be voted on.

If the vote is passed it means that the world will have an ISO standard for grading diamonds. If it is not passed, then the working group will have to reconvene and it is doubtful if another paper will be published in the near future. It has taken over fifteen years to have reached this stage. Some of those who were involved in the writing of these papers have indicated they will vote against it. How has this state of affairs arisen and how will it affect diamond grading and the diamond trade and all those involved in selling grading certificates with their stones?

Terms for colour

Diamonds have been graded for many years for colour and clarity. Initially descriptive terms for colour, sometimes based on geographical locations, were used. For example, we had 'white', 'tinted', 'cape', 'wesselton', 'river', 'light brown' stones and so on. There was usually local understanding of these terms and how they would be used, but there were no universal agreements. So partners in a firm, local dealers belonging to a diamond bourse or those travelling to, say, South Africa, would understand what a 'cape series' was, but this was very much an esoteric language. 'White' meant different things to different dealers, and one could rarely buy on the seller's description only, one had to see the stone. The prominent systems to be used were the ones used in South Africa as a producing country, and consisted of the terms 'river', 'wesselton', 'crystal' and 'cape', with words such as 'top' added as a prefix. End-user countries adopted and modified such systems and the above terminology was

incorporated into the Scan D N grading system.

A further system was introduced to make the language less esoteric and terms such as 'white', 'tinted' and 'brown' were used with prefixes such as 'exceptional', 'rare', 'slightly' and 'top' being used. As an aside, stones sold as 'blue white' and 'premier' are now referred to as those that have fluorescence.

GIA system

In all this confusion an attempt was made by the GIA to introduce a grading system which was more objective than the subjective methods used. They picked on a certain number of stones of different shades, graded these by comparing them to each other ranging from the purest white (or, more accurately, colourlessness) to shades of pale yellow, gave letters to these stones and referred to them as 'Master Stones'. They called the highest grade a D colour, and graded the rest down using E, F, G and so on. There was a perceivable shade of colour between adjacent stones in this series. Thus, a stone which looked more colourless than a G but less colourless than an F, was referred to as an F colour.

The letter D was taken to be the best colour and this was done, according to the late Richard Liddicoat (for many years Chairman of the GIA), to avoid confusion with letters already in use such as A, B and C. The systems using these letters had been further modified by using A+, A++, AA, AAA, and so on. D was the failure grade in American schools and as an 'in joke' and, on the assumption that D had never been used to denote a colour grade, they made this the top colour. The trade and public found this to be a far less confusing system – they knew the lower the letter the lower was the colour.

Clarity terms

On the clarity grading, terms such as 'loupe clean', 'very very small inclusions' (VVS), 'very small inclusions' (VS), 'small inclusion' (SI), were used and these too were easy to understand. With such a system in place investors discovered diamonds as something worth putting their money into and so started the investment market and soon prices began to rise in leaps and bounds. Everyone wanted graded stones and certified diamonds and diamond reports appeared all over the place, with the result that the grading in some of the labs became less and less consistent.

Dangers for the trade

Bodies such as CIBJO saw the danger in this for the trade and tried to introduce some sort of control. They did this by recognizing only a certain number of laboratories, the general rule being one per country and preferably recognized by national associations. They too introduced a system of grading diamonds using terms such as 'white' and 'tinted' as explained above. They had their own set of Master Stones for colour grading. It was known that they had been co-operating with the GIA but it was unclear as to how the Master Stones had been obtained. The system they adopted was to give a chart linking their stones to the GIA system, thus 'exceptional white +' was a D, 'rare white' a G and so on.

The main laboratory in Antwerp was the HRD and they too had evolved their own system again using descriptive terms such as 'white' with their own sets of master stones. They became the main laboratory in Antwerp serving the diamond industry there through the International Diamond Council (IDC).

Thus in the mid-eighties we had several acceptable systems in

operation and the diamond trade, through the encouragement of groups such as the Diamond Trading Company, thought that all these systems should be harmonized. In this way the now international diamond trade would become truly international with all countries speaking the same language in grading diamonds.

ISO Standard drafted

The main groups got together and decided to draw up an ISO Standard. These groups were the GIA, IDC, CIBJO and Scan DN. The standard was to be drafted in two parts, Part 1 to deal with Terminology and Classification. This defined how terms such as those referring to the type of inclusion within a diamond should be used

and the colour grades, as well as defining the different shapes of diamonds. This was ISO/FDIS 11211-1. Part 2 would deal with Test Methods, explaining under what conditions should colour be determined, how various measurements would be made and how these would be shown on a report. The points here are of course more numerous than I am stating in this article, but the combined papers should enable a laboratory to grade and produce a report on a diamond and all those using the Standard would produce more or less identical reports.

It was around the time of completion of Part 1 that one of the main participants decided to drop out. This was the GIA. As one who was not involved with the actual

working group it is difficult to know exactly why this occurred. Maybe the GIA, considering themselves leaders in the field of diamond grading, could see no point in giving their system away to be used by everyone as it was possible that many laboratories using GIA terminology would not necessarily grade to their standards.

Importance of cut

This left Scan DN, CIBJO and the IDC in the working group. As I have often said in these articles, there is far more in determining the price of a diamond than merely colour and clarity. In considering the 4 Cs – carat, clarity, colour and cut – most people forget about the cut and it is this that gives the stone its beauty. All grading reports indicate the size of the table and the depth of a stone as a percentage of its width or diameter, but it takes an expert to interpret this.

The IDC indicates the depths of the crown and the pavilion separately and then gives a comment on the proportions of the stones using terms such as 'good', 'very good' and 'unusual'. The GIA does not give these comments on proportion but makes general judgements on the symmetry of a stone. This difference led to a compromise being reached two years ago that a proportion comment would be optional.

When the papers were finally published and circulated, the IDC claimed that they had understood that proportion comment would be mandatory on all grading reports.

If the IDC wishes are accepted then there are those who feel that the GIA system would fall short of the Standard in that they do not comment on proportion. There are also those countries who have used the GIA system over the years and would not like to see a Standard that somewhat denigrates the system they have used for years and could confuse their public.

At the time of writing the vote has not been completed so the result is awaited with interest.

Harry Levy

Their beauty is only skin deep! A gem merchant's dilemma

Many of you will have followed the recent saga of the treatment of sapphires, where an orange surface of varying thickness is produced in a variety of sapphires, but particularly in pink Madagascar sapphires, resulting in a pink/orange padparadscha-type colour (see 'Burma ruby and new corundum treatments' on p.75). Quite correctly even when a treatment is only surface deep it must be declared. As coloured gemstone merchants we are having a very hard time selling our product and do not need the added problems of being considered dishonest by selling such sapphires without declaring their treatment.

The general call goes up that it is the responsibility of the gem merchants to clean up the trade, but they do not understand why it is so hard to 'clean up'. The masters of heating corundum are the Thais. However, the people who treat the gemstones do not own them. The rough dealer brings his rough to a 'heater', with whom he has probably had a very long relationship, and a

price is negotiated on the yield from the said rough. The only thing the 'heater' owns is his knowledge and experience of treating stones, along with often some fairly basic equipment. Therefore he is not going to tell anyone how he heats their corundum and nor is he going to mention any new methods he has developed to 'assist' the colour improvement. Herein lies the reason for the breakdown in communication between the Thai trade and their customers and the gem laboratories.

As gem dealers, the only protest we can make against this situation is to refuse to trade in suspicious gemstones and to watch out for a sudden increase in supply of a previously rare and expensive material. It is our duty to supply the laboratories with any new and unusual stones; however this is not always easy as, when a treated stone is identified, the stone usually ricochets back through the hands of those who have handled it as a loss of money is inevitable.

Anon of Hatton Garden

Terry Davidson

Cont. from p. 61

occasion from his time at Cartier, was as a bidder in the sale of the Duchess of Windsor's jewels.

The next rewarding chapter opened in 1997 when Terry was invited to become Head of Jewellery for Asprey (later Asprey & Garrard) at 167 Bond Street, where he oversaw the development of the 'Eternal Diamond' for Asprey & Garrard in 1999, and the recently launched 'Asprey Cut Diamond'.

Running in tandem with his work, Terry has always played an important role in supporting various trade organizations; of the many this

includes being a member of the Jewellery and Allied Industries Training Council (JAITC), and a Committee Member of the Goldsmiths, Silversmiths and Jewellers Benevolent Society. With three children including a son who is following in his father's footsteps now working for Boodle & Dunthorne, Terry is proud to be of grandfather status and has three small granddaughters whom he dotes on. Therefore, with a magnificent career spanning 50 years, we wish him every success in his new position.

Corinna Pike

John Henn new NAG Chairman

Wolverhampton jeweller, John Henn, Gem.Dip, FGA, DGA, was appointed Chairman of the National Association of Goldsmiths (NAG) at their AGM on 27 June at Le Meridien Hotel, Piccadilly.

Welcoming John to his new role, Michael Hoare, the NAG's chief executive said: "John Henn is a credit to the jewellery industry and a consummate professional. His gemmological knowledge is unsurpassed and he encourages everyone to keep their skills updated through ongoing education and training."

'Asprey Cut' diamond

Asprey is celebrating its relaunch as the ultimate authentic British luxury lifestyle house, with an exclusive new diamond cut, the 'Asprey Cut'.

It therefore seems appropriate that a diamond, both contemporary and timeless, should be the first of the eagerly awaited products from this famous store, and in collaboration with Gabi Tolokowsky, a

master diamond cutter of international repute, the 'Asprey Cut' was launched to herald this exciting new era. Top and side views are shown below.

The 'Asprey Cut' is a cushion-cut diamond with 61 facets and four 'A's appearing around the four edges of the stone; the 'A's are discernible and yet subtle. With this new cut Tolokowsky feels he has achieved a

new form of beauty. The shape of the cushion cut is close to the natural form of a diamond in the rough, but Tolokowsky has been able to maximise the light refraction to brilliant effect. The 'Asprey Cut' collection will be developed into pendants, bracelets and earrings. In 1999 Gabi Tolokowsky created the 'Eternal Cut' exclusively for Asprey & Garrard.



Gem and Mineral Shows

Rock 'n' Gem Shows

Newmarket Racecourse, Suffolk	28/29 September
Cheltenham Racecourse, Glos	19/20 October
Hatfield House, Hertfordshire	26/27 October
Kempton Park Racecourse, Sunbury on Thames, Middx	2/3 November*

* To be held in conjunction with Gem-A Annual Conference, see p.78.

All shows open 10 a.m. to 5 p.m. Enquiries to The Exhibition Team Ltd.
Tel: 01628 621697 (e-mail: Rockngems@aol.com)

Jewellery Sales

Autumn sale dates from the auction houses

Bonhams, London

Montpelier Street, London SW7 1HH
Jewellery: 16 October, 13 November, 11 December
101 New Bond Street, London W1S 1SR
Fine Jewellery 10 October, 5 December
Tel. Montpelier Street 020 7393 3970; New Bond Street 020 7468 8282

Christie's South Kensington

Rings: 17 September
Pawnbrokers' Unredeemed Pledges: 20 September, 13 December
20th Century Jewellery: 15 October
Jewellery: 29 October, 26 November
Antique Jewellery: 12 November
Fine Jewellery: 10 December
Tel. 020 7581 7611 (www.christies.com)

Dreweatt Neate, Donnington Priory Salerooms, Donnington, Newbury, Berkshire

General Antique and later Furniture and Effects, with a Silver and Jewellery section: 22 October
Antique Furniture, Works of Art, Silver and Jewellery: 23 October
Tel: 01635 553553 (auctions.dreweatt-neate.co.uk)

Fellows & Sons, Birmingham

Antique and Second-hand Jewellery and Watches (by Direction of Pawnbrokers Nationwide): 26 September, 10 and 24 October, 7 and 21 November, 5 December
Antique and Modern Jewellery and Watches: 17 October, 28 November
Tel. 0121 212 2131 (www.fellows.co.uk)

Gardiner Houlgate, The Bath Auction Rooms, Bath

Jewellery: 25 September, 9 and 23 October, 6 and 20 November, 4 and 18 December
Tel. 01225 812912 e-mail: auctions@gardiner-houlgate.co.uk

Sotheby's, London

Modern Jewellery (Olympia): 15 October and 29 November
Modern Jewellery (New Bond Street): 29 October
Antique and Modern Jewellery (New Bond Street): 17 December
Tel.: 020 7293 5000 (www.sothebys.com)

Dates correct at time of going to press but may be subject to alteration.

Beadwork and Bead Fair

The Bead Society of Great Britain will be holding its 2002 Annual Beadwork and Bead Fair on Sunday 6 October at Byron Hall, Harrow Leisure Centre, Harrow (North West London). The Fair will be open from 11:30 a.m. to 5:30 p.m.

For further information send a SAE to the Secretary, Carole Morris, 1 Casburn Lane, Burwell, Cambs, CB5 0ED.

Goldsmiths' Fair

The Goldsmiths' Fair, the annual selling exhibition of contemporary jewellery and silverware, takes place from Monday 30 September to Sunday 6 October, at Goldsmiths' Hall, Foster Lane, London EC2V 6BN.

For further information call the Goldsmiths' Company on 020 7606 7010.

Court Jewellers, Splendour, Finance and Intrigue

This two-day symposium, organized by the Society of Jewellery Historians, will be held in London on Thursday and Friday, 26 and 27 September. Distinguished international lecturers will talk on subjects ranging geographically through India, Russia, Europe and England, and chronologically through five centuries. Gem-A members are invited to write for an application form to the SJH Chairman at the address given on p.62.

Congratulations!

It is good to have a happy news item to report from the British Museum. Judy Rudoe is well known to all members of the Society of Jewellery Historians for her fine scholarly work on 19th- and 20th-century jewellery and for her superb lectures. We should like to congratulate her and Antony Griffiths (Keeper of Prints and Drawings in the British Museum) on their marriage.

Pegmatites and gemstone mines of Central Namibia

John and Catriona McInnes report on their recent trip

As part of the International Association on the Genesis of Ore Deposits (IAGOD) Geocongress, held in Windhoek in July 2002, an excellent excursion to the pegmatites, gemstones and industrial minerals of Central Namibia was led by Dr Gabi Schneider, Director of the Geological Survey of Namibia, and Drs Judith Kinnaird and Paul Nex of Witwatersrand University.

An unlikely grouping of interests, ages and nationalities packed into four minibuses and set off for Swakopmund via Kleine Spitzkoppe, where locals demonstrated how they dig for gem-quality crystals of aquamarine and topaz, along with schorl and quartz from pegmatite pockets in the microgranite. The mineral stalls by the side of the road proved such an attraction that the leaders had great difficulty moving us on! Care was needed when buying, as the crystal faces on many aquamarines had been skilfully polished to 'improve' the specimen. Continuing on to the coast on a gravel road across the spectacular plain of the Namib



Local Damara miners demonstrate how they dig for topaz, aquamarine and quartz in cavities in the granite pegmatites at Kleine Spitzkoppe. Photo McInnes.

Desert with the Brandberg, Namibia's highest mountain, to the north, we met only three vehicles in a distance of 92 km.

A fascinating visit to the Swakopmund salt works followed. As well as salt, the company produces oysters, sampled by the more intrepid members of the party, and around 1000 tons of guano per annum from the specially erected seabird platform in one of the saltpans. The company advice on

preservation of our beautiful specimens of salt crystals proved disastrous, as hair spray turned the pale pink crystals a bright canary yellow. There was just time to take in the Kristallgalerie, a small mineralogical museum in Swakopmund, where excellent specimens of tourmaline and huge quartz clusters from the Otjua Mine are on display. Some of the quartz crystals are quite unrivalled in that they are perfectly formed, doubly terminated 'floaters', the largest being 2.2 m long and 1.8 m in circumference.

The origins of 'heliodor'

After a night in a luxurious *pension* dramatically situated on the beach, we set off inland again next morning for Rössing mine, which is the world's largest producer of primary uranium. It was the golden beryl from Rössing which was first given the name 'heliodor'. The special properties attributed to the Rössing beryl were later discounted, as was the suggestion that its colour was due to trace amounts of uranium. As Drs Kinnaird and Nex are specialists on the Rössing mine, we were shown the mineralogical



Boris Shmakin beside a group of large quartz crystals, Otjua Tourmaline Mine. Photo McInnes.

variations across the rock types in the area. Sadly we found no helliodor, but we were given a nice specimen of the rare uranium-bearing mineral, betafite.

From monazite to tourmaline

The next three nights we spent in basic, but friendly, accommodation in Karibib, as a base for exploring the surrounding area. The next stop was Eureka Farm to examine an unusual monazite-bearing carbonatite dyke of mantle origin. The monazite occurs as reddish-brown, euhedral crystals up to 7 cm in length. Small patches of the crystals can be quite gemmy, but are probably too fractured to facet. In the afternoon we were off to the Usakos wollastonite mine, which exports pure white wollastonite for use in the ceramics and building industry. Our last stop for the day was the tourmaline mine near Usakos. The pegmatites of the area are rich in tourmaline, much of it black to opaque bluish-black. Green and bluish-green, and rarely pink, gem-quality tourmaline occurs in kaolinized cavities, often associated with lepidolite. The current owner of the mine told us that the last pocket found was two years ago, just before he bought the mine. We were allowed to collect on the dumps and found matrix specimens of bluish-green and pink, opaque to translucent tourmaline.

The following day started with the abandoned Rubikon mine, which was formerly mined for petalite, amblygonite, lepidolite, beryl, quartz, pollucite and bismuth and was Namibia's major source of lithium. Before the mine closed, the ore was hand-picked and provided welcome local employment. We crossed the different zones of the pegmatite and collected samples. Some of the beryl may be facetable.

The Otjua mine, our last stop, is the source of the gem tourmalines and large quartz crystals, which we saw in the museum in Swakopmund. The colours of the tourmalines vary



Dr Gabi Schneider, Director of the Namibian Geological Survey, with Drs Paul Nex and Judith Kinnaird of Witwatersrand University, at the Karibib Marble quarry. Photo McInnes.

the chemical composition changes. Blue to emerald-green and occasionally pink gem-quality tourmalines are found, often with watermelon zoning, though unfortunately they are usually badly fractured. The mine owner generously allowed us to keep most of what we collected. One specimen was a half metre long slab of perfect cleavelandite with 2 cm diameter watermelon tourmaline protruding several centimetres from the surface. A very happy group drove back to base, contemplating yet another glorious Namibian sunset behind the mountains and the desert.

On the final morning we visited the Karibib Marbleworks from where

beautiful white marble, easily rivalling that of Carrara, is exported all over the world. The company now also produces tiles in marble and in the local granite. We were also taken to the marble quarry to see how the colossal blocks of marble are cut.

A visit to the wood carvers' market in Okahandja on the way back to Windhoek added a few extra passengers to the vehicles in the form of giraffe and rhino.

At the end of a well organized and interesting trip to such a beautiful country with so many gemmological resources still to be discovered, we felt that we had only scratched the surface. A future Gem-A trip, perhaps?

Gem notes from New Zealand

Sitting here far away in New Zealand, the *GJN* is a welcome newsletter.

I was intrigued by the editorial of Michael O'Donoghue (*GJN*, June 2002, Vol. 11, No 3) on the rare items of 'young journal contributors'. Now I am at the other end of the scale (going on to extinction as he puts it). Being a retired gemmologist/jewellery teacher of 30

Faceting

These days I am cutting superb gemstones. I have two faceting machines, and although I do a little professional cutting, most of my lapidary work is enjoying the challenges that this neglected side of the gemstone world has to offer. For example I have recently cut an 'Involute Spiral'. Now I suppose that most people have never heard of this

appeared in the *Lapidary Journal* in 1987. It is a step-cut round stone and the facets form a spiral from the crown to the pavilion. This is probably the most difficult cut there is. For those of you familiar with a faceting machine, it calls for complete mastery of the cheater as the angles of the facets change all the time. The result is superb. Of course these cuts are not a viable commercial proposition. Another intriguing cut that is a favourite of mine is the Capriccio Cushion. This is an eight-sided cut with fan like facets in four of the corners. Again it is dazzling, and is a welcome change from the everlasting native cut ovals, many of which I have re-cut to the correct angles sacrificing a few points to make a far better looking stone. A friend in Tucson, Arizona, has challenged me to cut the Patience II which has 712 facets!

Putting a value on a stone

The article by Harry Levy concerning the difficulty of putting a value on coloured stones also highlights an intriguing problem.

I have just obtained some fabulous blue tourmaline crystals with an open c-axis. One crystal weighs 9.3 carats at a cost of US\$ 30 a carat totalling \$279. Now cutting this crystal yielded only a 3 carat stone. It is not unusual to lose up to 60% depending on the shape of the rough, so the stone costs me \$93.00 per carat. The time taken to cut a special rectangular cushion was about two hours. I need to cover my costs also in equipment depreciation, postage, insurance and foreign exchange, etc. The tourmaline is flawless and of even colour with over 80% light return, and the cut is perfectly symmetrical. So here comes the harder bit. What

profit do I put on the stone and what is its valuation? The market here in New Zealand is still concerned mainly with selling diamonds, and coloured stones are a secondary consideration except for the usual sapphires, rubies, emeralds and aquamarines.

So my intention now is to design and make a beautiful blue tourmaline ring. I'll go prospecting for gold. There is life after the examinations. There are pegmatite dykes in New Zealand but the terrain is so difficult even a helicopter can't get there

In the next article I go digging for my own gemstones, zircons in Australia – with some surprising results

Francis Henrich FGA

How much does it cost?

This question has been asked more and more in recent months. Many members of the public – and the trade – have no idea of the cost of gemstones: they ask “Is there a standard price list to which all dealers send information?”

Yasukazu Suwa's *Gemstones, quality and value** in three volumes provides some of the answers. For those who have not come across this beautifully-illustrated work, first published in Japanese, the aim is to illustrate the major gem species, showing different qualities, and to give prices which could be asked or which have been secured at auction (these for the more important specimens, naturally).

The three volumes cover a variety of species and I am pleased to report that the long-awaited English version of Volume 2 has now been published. This volume deals with amber, pink coral, citrine, chrysoberyl cat's-eye, heated fancy blue diamond, heated star ruby,

fancy-coloured sapphire, often heated, untreated Sri Lanka blue sapphire, untreated fancy pink diamond, untreated star sapphire, untreated fancy yellow diamond, untreated red spinel, untreated Zambian emerald, untreated tsavorite, untreated iolite, untreated Imperial topaz, untreated boulder opal, untreated bi-coloured tourmaline, untreated Mexican opal, heated blue zircon, untreated Mogok ruby, heated Mong Hsu ruby. The following chapters deal with diamond shape and cut and how gemstone values are established.

The author and publishers have been astute in presenting their species on an apparently random basis (you need to buy all three volumes to find all the major stones!) but this is the best recent attempt to put pricing in something like reasonable order. It will not, I predict, urge dealers to issue their own lists, however! Students and course participants do not always realize that dealers are most often

one-person concerns who do not want rivals to know what they are asking for their goods because that gives a clue to what they are paying their suppliers!

Michael O'Donoghue

* The three volumes of Suwa's *Gemstones, quality and value* are available from Gem-A Instruments (telephone: 020 7404 3334, e-mail gagt@btinternet.com) at £75 per volume, plus postage and packing.

Browser

The Museum of Fine Arts Boston has an on-line catalogue of engraved gems in their collection. This can be viewed at:

<http://perseus.csad.ox.ac.uk/PR/mfa.ann3.html>

William Summers, LVO

Crown Jeweller and Director of Garrards

William Summers sadly died on 19th June 2002 at the age of 71, having been a director of Garrard and serving as Crown Jeweller from 1962 until his retirement in 1991. During his time in this unique role, he was responsible for the upkeep and maintenance of the Crown Jewels in H.M. Tower of London; and also took care of the private jewels

of H.M. the Queen and other members of the Royal Family, as well as assisting monarchs and dignitaries worldwide. The most visible part of these responsibilities is when the Crown Jeweller is required to be in attendance, accompanying the Imperial State Crown at the State Opening of Parliament. This position was

created in 1843 when Queen Victoria appointed Garrard to be Crown Jewellers, and the company has served six monarchs since then.

Bill, as he was known to his friends, was born in 1930 and the son of two doctors. His initial career in medicine was not to be, due to an aversion to the sight of blood. He completed his national service with the 13/18th Hussars in Libya and later Malaysia; then transferred to the Tank Regiment and later served in the Inns of Court Regiment (TA) until 1961. In 1950 he joined Garrard and soon after took part in the preparations for the Coronation of 1953; later he became assistant to Cecil Mann, the Crown Jeweller at that time, and when Mann died in 1962 he succeeded to the post. Bill travelled extensively hosting Garrard exhibitions overseas to promote British craftsmanship. In 1993, he made a significant contribution to the important publication *Garrard The Crown Jewellers For 150 Years*, by Charlotte Gere and John Culme.

In 1974 he was appointed M.V.O. and in 1989 the L.V.O., shortly before his retirement in 1991, when he was succeeded by David Thomas the present Crown Jeweller who continues to work for Garrard at their new premises at 24 Albemarle Street. Since 1976 Bill lived in Tonbridge and was keenly involved in local activities, including the Tonbridge Civic Society, Penshurst Village Hall and Broomhill Opera. Our sympathies and best wishes go to Rosemarie his wife and their son and two daughters. At his funeral a great many of his work colleagues and close friends paid their respects to the man who had upheld an important part of the Garrard heritage.



William Summers.

A. Kenneth Snowman, CBE, FSA

Fabergé expert and Chairman of Wartski

Kenneth Snowman who was President of the Society of Jewellery Historians (1994 to 1998) sadly died on 9th July aged 82. He left an enduring legacy and members will have many happy memories of how he enriched all our lives. During his term of office in the SJH he delivered one of his characteristically entertaining lectures on eighteenth century gold boxes, having written the definitive survey on the subject in a huge, lavishly illustrated tome in 1966. He was thrilled to have the opportunity to edit the text and add new colour photographs when the book was republished in 1990.

However, it is the early research he conducted into the work of Carl Fabergé and the articles and books that followed which are most readily associated with Kenneth. The exhibition he curated for the Queen's Silver Jubilee in 1977 at the Victoria and Albert Museum was legendary, and not only for the vast queues that gathered outside the building.

As Chairman of Wartski, the firm of jewellers founded by his grandfather Morris Wartski in 1865, he encouraged the small staff to pursue their own areas of interest and was endlessly supportive of every project they chose to undertake. He presided over the 'inner sanctum' of his office downstairs where one would inevitably be served the strongest of Bloody Marys. An impeccable host, his wit and self-deprecating humour made him the very best of company. He was a member of the Garrick Club and would often enjoy his sociable lunches there.

Kenneth was also a talented artist, having exhibited at the Royal Academy in 1939, an interest that never left him and he continued to paint throughout his life. In 1942 he married Sallie Moghilevkine, who predeceased him, and their son is



Kenneth Snowman showing an object created by Carl Fabergé to Her Late Majesty Queen Elizabeth the Queen Mother.

co-chairman of Wartski. In 1997 Kenneth was appointed CBE .

Kenneth Snowman was among

the most spirited Presidents of the Society of Jewellery Historians and he will be sadly missed.

Richard T. Liddicoat

It is with great sadness we report the death of Richard T. Liddicoat, Chairman of the Gemological Institute of America and Honorary Fellow of Gem-A, on 23 July.

A full obituary will be published in the October issue of *The Journal of Gemmology*.

Gemmology Scholarship Awards – a world first!

Gem-A Gemmology Course Scholarship Awards were presented to the lucky winners by Gem-A CEO Terry Davidson at the JA Show, New York, on Sunday 28 July.

The scholarships – the first in the history of Gem-A – have been sponsored by EGL USA and *National Jeweler*. The successful applicants win the Gem-A's home study course and those qualifying in the Diploma

examination may apply for the coveted FGA.

From over forty applications, five scholarships were awarded, four to those with at least three years' experience in the jewellery trade and one to a student studying gemmology at the Fashion Institute of Technology, New York.

The names of the successful applicants are Judith Anderson, Manchester, New Hampshire, Kathleen Donovan, San Diego, California, Laura D. Haas, Fishers, Indiana, Leslie Scott, Portland, Oregon, and Michelle Szmojiko, Staten Island, New York.



Three of the Scholarship winners at the JA Show, New York. From left: Anne Dale (Gem-A USA), Terry Davidson (Gem-A), Kathleen Donovan, Mark Gershburt (EGL USA), Laura Haas, Whitney Sielaff (National Jeweler) and Michelle Szmojiko.

New gem course to be held at Somerset House

This autumn sees the launch of a new eight-week course to be run by Gem-A in the splendid surroundings of the Gilbert Collection at Somerset House.

'A Practical Introduction to Precious Stones' offers the opportunity to explore the fascinating world of gemstones with the emphasis on hands-on study. Starting with the question 'What is a gem?' the afternoon sessions will progress through topics such as beauty, fashion and what we actually mean when we use the terms 'real' and 'natural'. There will also be tours of the collections, with special emphasis placed on the Gold Boxes and the Hardstone Mosaics. Between them, these two galleries hold a wealth of examples of precious stones from all over the world which have been used to



The Frederick gold box. One of the magnificent items that forms part of the Gilbert Collection.

stunning effect in a variety of ways. Suitable for complete beginners as well as more knowledgeable enthusiasts, this course promises to

be a delight and one not to be missed. To be held on Tuesday afternoons from 3:00 to 5:00 p.m., from 15 October to 3 December.

Family workshop

In addition to this course, we will be holding a family workshop 'Exploring Precious Stones' on Saturday 16 November at Somerset House. With sessions available in either the morning or the afternoon, this day offers the opportunity for families to discover more about gemstones in a fun environment suitable for both children and adults.

For further information and booking details for both these events, please call The Gilbert Collection on 0207 420 9400.

Calligrapher retires

George Alsford has been inscribing the Diplomas for the graduates of the Diploma in Gemmology and the Gem Diamond Diploma since 1981. After completing the Diplomas for the January 2002 examinations he decided to retire from this task – he celebrated his 81st birthday in June this year!

Over the 21 years since he started writing for the Association, George has inscribed 3753 Diplomas in Gemmology and 1273 Gem Diamond Diplomas for graduates worldwide. Many of the Diplomas will be proudly displayed in

homes and businesses in Canada, China, Hong Kong, India, Japan, Korea, Myanmar, Singapore, Sri Lanka, Thailand and the USA, as well as in most European countries and the UK.

It will not be easy to find a successor to match his excellent calligraphy and careful work. We will also miss the visits from his wife, who would sometimes hand-deliver the Diplomas to us during shopping trips to London!

We wish George Alsford and his wife a very happy and relaxing retirement.

RECENT EVENTS

Frédéric Boucheron

A lecture by Marie-Noël de Gary to the SJH

Marie-Noël de Gary, in her lecture to the Society of Jewellery Historians on Tuesday 14 May, traced the history of the famous Parisian jewellers Boucheron, concentrating on the founder of the firm, Frédéric Boucheron (1830-1902).

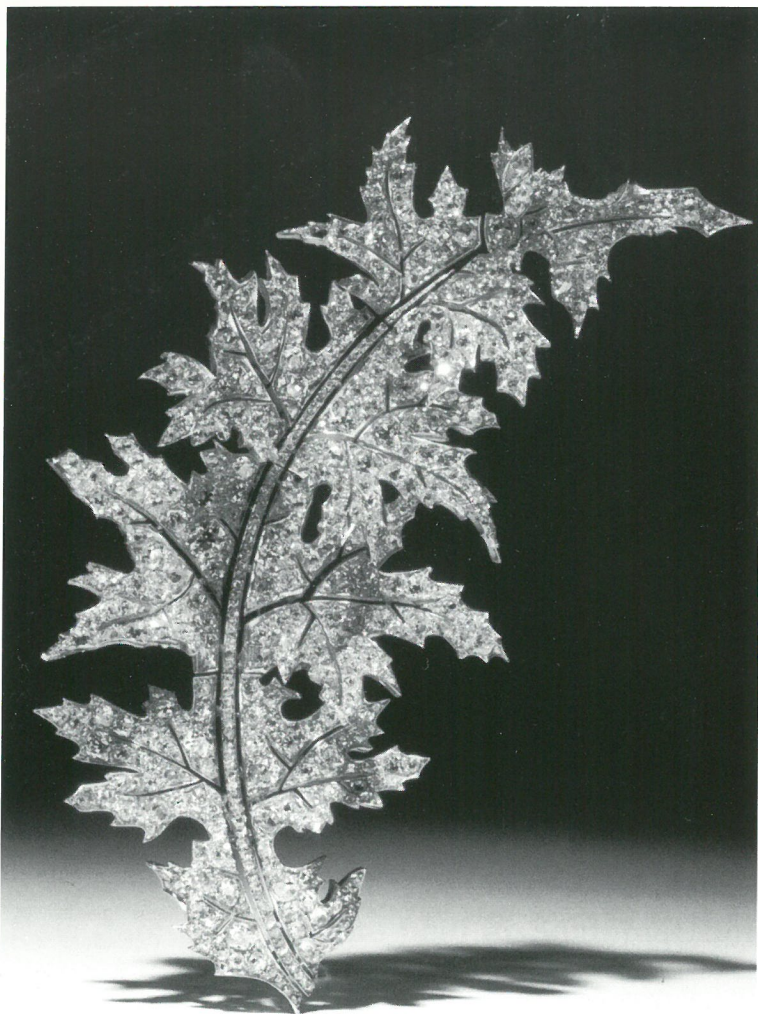
In 1844, Frédéric Boucheron joined Jules Chaise, proprietor of one of the finest workshops in Paris, as an apprentice; in 1853 he moved to Tixier-Descamps in the Palais-Royal as a shop assistant and buyer. It was here, in the Palais-Royal, that he set up his own business in 1858 at 152 Galerie de Valois. From the beginning his commercial acumen, allied with his feel for the latest novelties, resulted in immediate success. His business expanded to the point where he needed to extend into the neighbouring arcade under the galleries of the Palais-Royal and he was the first proprietor to understand the demand for an appropriately decorated shop with a glass shop front containing jewels displayed on cylinders of black

velvet. The decoration was ordered from Penon, one of the most fashionable upholsterers of the day. And as we know from Veveer the chandelier and standard lamps were copied from those Prince Napoleon had commissioned for his Pompeian-style house after designs by Charles Rossignaux. In the same year (1866) Boucheron established a workshop, under the direction of Jules Debut (1838-1900), and on 21 September 1866 he registered his first mark.

Debut designed the most important pieces shown by the Maison Boucheron at the Exposition Universelle of 1867, including a hand-mirror decorated with open backed transparent enamel by Armand-Désir Riffault (1832-1872). For this, their first display at an international exhibition, the Maison Boucheron was awarded a gold medal. The hand-mirror, now lost, was bought by an Englishman William Ward, Earl of Dudley, directly from the exhibition. Dudley was president of the jury for the joaillerie-

bijouterie section of the 1867 exhibition, a connoisseur of enamelling and a great collector of jewellery, with major pieces by Baugrand, Falize, Castellani and Hancock. Between 1867 and 1878, six years after the enamellist's death, Dudley bought seven jewels with translucent enamelling by Riffault from Boucheron. Boucheron, who had bought the patent from Riffault's widow, continued to use this particular technique for several years. The wealthy iron master H.W.F. Bólcow was also an admirer of Riffault's enamelling and he acquired a set of bracelet and pendant cross, which he bequeathed in 1890 to the Victoria and Albert Museum.

In the 1870s, Frédéric Boucheron started to produce pieces for American clients; his meeting with Gideon F.T. Reed, vice-president of the New York firm of Tiffany and their director in Paris, was decisive. In Paris, Reed was buying quantities of jewellery for their richest customers and he



Diamond-set thistle leaf by Octave Loeuillard for Frédéric Boucheron, Paris 1880.

regularly stocked up at Boucheron. He bought for the Tiffany shops in New York, but he stocked the Paris branch at the same time, because many Americans visiting Paris stuck to Tiffany's itself, finding it more comfortable to shop at a firm they knew and felt they could trust. However he also introduced a valuable clientele to Boucheron. Frédéric Boucheron, with the assistance of his associate and nephew Georges Radius, who unusually had mastered English perfectly, did not hesitate to take on

the challenge of the American market and he was one of the very few representatives of the Parisian luxury trades to participate in 1876 at the Philadelphia Centennial Exhibition. Because she had admired Boucheron's display there, Mrs Clarence Mackay commissioned an important sapphire necklace from the firm in 1878.

At the Paris 1878 Exposition Universelle, Boucheron was awarded three Grand Prix. The public, the critics and the press admired the

jewels for their originality in design, for their choice of stones and the perfection of the settings. Frédéric Boucheron was careful to bring his collaborators, his artists, his designers and workmen to the attention of the juries; throughout his long life he was meticulous in giving credit to all those who worked for him.

His right-hand man, Jules Debut, was the originator of the most interesting pieces, among them the necklace bought by Sarah Bernhardt, a choker of 'fleurs des champs' with a second row falling in a garland in which diamonds, faceted coloured stones and open-backed translucent cabochon enamels combined to give a sparkling and novel effect.

The most sophisticated botanical jewellery was made by Octave Loeuillard, workshop manager from 1865 to 1878.

Always inventive, Frédéric Boucheron did not reserve his new introductions for the Universal Exhibitions, but dressed showcases with the latest fashionable pieces from his finest suppliers. Eugène Fontenay, for example, supplied him for nearly twenty years.

He made jewels and precious objets in the unusual techniques and materials which were his speciality, prodigies of inventive workmanship, of refinement and fantasy. Between 1865 and 1880 the foremost chaser and damascener, Tissot (1815-1887) produced bracelets, medallions, chatelaines and cuff-links in gold-inlaid steel, a technique formerly practised only by silversmiths and armourers. For jewels and small leatherwork items, Rhône used silver mounts with pierced and engraved grotesque ornament taken from the ornament prints of Giovanni Orlandi, printed in Naples in 1637. Quantities of items made of red gold with polished facets came from the manufacturer Alfred Menu (born 1828); Louis-Armand Rault (1847-1903) produced chased steel pins and gold medals.

Paul Legrand, who ran the workshop from 1879 to 1889, had

the notion of transforming the traditional pearl necklace by inserting circles of diamonds, pierced and cut in facets by C. Bordinckx (died 1892). C. Bordinckx was the foremost western practitioner in cutting diamonds in the rough and engraving them. His son continued his work after his death. Legrand was also the inventor of the 'question mark' necklace, with its patent spring mechanism, the main talking point of the 1889 exhibition. It was formed of a gem-set open circle round the neck with a trailing end of grapes, or leaf and fruit of the plane, lotus flower or peacock's plume. Exotic and colourful objets d'art were a feature of that same exhibition, among them the 'dragon' vase carved in rock crystal by Varangoz, with mounts of cloisonné enamel.

After having twice expanded his premises in the Palais-Royal (1869 and 1876), Boucheron, well ahead of his competitors, moved on in 1893 to a fashionable location at 26 de la Place Vendôme on the corner

of the rue de Paix, the haute couture neighbourhood. Formerly the premises were occupied by La Maison Normand, which sold bronzes by the sculptor Barye, paper goods and toys; Empress Eugénie frequented the shop at Christmas time. The new shop was decorated in the fashionable Louis XV style, with curved boiseries to create a warm atmosphere where clients would feel comfortable. The original interior of the Palais-Royal shop was installed in the Boucheron branch which opened in Moscow in 1897.

In 1900, Boucheron won a Grand Prix yet again, as he continued to astonish critics and the jury with his inventiveness, with, for example, the flowers and insects with petals and wings of engraved diamonds by Bordinckx *filis*. Auguste Bugniot (born 1873) designed large corsage ornaments made with flower sprays, and necklaces and tiaras of water plants. Unusual jewelled pieces were made by Charles Arfvidson, including diamond-set chains composed of chased and blued steel. The

enameller Lucien Hirtz (1864–1928) designed numbers of silver pieces, and the sculptor Edmond-Henri Becker (born 1871) made items in box-wood with gold mounts, such as umbrella handles, fans, boxes and clocks.

When Frédéric Boucheron died in 1902 his son Louis Boucheron (1874-1959) took over the management of the firm. In 1903 a branch was opened at 69 Piccadilly; it transferred in 1908 to 180 New Bond Street, where it remained until 1996. A branch in New York was established in the same period.

Marie-Noël de Gary illustrated her marvellous lecture with previously unseen designs for plique-à-jour enamels and gem-set jewellery, and archival photographs of long-lost pieces. Her detailed biographical information concerning Frédéric Boucheron was fascinating and provided insight into the man whose enterprising spirit and imagination founded one of the most successful firms in Paris in the latter half of the nineteenth century, and one of the few to survive to this day.

Burma ruby and new corundum treatments

Talks by Richard Hughes to Gem-A members

During his visit to Europe in June, Richard W. Hughes gave presentations to Gem-A members in London and Edinburgh. Both meetings were well attended, with a 'full house' of over 80 members and guests in London.

Dick Hughes is one of the world's foremost authorities on ruby and sapphire and has travelled extensively through the world researching the true origins of gemstones and also visiting the facilities where gemstones are treated. He is currently webmaster at Pala International (www.palagems.com) in Fallbrook, California.

Corundum treatments

In 1987, Dick brought a then-controversial message to

the International Gemmological Conference in Brazil that the future would not involve identifying synthetics so much as separating increasingly sophisticated treatments of natural stones. Such activities have indeed continued to grow and in the lecture he demonstrated the visible effects of such treatment with regard to the new 'bulk' diffusion of yellow, orange and red corundums and the flux healing of fractures in Mong Hsu ruby.

New bulk-diffusion treatment

Dick Hughes then outlined the problem relating to the new bulk-diffusion treatment seen in golden yellow sapphires through to rubies but particularly affecting the trade in pink/orange sapphires. Hughes first became aware of the stones in

October 2001 via Australian Terry Coldham, who had seen them in Chanthaburi, Thailand. They were described as being the result of a new heating process. In December 2001, Ken Scarratt of the American Gem Trade Association (AGTA) Gem Testing Center purchased some in Bangkok. Upon returning to New York and immersing the gems, he discovered unusual surface-conformal colour rims and so contacted Hughes to see if he had noticed anything unusual. Dick proceeded to examine stones recently purchased by Pala International in Bangkok and found identical features. From this point on, warnings were quickly sent out via the internet, rapidly spreading around the world.

Gemmologists were initially puzzled over the cause of these colour rims, which consisted of yellow haloes surrounding pink cores (with the overall colour of the gems being orange to pinkish-orange). Then Hughes received a call from Dr John Emmett, one of the world's top experts on corundum, who suggested the features resulted from an outside-in 'bulk' (surface) diffusion of light elements, producing trapped-hole colour centres. While the colouring mechanism and elements are different, the process is essentially identical to that used to produce blue bulk-diffusion sapphires.

Further study of the stones by the AGTA and GIA using advanced trace-element analysis techniques (SIMS and LA-ICP-MS) revealed high concentrations of beryllium in the coloured layers, decreasing towards the core. The source of the beryllium is not known for certain and how it affects colour is not yet understood, but both John Emmett and Swarovski & Co have experimented by heating sapphires with chrysoberyl in the crucible and have succeeded in reproducing the same colour range.

In some cases, the treatment is detected by immersing the stone in di-iodomethane and observing an orange rim and a pink core to the stone. But in the case of yellow stones, where the colour may penetrate all the way through to the core, detection is far more difficult. The GIA and AGTA labs are currently working to develop means of detection for these.

Dick Hughes made the significant point that the internet allowed the trade to react to the discovery with unprecedented speed. For the first time in recent history, it was the producers of a fraud which were left holding the goods, rather than unsuspecting dealers, jewellers and the general public. Apart from large sales in Japan, where it has been reported that over 10,000 'heat only' certs have been issued and many more stones sold, the majority of goods

have been left in the hands of producers in Thailand.

The difference in attitudes is telling. In Thailand and Japan, where the goods rapidly penetrated the market, the attitude has been one of denial, where both dealers and labs have attempted to avoid full disclosure of the treatment or explain it away as ordinary heating. Contrast that with the US market, where traders have been able to make unbiased judgments because they do not own the goods.

Flux-assisted fracture healing of Mong Hsu rubies

Burmese rubies from the Mong Hsu mines were the next focus of attention. While rubies from the famous Mogok mines require no treatment, over 99% of those from Mong Hsu have been treated. And in the last decade, over 95% of the rubies sold around the world first emerged from the ground at Mong Hsu. This treatment is greatly misunderstood.

A picture of two piles of Mong Hsu stones, one before and one after heat treatment, was a graphic illustration why this process is carried out. Not only is the colour dramatically improved, but also the almost ubiquitous fractures in the natural rough stones are greatly dissipated. Dick Hughes made the point here that flux combined with high-temperature heating produces significant healing of fractures. Similar to joining two pieces of metal with a torch and a flux, this treatment welds fractures closed. Thus the process is one of flux healing and not glass filling.

He argued that it is wrong to think in terms of fractures being filled with glass – the fractures are healed by partial melting and recrystallization to form what is effectively synthetic ruby. Even though the amounts of residual flux present in healed fractures are only micrograms in quantity, they have had a disproportionate and significant effect in improving the clarity and durability of the stone. Paradoxically, the more residual flux

observed in a fracture of a stone, the less effective the heat treatment process has been. Thus, while a perfectly healed fracture with little residual flux is often the result of more effective, longer flux-healing heat treatment, some laboratories misinterpret large quantities of residues as being indicative of a heavier level of treatment. In fact, the reverse is true.

Mogok rubies

From here, Dick switched gears, to discuss natural gems, specifically those from Burma's Mogok Stone Tract. Hughes first visited Burma when he was 19, but it was not until the 1990s that he was able to visit Mogok itself. After recounting the early history of mining in the area, he then concentrated on the renaissance of mining in the 1990s. He described the love of the Burmese for the sound of water – countryside it sustains their paddy fields and their staple diet of rice, and for those at the mines it washes the mud from the rubies!

The different kinds of mining – alluvial extraction, and excavation from cracks in the limestone/ marble – were illustrated. Examples of the 'run of mine' and some exceptional crystals obtained were also shown. In Mogok, the marble host to the rubies and red spinels is itself exceptional – being unusually coarse with fist-sized crystals of calcite common in mine tailings. It is traversed too by cracks and fissures which may extend for miles (a 5000 ft rope did not reach the bottom of one crack), and several mining claims may be located along one crack.

In the speaker's opinion, the beauty of cut and polished rubies from Mogok depend on their colour, fluorescence and the nature of their inclusions. Absolute clarity, he said, was not a desirable characteristic in a ruby, for clear stones almost always showed some 'extinction' (black facets). The advantage of the fluorescence in daylight of Mogok rubies and their wisps and clouds of

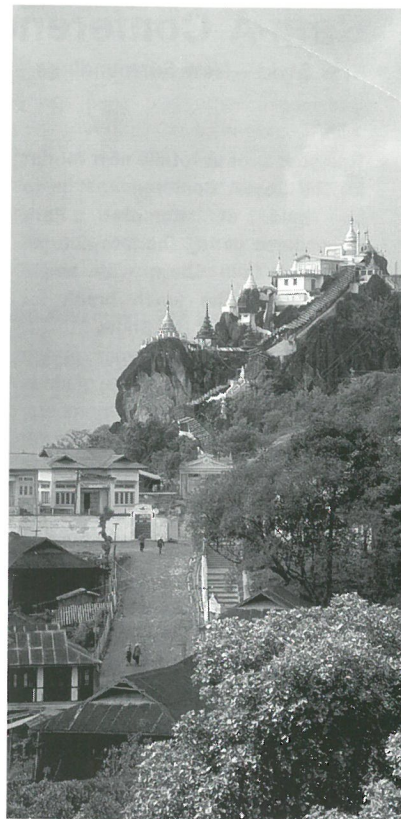


Spinel and ruby on a brass plate in a Mogok, Burma, market. Photo: Richard Hughes.

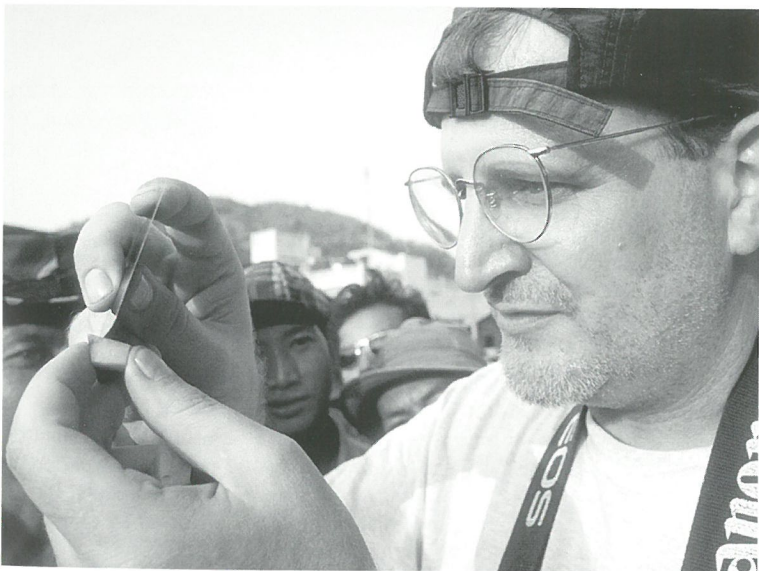
very fine rutile silk was that the internal light was dispersed and tended to minimize the impact of any dark facets.

Dick Hughes briefly mentioned other gem species found in the Mogok region – particularly peridot – and also mentioned that within the past eight months another painite crystal had been found.

He concluded with the legend of the Nga Mauk ruby. Many years ago a miner found an exceptional crystal, at a time when any gem beyond a certain value belonged to the king, of how the miner struggled with his conscience about the conflict between loyalty and the need to support his family, and of the compromise he adopted and of the



Kyaukpyatthat-ashe village in Burma's Mogok Stone Tract. Some of the world's finest sapphires are found in the vicinity. Photo: Richard Hughes.



Richard Hughes examining jadeite in Mandalay's jade market. Photo: Fred Ward.

gruesome retribution exacted by the king.

Times have changed, but even today the struggle to bring these stones to market is still violent and difficult, truly 'beyond rubies'. And yet people continue to seek them out, knowing the risks. What is it that draws us to rubies? Hughes found his answer to that question atop a hill above Mogok. What was it? Sorry, we won't spoil it. To find out, you'll have to catch Dick's lecture yourself.

Thanks are due to Richard Hughes and Stephen Kennedy for amendments and comments.

Roger Harding

Gem-A Conference 2002

New Style – New Surroundings – New Content

This year sees a totally new format for the Gem-A Conference. It is to be held at Kempton Park Racecourse during the late autumn Rock 'n' Gem Show, with ample time during the lunch break for delegates to visit the Show.

The Gem-A Conference is the ideal forum for the exchange of ideas and experiences between members. This will be a day of indulgence for anyone with an interest in gemstones, with lectures ranging from the inclusions in gemstones and what may be learnt from them, to the minerals to be found in England and Wales, and the use of coloured stones in jewellery.

The Conference will open at 10:30 a.m. with a welcome by the President, Prof. Alan Collins, and close at 5:00 p.m. There will be a break of approximately 1½ hours at 12:45 p.m. to allow delegates to browse (and buy!) at the Show, and to make their own arrangements for lunch (not included in the fee). An optional dinner will be held following the Conference at 6:00 p.m.

Two sessions

This year the Conference has been divided into morning and afternoon sessions, each comprising two lectures with tea and coffee between, and you have the option of booking for just one session.

The fee for the full Conference is £40 for Gem-A members (£45 for non-members) or for one session only (morning or afternoon) the fee is £25 for Gem-A members (£30 for non-members). The fees include attendance at lectures, entry to the Rock 'n' Gem Show, tea and coffee, and VAT. The optional dinner is £25 a head.

For further details of the conference and visits to the DTC and 'The Jewels of JAR, Paris' exhibition, contact Mary Burland at Gem-A (tel: 020 7404 3334 e-mail: gagtl@btinternet.com).

Programme

Morning session – 10:30 am to 12:45 p.m.

Inclusion and chemical fingerprints for sapphires and rubies

Prof. Andy Rankin

A range of modern analytical techniques including Laser-Raman Spectroscopy, Laser-IPS-MS and Electron Probe Microanalysis has recently been applied to the analysis of liquid and solid inclusions in gemstones. Trace element signatures and inclusion characteristics are a useful guide for fingerprinting the genesis and provenance of gemstones. The uses and applications of this approach are illustrated with particular reference to gem deposits from Malawi and Thailand.

Some sites of precious minerals in England and Wales

Dr Bob Symes, FGS OBE

This talk will consider the occurrence of various minerals and rocks from England and Wales that have been worked as decorative or semi-precious stones. For example, hematite, agate, fluorite and gold will be included.

Afternoon session – 2:30 to 5:00 p.m.

KEYNOTE LECTURE

The diagnostic mineral inclusions of the garnet group

Prof. Dr Edward J. Gübelin

The mineral inclusions in the garnet group enable you, usually at first sight, not only to immediately identify to which species and variety a garnet under examination belongs, but in many cases also from which deposit it originates.

Women's self purchase and the coloured stone

Stephen Webster

The lecture discusses the broadening of the colour palette in jewellery as a reflection of the increase in self purchasing by women.

Additional events for Conference delegates

The visit to the DTC and the guided tour of the Crown Jewels to be held on Tuesday 5 November are now *fully booked* but we are pleased to announce that additional visits have been arranged.

Monday 4 November 10:00 a.m.

Visit to the Diamond Trading Company

The DTC have kindly agreed to arrange an additional visit on Monday 4 November. Tickets for the visit are £7.50.

Tuesday 5 November 10:00 a.m.

Curatorial tour of the Jewels of JAR, Paris exhibition

To celebrate 25 years of creating spectacular jewellery, Joel Arthur Rosenthal (JAR), an artist in gems, will be showing 400 extraordinary pieces in this major exhibition. Craftsmanship and exuberant colours are the hallmarks of JAR. The tour of the exhibition will be conducted by Curator Phillippa Glanville. Tickets for the tour are £15.00.

Both events restricted to Conference delegates.

GEM-A AND SJH LONDON EVENTS

Details of times, venues and prices are given on p.80

25 September: Gem-A lecture

Notes from the Laboratory: Detection, disclosure and false descriptions

STEPHEN KENNEDY

Following the AGM, there will be an illustrated talk by Stephen Kennedy, Director of the Gem-A Gem Testing Laboratory. Stephen is a science graduate from Southampton University and joined the Gem Testing Laboratory in 1980. As a laboratory gemmologist he has a wide experience of testing all kinds of gem materials.

22 October: SJH lecture

Jewellery at the Great Exhibition

JUDY RUDOE

Judy Rudoë, Assistant Keeper at the British Museum, is also a longstanding Committee Member of the SJH. She has written widely on 19th-century jewellery and micromosaics: her publications include the two-volume *Catalogue of the Hull Grundy Gift of Jewellery to the British Museum* (as co-author, 1984); and the catalogue of the exhibition *Cartier 1900-1939*, which she organized at the British Museum in 1997. She is currently working with Charlotte Gere on a new book, *European and American Jewellery in the Age of Victoria*.

25 October: Gem-A lecture

Emeralds of Colombia. A visit to the emerald mining districts of Colombia, South America

JOSEPH TENHAGEN

From 1970 through 1987 Joe Tenhagen travelled to Colombia four or five times a year. During this period he visited all the emerald mining locations. He has visited and stayed at Muzo mine and other associated mines in the Muzo region on more

than twenty occasions as well as the Chivor mine and other associated mines in the Chivor region. These many trips to Colombia have provided an insider's look at emeralds in general and emerald regions of Colombia which have produced some of the finest emeralds in the world.

26 November: SJH lecture

Victorian Romantics: dressing up in the 19th century

CHARLOTTE GERE

Charlotte Gere has lectured on several occasions for the SJH and previously shared a fascinating insight into new and unusual topics on jewellery. She is an eminent 19th century decorative arts historian as a writer and freelance exhibition curator, specializing in jewellery and interiors. Charlotte has written extensively and her articles have been published in *Master Drawings*, *The Art Newspaper*, *The Burlington Magazine*, *Apollo* and *Country Life*. In addition to this lecture, she is also a guest speaker at the SJH Symposium 'Court Jewellers: Splendour, Finance and Intrigue' (26/27 September).

COMPETITION

I was approached by a large sporting organization who were planning to run a knock-out tennis tournament. Rather than give the winner of the tournament a large prize, they said that they would prefer to give the winner of each game a prize of a diamond. I pointed out that those who survived longer into the tournament would win more than one prize. They felt this would add to the interest and excitement of the matches. If there were initially 128 players, how many diamonds would they need? As usual with these puzzles, the method you use to arrive at the answer is as important as the correct answer. There is a short cut to the solution.

So let's see you *servicing* some answers in!

Solution to the last puzzle

Deep diffusion of corundum has become a complicated practical problem. Initially when deep diffusion was introduced natural white and very pale sapphires were used. The sources for such stones became scarce and prices rose. This is the reason that natural white sapphires are now so expensive and difficult to find. Many diffusion stones are now made by using synthetic white corundum. These come from the synthetic producers and cutters, are often calibrated and cost a few cents per stone. Rarely do

the producers of such stones declare their product as being synthetic. They sell them as diffusion sapphires and the buyer seeing a disclosure of the treatment assumes the stones to be natural. Often those who sell diffusion sapphires without any declaration at all, who try to pass them on as merely heated stones, are themselves deceived by buying what are in essence synthetic stones thinking that they are natural. So the next time you handle or sell a deep diffusion sapphire, try to make sure that it is a natural stone. So I needed to ascertain this aspect before I could sell my stone!

Harry Levy

Gemmological Association and Gem Testing Laboratory of Great Britain

London

Unless otherwise stated, meetings will be held at the Gem-A Gem Tutorial Centre, 27 Greville Street (Saffron Hill entrance), London EC1N 8TN. Further details of autumn meetings are given on pp. 78 and 79.

25 September. Annual General Meeting followed by STEPHEN KENNEDY

Notes from the Laboratory: detection, disclosure and false descriptions

(Gem-A members only – free of charge)

25 October. JOSEPH TENHAGEN

Emeralds of Colombia. A visit to the emerald mining districts of Colombia, South America

3 November. Gem-A CONFERENCE 2002

(details given on p. 78)

4 November. Goldsmiths' Hall, London. 6:30 p.m.

Presentation of Awards and Reunion of Members

Tickets £9.50 (Gem-A members and guests only)

4 and 5 November. Visits to the DTC (details given on p. 78)

5 November. Curatorial tour of 'The Jewels of JAR, Paris', exhibition at Somerset House (details given on p. 78)

5 November. Guided tour with David Thomas, Crown Jeweller, of the Crown Jewels at the Tower of London (fully booked).

Midlands Branch

Friday meetings will be held at The Earth Sciences Building, University of Birmingham, Edgbaston at 6.30 for 7.00 p.m. Admission £2 for a member. For further

information call 0121 445 5359.

27 September. RICHARD TAYLOR
Diamonds, certification, appraisal and valuation

25 October. ALAN HODGKINSON
Tucson surprises – the highlights of Tucson 2002

29 November. STEPHEN DALE
Fabulous Fabergé expert, auctioneer and buyer

7 December. Celebration 50th Anniversary Dinner
Venue: Barnt Green, Worcestershire

North West Branch

Meetings will be held at Church House, Hanover Street, Liverpool 1. For further details contact Deanna Brady on 0151 648 4266.

16 October. ROSEMARY I. McIVER
Jewels for a Royal occasion

20 November. AGM and social evening

Scottish Branch

For further details of Scottish Branch meetings contact Catriona McInnes on 0131 667 2199.

15 October. JOY BONNAR
Cameos

19 November. E. ALAN JOBBINS
The Crown Jewels.

South West Branch

Contact Bronwen Harman on 01225 82188.

17 November. 'Trick or Treat'
An afternoon of talks and practical gemmology.

Society of Jewellery Historians

Unless otherwise stated, all Society of Jewellery Historians' lectures are held at the Society of Antiquaries, Burlington House, London W1 and start at 6.00 p.m. sharp. Lectures are followed by an informal reception with wine. Meetings are open only to SJH members and their guests. A nominal charge is made for wine to comply with our charity status. Further details of autumn meetings are given on p. 79.

24 September. ANN LOUISE LUTHI

A history of hair jewellery.

26/27 September. Two-day symposium 'Court Jewellers – Splendour, Finance and Intrigue'.

22 October. JUDY RUDOE
Jewellery at the Great Exhibition

6 November. CHARLOTTE GERE
Victorian Romantics: dressing up in the 19th century

28 January 2003. Annual General Meeting followed by E. ALAN JOBBINS on Jade

25 February 2003. SARAH POSEY
Amulets across the Middle East, Central Asia and North Africa