

Gem & Jewellery News

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TESTING TIME FOR DIAMONDS

Recently scientists from De Beers DTC Research Centre, Maidenhead, UK, published details of two instruments designed to identify synthetic diamonds cut as gemstones (Welbourn *et al.*, 1996, *Gems & Gemology*, vol. 32, no. 3, pp. 156-169). These two instruments are called

DiamondSure and DiamondView, and can detect all currently known cut synthetic diamonds.

The technology to produce synthetic diamonds of cuttable size and quality has existed since the early seventies but only since the beginning of the present decade, when

Russian researchers started to produce synthetic diamonds in small-scale presses known as 'BARS' equipment, has the subject of the production of synthetic diamonds

received significant attention in the gem trade. A number of yellow to yellow-brown synthetic diamonds,

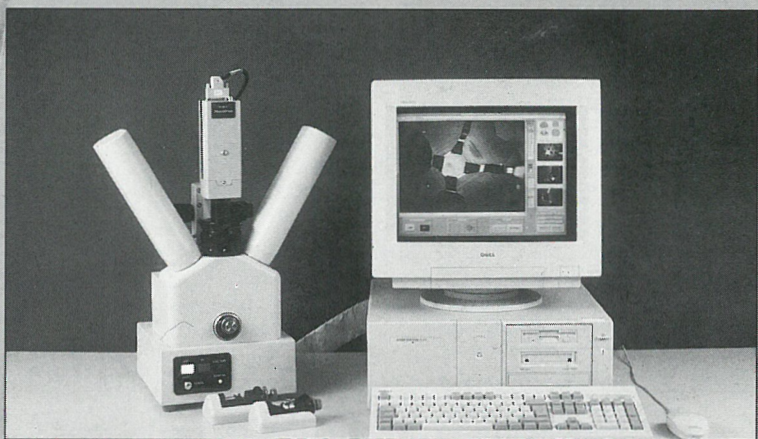
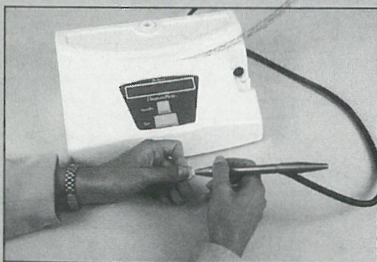
grown in Russia, have been offered for sale at recent gem and jewellery trade shows and a few have been submitted to grading laboratories. Particular concern has been expressed over recent announcements of the production and

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De Beers announces synthetic diamond detectors

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With the fibre-optic probe being held in contact with the table of a diamond set in a ring, the DiamondSure instrument automatically identifies this stone as natural by displaying 'PASS', having detected the presence of a 415 nm absorption line. If this absorption had not been detected, the message 'REFER FOR FURTHER TESTS' would have been displayed.



The DiamondView consists of a fluorescence imaging unit (left), in which a TV camera is located between two ultra-violet lamp housings, and a specially configured computer, the monitor of which is showing the distinctive growth-structure pattern of a synthetic diamond.

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EDITORIAL

As a new member of the editorial team I should like to introduce myself as a traditional jeweller, tackling the everyday enquiries from the general public and serving customers. This may sound quaint, but it makes one particularly aware of the burgeoning complex issues confronting front line jewellers.

Jewellery is about people; from the patron, through design and manufacture, to the finished product and the individuals who ultimately wear it, for whom it is very personal. All routes lead to 'the customers' who form the fulcrum of our whole industry; retail jewellers cannot exist without them, with museums and auction houses depending on the provenance of purchases which become heirlooms. A jeweller, like an architect, must have a working knowledge of a wide range of skills and procedures, not to mention the bedside manner of a doctor on occasions. The buck stops at the point of reckoning in the showroom, where the face that meets the public must be accountable.

Marketing has a colossal influence on people's attitudes and buying trends. The modern discerning public is less forgiving, expecting expert advice, a good service and quick results. The pressure to honour these requirements is coupled with added complications involving the widespread use of treated gemstones and other questionable practices, particularly when dealing with repairs and valuations. Responsibilities should not end when a transaction has been concluded and the ethical handling of a sale or service is paramount. Consumer loyalty is earned and there are no short cuts; therefore it is in everyone's interest to keep abreast of new developments. Training is essential and eminent members of the trade have repeatedly emphasized the merits of education.

A jeweller must constantly be alert to these new influences and has to juggle all manner of fast-moving situations. These challenges often become a lifelong commitment, and the reason why so many jewellers become dedicated to this profession. The front line jeweller relies on the loyalty, honesty and support of the trade where every step in the system plays a vital part.

The traditional jeweller with specialist knowledge and consultancy skills is now faced with other types of retail outlets trading in superficially similar items. What should the public expect to justify patronage of the former rather than the latter? C.P.

Members of the GAGTL wishing to raise issues concerning GAGTL activities are reminded that they may contact the Chairman of the Members' Council, Mr Colin Winter, c/o the GAGTL, 27 Greville Street, London, EC1N 8SU.

AROUND THE TRADE

In this column we endeavour to keep you informed of business matters affecting dealers from a trading perspective. We welcome views and questions from all readers handling gemstones and jewellery on a commercial basis.

Natural doublets?

During the normal course of business Chris Cavey recently purchased a collection of corundum crystals reported to have come from Beit Bridge in Zimbabwe. It consisted of a number of flat tabular blue and grey and pink/red specimens, some of which were up to 6 cm across. A number were flat and tabular but two specimens had a slightly distorted hexagonal outline and one showed some sign of 'barrelling', both of these being pinkish-red in colour. All the stones were still covered in mud and were in a freshly mined state so they had to be washed before their true quality and character could be assessed.

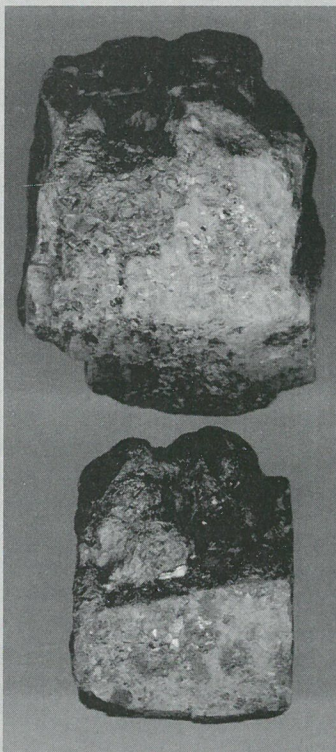
After cleaning, the pinkish-red stones were carefully examined

and were found to have a quantity of black mica crystals (probably biotite) adhering to their surfaces. After loupe examination it became clear that another translucent red mineral was present. Having seen a number of corundums from a wide variety of localities, Chris thought the other mineral was most likely to be a form of spinel. Having

observed the strong red fluorescence of the red corundum and none whatever from the other mineral in LWUV, he decided to examine the spectrum of the spinel-like material, only to find that it had a typical pyrope/almandine spectrum.

This was the first time that Chris had observed these two minerals co-existing, and what was more surprising was the size of the crystals as the larger specimen contained two garnets one of which was 3 cm across. The smaller crystal (lower illustration) has a group of three rounded garnet crystals attached (see the three crystals adhering to the top side of the lower specimen) and on the other side there are a number of distorted dodecahedral cavities with remnants of garnet crystals still present. After consulting several experts, Chris could not find anyone who had seen garnets of any size, let alone crystals up to 3 cm co-existing with pink/red corundum.

One amusing thought came out of this discovery – the possibility of cutting natural ruby/garnet or garnet/ruby doublets as gems!



Ruby with pyrope/almandine garnet inclusions from Beit Bridge, Zimbabwe

'Accepted trade practice'

David Callaghan chose a wonderful platform at the GAGTL annual Presentation of Awards to inform our next generation of jewellers of the problems they could encounter with treated gemstones (reports in the *Journal of Gemmology*, 1997 Vol. 25, No. 5, p. 378–80 and the trade press).

In it he made reference to 'accepted trade practice', a phrase that is a source of worry to many. As far as I am aware it came into prominence in the early days when the trade was trying to legislate its own trade rules through such bodies as CIBJO. It came about through pressure to preserve a somewhat minor part of the trade, for stones that were sold for a few pence each. Agates were popular, especially for signet rings, and colours such as black, red, blue and green were often obtained by staining colourless or pale coloured agates. Those who produced these stones thought that their trade would deteriorate if they suddenly had to declare such stones as 'stained' or 'dyed'. They claimed that this process was always applied, as was the oiling of emeralds, and after much discussion and argument the above phrase came into the literature and terminology of the gem trade. The irony is that the majority of these signet agates are now cut in the Far East and the cutters there, being unaware of the thinking of their European counterparts, refer to such stones as 'stained' or 'dyed' in all their literature and invoices. So one now buys, for example, 'dyed green agate' and the Far East cutters distinguish openly between the stained stones and the natural ones.

I find that the phrase has now acquired a somewhat Monty

Pythonesque stature. At international congresses where the problems of treatment are discussed, interested groups that do not wish to have a particular treatment proclaimed declarable, will argue their point and, if all else fails, will play their joker or super-trump-card – ‘accepted trade practice’ – and this brings an end to the debate and discussion.

The phrase has now become part of the language of the gem trade and is used to cover a multitude of sins.

Treatments

One extreme form of the argument is that most gemstones undergo treatments after being taken out of the ground, the first being cutting and polishing. Oiling, heating and fracture filling, are all parts of the process of beautifying a stone. All was well and acceptable until someone came out with a new process to make their stones more desirable than others on the market and that is when stockholders started to shout ‘foull!’.

Take the example of the heating of sapphires. The Thai cutters found that they could take inexpensive geuda sapphires from Sri Lanka and with specialized heating change the colour to that of stones worth much more. At first no-one spoke of this new process, until the traditional stockholders found much larger amounts of expensive looking sapphires on the markets and this forced the prices down. They found that cutters and dealers were able to undercut prices, no matter how low they were priced.

One of the factors affecting the price of a gemstone is its rarity. A ‘good’ large ruby is worth more than its equivalent ‘good’ sapphire because there are far less of them in nature. Similarly a perfect amethyst is worth less than a perfect emerald because there are many more fine amethysts than fine emeralds.

Another factor affecting the price is the labour charge in producing an article. The labour charge of producing a fine sapphire is no more

than producing a cheap one; they both come out of the same hole in the ground and undergo similar processes in cutting and polishing.

There were no moral, ethical or altruistic reasons for the clamour for declarations of treatments, and the clamour came not from the public but from the trade itself. The price of expensive sapphires came down and there was a demand to find ways of distinguishing stones that had been heated from their natural counterparts. It was felt to be ‘unfair’ that someone could buy insipid coloured sapphires which were plentiful and hence cheap, spend a few dollars in heating them, and then be able to sell them at prices many times those at which they had been bought. The cry of ‘Cheating!’ came from the trade.

Scientists and laboratories have become an integral part of the trade, and although they indirectly protect the public, the end user, they are there to serve the trade. This they do at present by pursuing ways of distinguishing stones that have undergone the new processes from those subject to traditional ones that have become part of the ‘accepted trade practice’.

Cutters, dealers and distributors then felt a need to distinguish stones that had been treated, arguing that it was to protect the public, but because the range of treatments resembles a continuous graph of both composition and degree of penetration, the problem has since been: which of the treatments should be declared? As I have tried to show above, in a simplified form, polishing a stone is a treatment, but no-one wants to declare this (other than in tariff codes and job description), whereas everyone wants the declaration of, say, the surface colouring of a sapphire to be mandatory.

Disagreements came over where the demarcation should be between what to declare and what to leave alone. Those who advocate ‘total disclosure’ often forget that they have already made a demarcation between what is disclosed and what

is not. Again these advocates say that everything should be declared other than cutting and polishing. However, almost all aquamarines are now heated to ‘change’ their colour, but I do not see a system being established where every aquamarine is labelled as ‘heated’.

It is argued by diamond cutters that they cut diamonds, not with saws or grinding wheels, but now also with lasers and they can ‘cut’ the inside of the stone to remove an inclusion, in the same way that they cut the outside of the stone to remove a flaw.

Enhancement

I recall at one of the CIBJO congresses a few years ago that some of the delegates came with literature and talk of replacing the word ‘treated’ with ‘enhanced’. They argued that it was detrimental and demeaning for the trade to advocate some of its products as ‘treated’. This confused the public into believing that the product they had bought was intrinsically bad and had been treated to improve it. We had gone for something ‘bad’ to something ‘better’. The connotation of the word ‘enhanced’ was that something ‘good’ had been made ‘better’. Producing countries and those who are strong on marketing techniques are winning the arguments by avoiding the use of the word ‘treated’ whenever possible.

Processing

There are those involved with marketing who feel that both the terms ‘treated’ and ‘enhanced’ are too emotive and can raise negative attitudes in potential buyers and that these terms should be replaced by the more neutral word ‘processed’. If we take this path, one can argue that the problem of what becomes declarable dissolves totally. Fracture filling is part of the process of making that particular stone suitable for marketing, those stones that do not need this extra work on them have not undergone the full process. Some stones need different process-

ing methods from others, and in this terminology there is no talk of treatments and enhancements. For those of us working in a traditional way in the trade such thoughts must be frightening.

I have attended congresses where delegates have come with motions to ban certain treatments being carried out and have even wanted to criminalize such activity. It has taken time to persuade such advocates that we live in societies where we cannot ban such processes; at best we can ask or demand that certain processes have to be declared at the point of sale, but our problem has been all along – which ones?

The present

The problem of declaration presently provokes confused and ambiguous solutions. Those involved with legislation for the trade will claim that they are in a holding situation until they can come to agreement about where the demarcation should be, so the situation is fluid.

Some claim that the division should come between those processes that give permanent and those that give transient results. To date the colour change of corundum through heating has been permanent as far as we can tell, so such a treatment would not have to be declared. But there are those who claim that unheated stones are worth more and a differentiation should be made, i.e. the heating should be declarable. We do not know the permanence of the colour change of, say, topaz through irradiation. In contrast, we now know that irradiation of kunzite can strengthen the pink colour but that over a long period of time (years), the colour fades. The oiling of emeralds is not permanent, but a very large part of the trade does not wish this process to become declarable.

Currently we have a situation with a prospect of progress. There are two distinct topics on which there is agreement, namely a group of processes that have to be declared and a group of those that do not. There is a third group on which

GEMSTONE PLAZA

International Jewellery London '97, the UK's leading jewellery trade event, takes place from the 7–10 September 1997 in Earls Court Two, London.

IJL '96 attracted over 6500 trade buyers who came to source new products, see new ranges and place orders for the peak Christmas season. A third of these visitors specified an interest in gemstones, indicating a need for a dedicated area. In line with this demand, 1997 will see the introduction of the **Gemstone Plaza** which will add a focus to gemstones.

In association with the GAGTL, jewellery manufacturers and retailers will be invited to view demonstrations and displays within a dedicated area. Stand space in the Gemstone Plaza is available to suppliers of gemstones and gemstone beads only. Exhibitors in this area will not only have the opportunity to meet with over 450 leading jewellery manufacturers but also over 6500 trade visitors.

Mike Allsopp, Exhibition Director, comments, 'We are thrilled by the support we are already receiving for this dedicated Gemstone Plaza which will offer visitors a wider range of products and services.'

75 per cent of available stand space has already been booked for 1997 which is expected to be bigger and better than ever before. If you are interested in taking part in the Gemstone Plaza, please contact Caroline Jones on +44 (0) 181 910 7963.

there is no universal consensus, e.g. the heating of gemstones or the fracture filling with substances other than clear oil with, say, a colourless resin. We do not at present declare this group but give a 'warning' by stating on our 'appro notes' and invoices that stones can be subjected to such treatments. We do not state that the stone being sold has or has not been subjected to this particular treatment, something specific which the buyer may want. To any purist this is an unsatisfactory situation, but that is what we have at present.

A major problem for many dealers and jewellers is that it is difficult to detect some of the processes. Few can distinguish whether an emerald has been treated with oil or a resin, and even laboratories may have difficulties. The only one who knows for certain is the person who has carried out the treatment. Even if this is declared at the point of sale, there is no guarantee that the declaration will be passed down the line. Thus we end up with a situation that dealers, no matter how honest, simply do not know for certain what processes their stones have undergone.

Attempts to boycott suspect cutters and dealers have generally not worked; all that happens is that the

supply of a particular stone dries up while people still want it, and this has happened with Colombian emerald. Some stones such as amethyst may be so cheap that it is not economic to test them to determine whether they are natural or synthetic. Reputable dealers are reputable, but if they are lied to and deceived when they buy their gems they cannot hope to monitor all their trade, especially the cheap end. They assume most of the corundums they now buy are heat treated from received knowledge, not from their own investigation, and now they are not in a position to guarantee that a stone has or has not been heat treated – unless they call in experts from the laboratory.

The future

Yes, jewellers do entice people to buy, as do almost all trades, be it in the sale of oranges or shirts; food stuffs are consistently tampered with to make them more attractive and saleable with treatments, for example, to improve their colour. This is a far more dangerous practice than colouring gemstones as the additives in food can be life-threatening.

I see no simple solution as the demand grows for clean stones with an even and good colour. The

demand from those who sell jewellery through mass markets is for each 'unit' of a certain type to be indistinguishable from other units of that type. In nature we can cut 100 amethysts and end up with a hundred shades of purple ranging from a pale lilac to an almost black purple. Manufacturers now demand 100 amethysts to be all of the same colour and clean, although they will end up in a hundred rings which will never be compared together by the end users. If there is a demand for thousands of identical stones and if nature cannot make it, man will find ways to achieve this.

Jewellery has traditionally been jewellery because each piece has been unique. Look in any jewellery auction, go to any antique fair and you will be hard pressed to match one piece with another.

Young and new jewellers love stones with inclusions or colour zoning. In their 'naïvety' they see the true beauties in stones, and yes, they also see the beauty in an evenly coloured and clean stone. Their art is not in the use of pure materials, but in their configuration with what nature has given us. Long may their naïvety survive before they become brainwashed by conventions old or new.

I am involved in organizations which are trying to sort out what we say and what we do not say about the treatments of gemstones. The problems have become so involved between so many vested interests, that we are now having meetings between congresses to prepare what is presented to the delegates, and even pre-in-between meetings.

For some time, I have been predicting that more and more stones will undergo modifications before they are marketed. At present we are trying to pick out those stones that have been treated, in future we will pick out those stones that have had the least done to them. This is already happening. Educated buyers now ask for 'unheated sapphires', stones that have not been irradiated to improve their colour, stones that

have not had their fissures filled. This demand is coming from dealers, jewellers, retailers and sections of the public. It comes from those who know. An educated buyer, no matter where he is in the distribution chain, will force the prices to adjust to reflect the availability of a stone. There is nothing wrong with a treated stone. It is when it is sold at a similar price to an untreated equivalent that the problems arise.

The answer to our problem of declaration lies in education not legislation. H.L.

A PLEA

SJH members will have received and, we hope, enjoyed, *Jewellery Studies 7*. *Jewellery Studies 8* is now being planned and we would remind members that publication is dependent upon suitable papers being submitted to the editors. Members of both the SJH and the GAGTL are urged to send any material that they think might be suitable. This also applies to *Gem & Jewellery News*. The more contributions received the better both publications will be.

MUSEUM NEWS

Ancient Faces: Mummy portraits from Ancient Egypt British Museum, 14 March–20 July 1997

This special exhibition at the British Museum will be of interest to all jewellery historians. It brings together some 200 portraits of the people of Roman Egypt from the British Museum's own collections and from other museums, and is accompanied by a detailed illustrated catalogue*. The pictures are funerary portraits, painted on shrouds, wooden panels and coffin lids; they recreate the faces of 2000 years ago complete with the details of their hairstyles, clothing and jewellery, and therefore provide a type of evidence which is familiar from much later periods but rare indeed from Classical antiquity. Many are of outstanding artistic merit.

The social and historical context of the paintings is explored in the exhibition and the material culture of the people commemorated in the pictures is explained and displayed. This includes many examples of Roman jewellery of the types depicted in the portraits.

* *Ancient faces*, edited by Susan Walker and M.L. Bierbrier, British Museum Press. £40.00 hardback, £18.99 paperback.



One of the paintings in the exhibition is this beautiful portrait of a young woman of the 2nd century AD from er-Rubayat in the Fayum. Her earrings are set with square emeralds and have pearl pendants, and her gold necklace is likewise set with emeralds and a large central garnet. (Photo: courtesy of the British Museum)

RECENT EVENTS

Faith, Hope and Vanity: Amuletic and Symbolic Jewellery

This one-day symposium was held by the Society of Jewellery Historians on 2 November 1996. The seven speakers covered an extensive chronological range, from ancient Egypt to modern times.

Two papers dealt with aspects of the ancient world, Eleni Vassilika's superb survey of Egyptian jewellery, and Dimitris Plantzos's study of astrological signs on Graeco-Roman amulets. The many complex messages and layers of meaning in beautiful ancient Egyptian ornaments which are so easily thought to be purely decorative may have come as a revelation to many in the audience. The focus of Plantzos's paper on zodiacal imagery likewise indicated a more complex system of belief than is obvious from a superficial examination.

For the medieval period, Denis Bruna's talk on prophylactic power in medieval popular jewellery revealed that in France as well as in Britain, base-metal (typically pewter) hat-badges were an important item of personal ornament, and that not all were classic pilgrim badges, recording visits to Christian shrines; some were expressions of secular superstition. Ronald Lightbown spoke on the wider theme of amulets and amuletic jewellery in the Middle Ages, and discussed in particular the contradictory and often confusing relationship between popular superstition and amulets of specifically Christian nature.

Martha McCrory focused on the court of the Medici in the sixteenth century, and brought out the survival of medieval beliefs alongside the growth of Renaissance rationalism as expressed in the collecting of stones and other natural wonders.

Dealing with the folk jewellery of a more recent period, Matthew Winterbottom familiarized the audience with the Hildburgh collection

of modern European (especially Spanish) amulets in the Victoria and Albert Museum, illuminating not only the range of popular protective charms in the collection but also the career of the collector, an eccentric American millionaire. Beatriz Chadour Sampson's paper concentrated on the eighteenth- and nineteenth-century folk amulets of the German-speaking Alpine regions, many of them made of organic materials not generally used for jewellery, and therefore stressing the

point that protection rather than decoration was their prime purpose.

The careful balance of lectures dealing with different aspects of the overall theme emphasised the universal importance of symbolic and protective elements in the design of personal ornament and ensured that everyone in the audience learned something new. The event was well attended, and the participants enjoyed not only the fine scholarly standard of the papers but a most excellent lunch.

C.M.J.

Testifying Jewels: some Women of Substance and their Bequests in Eighteenth-Century England

Lecture to the Society of Jewellery Historians by Marcia Pointon
20 January 1997

Jewellery historians are familiar with the situation in which substantive evidence of the artefacts of one century is destroyed as the next century re-makes its inheritance in forms that accord with new ideas about luxury and display. Historians Diana Scarisbrick and Shirley Bury, among others, have noted that, despite the paucity of jewellery surviving intact from the seventeenth and eighteenth centuries, written forms of evidence do exist. Historians have always favoured household inventories over wills, believing the former to offer a more independent and less personalised form of evidence for the possessions of individuals and families. It is precisely the personalised, and intensely invested, nature of wills that interests me. The writing of a will is a unique moment in an individual's life history, the moment when he or she turns their mind to a future of which they will not be a part, the moment at which they describe and define the material possessions they hold most dear in this world, the moment when they endeavour to assure the future of those possessions. My reading of a sample of wills written by women of means in eighteenth-century England, establishes a number of significant historical conditions for the consumption (that is the use in both the practical and the psychological sense of the word) of jewellery. I approach the texts of wills as literary documents, written or dictated at a moment of high personal significance. I believe that, contrary to popular view, women were by no means legally passive during this period and, analysing both the artefacts described and the way they are discussed, I suggest that women's relations with their jewellery was part of a wider structure of management of family assets. Such assets include portraits and items of furniture with specially strong family associations. Jewellery thus figures in the role that women play as guardians of memory.

Marcia Pointon

Over the past thirty years a number of gemstone rarities have passed us by like fragments of a visiting comet. Most are quickly forgotten although some reappear as new deposits are worked. But who now remembers cut stones of vanadium kornerupine, dark green chatoyant nephrite [strictly actinolite], red tourmaline with very high birefringence, chromium-bearing kyanite (blue rather than green)?

Here are some that I remember. **Vanadium kornerupine** came from Kenya and was a fine bright apple-green, quite unlike the recognizable brownish-green seen in the majority of kornerupines. I have not seen a specimen on the market (to which it hardly penetrated) since the early 1970s. **Chatoyant 'nephrite'** (a preferred selling name) also appeared at about the same time though there have been a few specimens sold later. Stones had quite an attractive dark green body colour with a fairly broad whitish eye. The highly birefringent red **tourmalines** (only small stones) came to my notice in 1977: they came from the Chipata area of Zambia. The notable birefringence was measured at 0.030, the specimen being, probably, an Fe-rich dravite. A red tourmaline from Kenya was also reported; this had an unusually high refractive index of 1.623–1.655, perhaps another Fe-rich dravite.

Still with the tourmaline group, what happened to the very attractive yellowish-green stones, some reaching quite large sizes, which were at the time known as **'tsilaisites'**? Some specimens at least were reported as coming from Zambian pegmatites and some showed a manganese absorption spectrum. The green chrome and/or vanadium tourmalines from East Africa are now much less often seen. This (and other cases of sudden rarity) may arise because miners find saleable specimens of other, better-known materials. The blue-green chrome kyanite (faint colour change from

reddish in incandescent light to blue-green in daylight and sometimes a Cr absorption spectrum) came from East Africa.

Benitoite in its blue form still turns up (expensive) but colourless stones with a strong orange fluorescence are much rarer since the material may not be considered worth cutting. The fluorescence is beautiful, particularly since it is unexpected in a colourless stone. What about large, brown transparent axinites with clove-brown and violet among the pleochroic colours? This material usually comes from Baja California, Mexico.

While **barite** may be found in different colours, the pale blue stones from Colorado seem to me especially attractive. The material (from the Sterling area) forms fine crystals which naturally are rarely cut. Faceted colourless and yellowish-brown stones of English barite are

WHERE ARE THEY NOW?

rarely on the market.

Colourless **beryllonite** is hard to find, though specimens do turn up. Almost invariably they will be from the pegmatites of Stoneham, Maine.

Deep red **manganotalite** came from Mozambique and from some places in Minas Gerais, Brazil. Faceted stones are still a rarity, not only because workable material is rare (and good crystals should be left as they are) but also because there is a distinct cleavage. Nonetheless, the stones are beautiful, occurring, like so many of our rarities, in granite pegmatites.

Man-made stones can be rarer than natural ones on occasion. The traditional textbooks (including mine) cite Verneuil-grown spinel as a good alexandrite simulant. Such stones do exist – I have seen two or three in 30 years! The colour-change is excellent and far more alexandrite-like than the V-doped corun-

dum (a much better imitation of amethyst!). Doped rutile is sometimes seen but doped strontium titanate is far more difficult to find. Lithium niobate (birefringent and sometimes doped diamond simulant) is beautiful and *very* rare now.

While we are still in the 1970s (a great decade for artificial materials) we must not forget the amazingly convincing **diamond simulants** which have a base of strontium titanate and a top of some other, harder colourless material, perhaps synthetic corundum or spinel: later CZ was used. I use the words base and top because the join was usually either above or below the girdle, so that crown and pavilion would not be accurate. When small, these stones must have caused some trouble: strontium titanate *melée* (not doublets) are also very hard to distinguish. The firm of Naftule, with offices in Switzerland and the United States, produced a good deal of these stones.

Probably someone, somewhere, has made a collection of **composites**: if so, the products of Johann Lechleitner should be sought, not just for the overgrown emeralds but for the specimen (perhaps there was only one) which had a topaz crown over something green to make an emerald simulant!

Russia is now producing a number of fine gemstones but the dark orange **danburite** could become another ship passing in the night! I saw a few superb specimens about three years ago but they have not featured strongly in *World of stones*, the Russian mineral and gemstone journal: danburite crystals are collectable for their own sake and specimens of this colour and of a size appropriate for producing quite large faceted stones would not often be cut.

We may continue this list of rarities – which compare in some ephemeral way with birds of passage – and comments would be useful. M.O'D.

SOME REFLECTION – NO REFRACTION

Reminiscences by Alec E. Farn, a Vice-President of the GAGTL

Recently I had a request from the insurance group concerning my pension which asked for an independent witness of my continued survival. I was somewhat surprised but realized that this was a sign of the times in which trust is less widespread than it seemed before.

The request stimulated retrospection on my part on the years spent in the Laboratory of the Diamond, Pearl and Precious Stone Section of the London Chamber of Commerce and Industry, better known in Hatton Garden as 'The Lab'.

I was employed for nine years before the 1939–45 War in the retail jewellery and pawnbroking trade followed by six years' service in the Army, 1940–46. I joined the Hatton Garden laboratory in 1946, the same year as Robert Webster and was the veriest tiro to three giants of gemmology, namely Basil Anderson, C. J. Payne and Robert Webster.

I am no longer closely in touch with the world of gemstones, dealers, merchants or any of the colourful kaleidoscope of personalities in Hatton Garden who visited the laboratory either clattering downstairs to the semi-basement of number 15 or puffing upstairs to the second floor of number 55.

I think the most impressive aspect of those early days when I was the junior was the trust that existed between the trade members themselves and the staff members of the laboratory. Trust was implicit. It wasn't something which suddenly happened. My very small room at No 15 faced directly onto the door with the small 'Judas window' at which callers appeared. We weren't



The author, second from left, working with the laboratory team in the postwar years.

very security minded at that time, but that changed when we moved to number 36 Greville Street *circa* 1976/77 where we installed closed circuit TV on advice from the police.

At number 15 the basement was approached by a wooden staircase which reacted like a sounding board. One pearl merchant in particular was always in a hurry; and he could easily be recognized by his heavy hurrying tread as he literally thundered down those stairs. As I opened the small hinged window he would thrust a pearl necklace through into my hands and say, 'When?'. If I asked, 'How many pearls?' he would reply, 'I don't know – I've only just bought them'. On telling him when they would be ready he would thunder just as noisily up the stairs back to 'The Bourse' in search of further business.

Another easily recognized footfall was that of a particular taxi driver. His was the slow, heavy tread of an

older man plus the clink of his cabby's badge against a coat button. The cabby was employed by one of Hatton Garden's most eminent merchants who had the *entrée* to all of the finest jewellers in London's West End. The taxi served as a secure protected means of carrying jewellery of considerable value around the West End and the precincts of Hatton Garden. The taxi driver was a lugubrious individual, very proud of his employer and the trust placed in him to deliver and collect jewellery from the laboratory. There were other readily recognized messengers who carried quantities of valuable jewels and jewellery to us for testing. They too used taxis and often came from the important auctioneers with consignments containing a large proportion of pearl necklaces and pearl-set jewellery. Pearl testing became my responsibility following the retirements of B.W. Anderson, C.J. Payne and Robert Webster.

In the earlier days, we did our own bookkeeping and had a daily

reminder of who were our best customers. Then the National Association of Goldsmiths accounted for 40 per cent of our gem testing income. The Gemmological Association, in the same building as the NAG were more closely concerned with education, classes, exams and correspondence courses. I was always impressed with the care taken by the staff of the NAG and the GA in the handling of the jewellery they sent to us from their members. Small strong manila envelopes were used to hold small items, each bearing their control number and the initials NAG or GA as the case may be. Brief descriptions of the contents and instructions on the test required were typed on each envelope, e.g. 'Test oval cabochon blue stone centred in three stone ring' or 'Test 113 graduated pearl necklace with three stone clasp'. On one occasion a larger than usual package was sent in which was a cardboard box containing a subtranslucent vanity case about 12" x 6" x 2". The typist had accurately, and also gemmologically, described the contents with the request, 'Please test case in box'. I smiled as I looked at the case and her unconscious word-play. I did the test and proved that it was indeed a casein vanity case.

Webster's 1937 *Pocket Compendium* describes casein as a synthetic substance made from the albumen of milk and used occasionally as an imitation of amber. In a much later and enlarged edition revised by Alan Jobbins, casein is described under the heading, 'Plastics (thermo setting types)', as 'a formalised product of the casein of milk, producing a horn-like substance . . . The material makes an excellent imitation of tortoiseshell, and to some extent amber and ivory.' I was interested in the two descriptions of casein and in the word itself.

In my copy of *Chambers Dictionary of Science and Technology* (a gift from Basil Anderson) casein is described as 'The principal albuminous con-

stituent of milk in which it is present as a calcium salt'. Transformed into insoluble paracasein (cheese) by the action of enzymes. Casein is a raw thermoplastic material used for insulators, buttons, artificial fibres, etc. Also used in adhesives and nerve-tonics. Perhaps a nerve- tonic containing casein would be appropriate to stimulate those sitting their Diploma Practical?

I am proud to have been one of four original London Chamber of Commerce employees who retired in that employment. They were once described by B.W. Anderson as a 'phalanx of four'. One of the laboratory's great gemmological friends and a real gem enthusiast was Mlle Dina Level of the Paris Chamber of Commerce gem testing laboratory. Writing of her 40 years behind the binocular microscope and 40 years of enthusiasm she said, 'Ah!, si c'était à refaire! Je le referais.' And so would I.

ICA CONGRESS Brazil 1997

The 1997 Congress of the International Colored Gemstone Association (ICA) is to be held from 13 to 17 July at the Ouro Minas Palace Hotel in Belo Horizonte, Brazil.

The agenda is full of interesting topics, including Raman Spectroscopy and Hong Kong's role in the gem industry after 1997, and delegates will get all the latest news from the producing countries, in particular Brazil and Colombia. An Inter-trade Auction is scheduled for 16 July, and the Congress will be followed by a gemstone trade show to be held from 18 to 20 July at Minascentro in downtown Belo.

For further details of the Congress contact Harry Levy on 0171 242 4547.

ISLAND OF GEMS

The exhibition on gems and the gem Industry of Sri Lanka



The first ever exhibition on gems and the gem industry of Sri Lanka organized by Don H. Ariyaratna, FGS, FGA, DGA, of Sri Lanka Gems was held recently at the Commonwealth Institute, Kensington High Street, London on 16 and 17 November 1996. Many visitors attended the two-day exhibition and some of the visitors had arrived from Norway, Denmark, Switzerland, Kenya, France, USA and Sri Lanka. Our picture shows the High Commissioner for Sri Lanka in London, His Excellency Mr S.K. Wickramasinghe, cutting the ribbon to open the exhibition to the public. On the left is Don Ariyaratna the chief organizer of the exhibition.

EDUCATION

New Enhancements in Gem Education

It is over ten years since the GA gemmology correspondence course notes underwent their last major revision. These notes, in their fine blue ring binders, have reached students in many countries around the world. In this time, there have been important developments in the world of gem discoveries, trading, treatment and testing, as well as in study and education. In GA education there has been a steady reduction in the proportion of students studying at home and this is a trend reflected worldwide. Throughout this time of transition we have developed the Allied Teaching Centre system whereby the Association's course notes and examinations are provided at a unified price in the UK and overseas. As a consequence, there are now many more gemmology tutors working with our course. Formerly, our course notes were not used by most colleges or their students and the notes had been written with home study primarily in mind. Whether for home or college study, tutors and students should be able to use up-to-date information that follows the syllabus in order and content. Concurrently, we are reinforcing our drive for better practice in gem observation by introducing an observational element into the Preliminary examination. From June this year, all Preliminary examination candidates will be asked to use their lens and pen-light on gem specimens to report on aspects of their observation. For all of these reasons, GAGTL is now issuing its brand new set of Preliminary course notes, accompanied by a Gem Observation Guide (also available separately from GI Ltd.), a reference book, a hand lens, a pen-light and a

Your DGA in only four months!

With growing interest in diamond grading the GAGTL will be introducing an intensive daytime Gem Diamond Diploma course from September 1997. This new course has been established following the success of our nine month Gemmology Diploma course which attracts students from Africa, Canada, China, Hong Kong, and Taiwan, Japan, Korea, Israel, Malaysia as well as from Europe and the home countries.

The new diamond course will run on Thursdays for 16 weeks with a choice of two start dates, one on 11 September 1997 which will take students up to the January 1998 exams and the other on 12 February 1998 which will run until the June 1998 exams.

An added advantage of a daytime course is the chance for students to gain extra course experience with the microscope in addition to the standard practical training already offered on our evening courses. The course covers diamond rough, and the colour, clarity, cut and symmetry of cut stones as well as simulants and synthetics.

This new course will complement our nine month gemmology course and will give students the opportunity to complete both the Gemmology and Gem Diamond Diplomas in just over one year of study.

The courses now offered at the Gem Tutorial Centre from September 1997 to June 1998 are:

September 1997

9 month daytime Gemmology Diploma	Monday and Friday
16 month evening Gemmology Diploma	Monday and Tuesday
4 month daytime Gem Diamond Diploma	Thursday

October 1997

8 month evening Gem Diamond Diploma	Thursday
8 month evening Gem Diamond Diploma	Friday

January 1998

16 month evening Gemmology Diploma	Monday and Tuesday
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February 1998

4 month daytime Gem Diamond Diploma	Thursday
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For further information on any of these courses contact the GAGTL Education Office on 0171 404 3334 or fax 0171 404 8843.

diamond structure model kit, all in a single pack. The initial reaction has been very positive, and further developments along these lines will be incorporated in the Diploma in Gemmology and Gem Diamond Diploma courses. We have already received requests from former stu-

dents for a set of new notes so that they can update their knowledge acquired perhaps some time ago. The Education Office would be delighted to provide details of the new materials: just ring 0171 404 3334 (+44 171 404 3334 international) or fax 0171 404 8843.

GAGTL Gem Tutorial Centre

- 25 March** **Crystals–Nature's Wonders**
A chance to see a wide variety of crystal wonders, inside and out. Find out how crystalline materials affect the way we see things.
Price £37.00 (including sandwich lunch)
- 26–27 April** **Two-Day Preliminary Practical Workshop**
This new course is designed to help students prepare for the Preliminary examination by providing the opportunity to see first hand the material discussed in the notes.
Price £131.60 (£94.00 for GAGTL registered students) – includes sandwich lunches
- 19 May** **Pearl Course**
A new course organized by the *Retail Jeweller* to help retailers distinguish between natural, cultured and imitation pearls and evaluate quality, as well as providing a guide to pricing. For further details call Lynda Bresgall at the RJ on 0171 417 2865.
- 20 May** **Review of Diploma Theory**
A day for Gemmology Diploma students to review their theory work and to prepare for the Diploma theory examinations. Advice on the consolidation and revision of facts, figures, principles, practical techniques and instruments. Let us help you to review your examination technique with the help of past questions. This review would help students who intend to enter the Diploma examination in June 1997.
Price £51.70 GAGTL students £37.00 (including sandwich lunch)
- 24 and 25 May
or 31 May
and 1 June** **Two-Day Diploma Practical Workshop**
The long-established intensive practical course to help students prepare for the Diploma practical examination; also highly effective for those in the trade and elsewhere to brush up on technique. This is the course to help you practise the methods required to coax the best results from gem instruments. The course includes a half-length mock exam for you to mark yourself.
Price £170.00 (£122.20 for GAGTL registered students) – includes sandwich lunches
- 28 May** **Review of Preliminary Theory**
A day for Gemmology Preliminary students to review their theory work and to prepare for the Preliminary examinations. Advice on the consolidation and revision of facts, figures, and principles. Let us help you to review your examination technique with the help of past questions. This review would help students who intend to enter the Preliminary examination in June 1997.
Price £51.70 GAGTL students £37.00 (including sandwich lunch)
- 14 and 15 June** **Weekend Diamond Grading Revision**
This intensive weekend course has been designed for all students about to take the Gem Diamond Diploma. This workshop will include a mock examination to help students gain familiarity and confidence with examination conditions.
Price £141.00. Starts 10.00 a.m. Saturday
- 5 and 6 July** **FEEG preparation for FGAs**
A session to prepare Fellows for the new European examination in gemmology under the auspices of FEEG.
- 8 July** **FEEG examination**

NOTE!! All prices include VAT at 17.5%

Please ring the Education Office (0171 404 3334) for further information

An Urgent Request

Please will all members and their acquaintances search into the inner recesses of their 'bit-boxes' and around the darkest corners of desks and workbenches for those unwanted cabochons, doublets, beads, pastes, diamonds and any other gem materials that they no longer need. Such gems may still have lots of life in them and if you send these to Ian Mercer at the Education Office at the GAGTL they will all be acknowledged and put to work in our many and various student and trade tutorial stone sets and for the new loan collection. We have a great variety of requirements to help with training and demonstrations both in the UK and overseas and your help would be most welcome.

Loan Collection

For instance, the Education Office is now starting the process of setting up an extensive collection for loan of relevant gem materials especially for Correspondence Course gemmology Diploma students. Initially the collection will be available to UK students but it is hoped that this service will eventually extend overseas. We already provide stone sets for UK Allied Teaching Centres and these sets will be improved to help maintain the standard of practical tuition.

Study courses on jewellery

Jewellery of the Ancient World

Oxford University Summer School
Oxford, 2-9 August 1997

This one-week residential course will look at the range of jewellery worn by the Greeks and Romans, and at changing styles and uses. Particular attention will be paid to the jewellery of Roman Britain, and to the importance of engraved gemstones in jewellery of this period. The tutor will be Dr Martin Henig, FSA, a leading authority on Classical jewellery and engraved gems. Visits to the Ashmolean Museum in Oxford and the British Museum will be included in the programme.

For details, contact Anna Sandham, Oxford University, Dept. of Continuing Education, Rewley House, 1 Wellington Square, Oxford, OX1 2JA. Tel: 01865 270396; Fax: 01865 270309.

Understanding Jewellery

Sotheby's Institute
London, 2-27 June 1997

This is an intensive full-time four-week course held twice a year, in January and June. It traces the development of jewellery from antiquity to the present, with a particular emphasis on the nineteenth and twentieth centuries. Introductory lectures on gemmology are included in the course and additional optional gemmology sessions are also provided. Lecturers include museum curators, designers and authors in the field, and visits to museums, major jewellery collections and Sotheby's auction rooms are included. The course is led by Amanda Triossi, FGA.

For further details contact Sotheby's Institute, 30 Oxford Street, London W1N 9FL. Tel: 0171 462 3232; Fax: 0171 580 8160.

SIMON THORNTON



It is with great sadness that we record the recent, sudden and unexpected passing of Simon Thornton. Simon will have been known to very many members of SJH and GAGTL as a past Chairman of the National Association of Goldsmiths, Master of the Worshipful Company of Clockmakers and President of the British Horological Society. Simon's jewellery shop in Kettering was founded by his grandfather, and he continued the family's tradition of supporting local activities, being prominent in many local organisations, business, charitable and recreational. He still found time to pursue other interests, and was particularly keen on vintage cars. Although he himself was built on rather a generous scale, he was extremely fond of Austin Sevens. Simon's Chairmanship of the NAG coincided with its separation from the Gemmological Association, with which it had shared premises and staff. Both organisations owe a tremendous debt to Simon for his characteristically unflappable and courteous efforts during this often fraught event. In everything Simon did, he was that extreme rarity of modern times, a true Gentleman. His passing is a great loss to his family, to the jewellery world and to his many friends in Kettering. He will be long remembered and missed.

Nigel Israel

Synthetic Diamonds

Continued from p. 17

planned marketing of near-colourless synthetic diamonds although the number of such synthetics available at present appears to be quite small.

For several years, researchers at De Beers DTC Research Centre have been actively investigating the characteristic features of synthetic diamonds. This work has been carried out in close collaboration with the high-pressure/high-temperature diamond synthesis team at De Beers Industrial Diamond Division's Diamond Research Laboratory in Johannesburg, South Africa. One aspect of this work has been the production of experimental cuttable-quality synthetic diamonds, with an extensive range of properties, both for research and for loan to the larger gemmological laboratories throughout the world to enable their staff to develop their own skills and identification techniques. A second aspect has been the development of instruments that, should the need arise, could be made available to help with the rapid identification of synthetic diamonds.

The De Beers instruments have been designed to be used in a two-stage procedure. The DiamondSure allows the operator to screen 10–15 stones per minute. A fibre optic probe is placed in contact with the table of the diamond being tested. Both loose stones and stones set in jewellery can be tested provided that the setting does not prevent the probe tip contacting the stone. The instrument automatically detects the presence or absence of an optical absorption line at 415 nm. This line is detected in the vast majority of natural diamonds but is not found in synthetic diamonds. If this line is detected, the instrument automatically displays the message 'PASS' whereas, if it is absent, the message 'REFER FOR FURTHER TESTS' is displayed.

Those diamonds referred by the DiamondSure, all synthetics and a

ANNUAL TRADE LUNCHEON

Friday 9 May 1997

The Langham Hilton Hotel, London W1

The GAGTL are pleased to announce that the guest speaker at the 1997 Annual Trade Luncheon will be Mr Robin Buchanan-Dunlop, CBE, Clerk of the Worshipful Company of Goldsmiths since 1988.

The event is open to all members and their guests and in recent years has become a permanent fixture in the diaries of many connected with the gem profession. The Luncheon is an opportunity to express appreciation to staff for their hard work, to thank customers or suppliers for their support, or simply to meet other trade members in a light and informal atmosphere.

The luncheon menu has been carefully chosen and tickets are £46.50 plus VAT to include wine. Tickets for single and block bookings are now available from Mary Burland at the GAGTL on 0171 404 3334.

small proportion of naturals (typically 3–5 per cent), will require additional testing. This could be by standard gemmological techniques. All currently known synthetic diamonds can be identified by standard gemmological testing; see for instance *A chart for the separation of natural and synthetic diamonds*, published by GIA (Shigley *et al.*, 1995, *Gems & Gemology*, vol. 31, no.4, pp. 256–264). However, to ease and speed up the task of handling diamonds 'referred' by the DiamondSure, a second instrument has been developed. The DiamondView consists of a specially designed fluorescence imaging unit, which uses far-ultraviolet radiation to produce fluorescence, and a specially configured computer to control the instrument, with a high-resolution monitor on which the fluorescence images are displayed. The pattern of fluorescence from the surface of a polished diamond results from the growth structure of that diamond. As the growth structure of synthetic diamonds is quite different from that of natural diamonds, synthetic diamonds can be positively identified by the fluorescence pattern produced by the DiamondView. Although a trained operator is required to make an interpretation of the fluorescence image, the patterns produced by synthetic diamonds are very distinctive and quite easy to recognize. On average, two to three

stones per minute can be viewed and identified with this instrument.

A striking feature of near-colourless synthetics is that they tend to exhibit strong, long-lived phosphorescence following illumination with ultraviolet radiation. Most near-colourless natural diamonds do not phosphoresce and, for those that do, the phosphorescence is generally much weaker than for near-colourless synthetics. Furthermore, there are local variations in phosphorescence within a synthetic diamond that result from the growth structure. In order to make use of this characteristic of near-colourless synthetics, the DiamondView has the facility to capture a phosphorescence image following a delay of 0.1 to 10 seconds after switching off the ultraviolet excitation.

Both the DiamondSure and the DiamondView have been designed so that they can be manufactured in volume should near-colourless synthetic diamonds enter the gem market in significant numbers. It has yet to be shown that this will be the case but, if so, these instruments could quickly be made commercially available. Their development ensures that synthetic diamonds of cuttable quality can be easily identified, so there should be no major cause for concern within the gem trade.

Chris Welbourn
DTC Research Centre, Maidenhead

LETTER TO THE EDITORS

Peridot

Your peridot article (*GJN*, December, 1996, pp 11–13) contains a statement that they can 'discolour on prolonged exposure to sunlight'. I have not seen this in other articles on peridot and have never, myself, seen any stone that I would have thought affected. I feel sure that many of the early Zebirget crystals were found loose on the surface where they were exposed for millennia to intense sunlight. This is equally true of fragmented San Carlos xenolith grains. Can you give any more details of such alteration?

It is commonly said that olivine is particularly heat sensitive and can shatter with sudden temperature changes. You do not mention this, but it might be a good cautionary comment. 'Sensitivity' to acid is rather ambiguous; if you mean that polished surfaces can be etched by corrosive liquids, I think that would be clearer. You could mention that solely Zebirget crystals, of all localities, do not exhibit, on recovery and fresh from their source, pitted and dull surfaces. The cutting of meteorite peridots is hardly recent, Kunz cut one. Tarnishing of facet edges needs an explanation – rounding from wear I can accept, but tarnishing? And the edges, how wide are they?

From: Frederick H. Pough, Ph.D.
Reno, NV, USA
18 January 1997

The statement about discoloration came from an article from the ICA Gem Bureau who have an extensive membership of cutters and dealers. I myself see many rings coming in set with peridots which are badly rubbed in the course of normal wear and tear. Any comments from our readers would be welcome.
H.L.

COMPETITIONS

The 1997 GAGTL Photo Competition

Collectors' gems

GAGTL members are reminded that the closing date for the 1997 Photo Competition is **30 April**.

In the competition this year members are asked to submit pictures of exceptional or unusual gems which justify their place in a collection. A gem's value in a collection may be in its rarity, its exceptional colour compared with most gems of its species, in its demonstration of particular features or perhaps in its historical associations. Send us your pictures of gems exceptional in some way for the 1997 Photographic Competition.

All entries will be judged for originality, beauty and gemmological interest.

The following prizes will be awarded:

First Prize:	£100.00
Second Prize:	£75.00
Third Prize:	£50.00

To enter, send your photos or slides together with the attached Entry Form to reach the GAGTL, 27 Greville Street, London EC1N 8SU, by not later than 30 April 1997.

I found myself in one of the new East European states recently and was offered some rather fine alexandrites. I remembered recent articles I had read in *Gem & Jewellery News* that there were now some very convincing synthetic stones on the market.

All I had was my loupe, so I asked if there were any gem laboratories in the city. I was told that there were two such laboratories but one always gave true reports, whereas the other always gave false ones, but nobody could tell me which was which. I was further told that one laboratory charged ten times the fee of the other.

I went to the first laboratory, who charged the low testing fee. They assured me that they were a genuine laboratory who produced the correct reports, their fees were correct and the other laboratory were the rogues and charged excessive fees since they cheated in everything else and caught people out in this as well.

I went to the other laboratory. They informed me that they were the genuine one, their fees were correct, the other laboratory tried to induce people to use them by offering cheap fees, had an inadequate staff and hence their reports were always wrong.

I had no stones with me with which to test the laboratories and I did not wish to lose the chance to buy the alexandrites, but then I did not want to pay a high price for a synthetic.

What should I have done? H.L.

Answer to the puzzle in the December 1996 issue

The miner spends the first day descending and the second day ascending. The easiest way to 'see' the solution is to impose the second day onto the first day. One can then see that he will meet himself on the way up. So there will always be one point which he reaches at the same time of the day.

WHAT'S ON

Gemmological Association and Gem Testing Laboratory of Great Britain

London Branch

Meetings will be held at the GAGTL Gem Tutorial Centre, 2nd floor, 27 Greville Street (Saffron Hill entrance), London EC1N 8SU. Entry will be by ticket only at £3.50 for a member (£5.00 for a non-member) available from the GAGTL.

- 16 April **Make paste! Imitating precious and semi-precious stones over 5000 years**
Ian Freestone
- 7 May **150 years of Cartier** Terry Davidson
- 30 June* **Annual General Meeting followed by Reunion of Members and Bring and Buy Sale**
- 9 July **Exploring for diamond, emerald and alexandrite in Europe** Bob Young

*Please note change of date

ANNUAL TRADE LUNCHEON

Friday 9 May

The Langham Hilton, London W1

Mr Robin Buchanan-Dunlop, Clerk of the Worshipful Company of Goldsmiths, is to be the guest speaker at the 1997 Annual Trade Luncheon. Further details are given on p. 30.

Midlands Branch

Monthly meetings will be held at the Discovery Centre, 77 Vyse Street, Birmingham, 18. Further details from Gwyn Green on 0121 445 5359.

- 21 March **Pearls** Blair Price
- 23 March **Gem Club – Synthetic gemstones and their identification** Alan Hodgkinson
- 20 April **Gem Club – Demonstration of diamond cutting techniques**
David Proudlove
- 25 April **AGM followed by Gems from the Law** John Bugg
- 27 April **Preliminary Exam Seminar**
- 4 May **Diploma Exam Seminar**
- 18 May **Gem Club – Diamond Grading Day**
Gwyn Green

North West Branch

For details of meetings contact Joe Azzopardi on 01270 628251.

- 19 March **Gemstones – A valuer's heaven or hell?**
Brian Dunn
- 21 May **The ins and outs of gemstones**
Doug J. Garrod

Scottish Branch

For details of Scottish Branch meetings contact Joanna Thomson on 01721 722936.

- 18–20 April **AGM. Weekend Conference in Peebles and Field Trip.** Lectures and demonstrations by Alan Hodgkinson, Brian Jackson and Marcus McCallum.
- 25 May **Lapidary session.** 12 noon. National Museum Workshops, Granton, Edinburgh.
- 15 June **Field trip.**

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 only open to SJH members and their guests. A nominal charge is made for wine to comply with our charity status.

- Monday
21 April **Ann Marie Shillito:** *Contemporary jewellery in refractory metals – inspiration for the designs and the technical aspects of making.*
- Monday 19 May **Dr Niamh Whitfield:** *The 'Tara Brooch'. A masterpiece of early medieval Celtic metalwork.*
- Monday 23 June **Dr Robert Liu,** co-editor of *Ornament, the art of personal adornment* magazine will speak about *Oriental ancient beads.*
- Monday
22 September **Charles Burnett,** the Ross Herald of Arms: *The Honours of Scotland.*
- Monday
3 November **Fred Rich:** *Enamelling techniques and his own work examined.*
- Saturday
8 November Proposed one-day Symposium at the British Museum to tie in with the exhibition **Cartier 1900–1939** (1 October 1997 to 1 February 1998).

The copy date for contributions for the June issue of *Gem and Jewellery News* is 15 April 1997