

# Gem & Jewellery News

## The Eternal Cut

A new diamond cut created by Gabi Tolkowsky for  
Asprey & Garrard, London

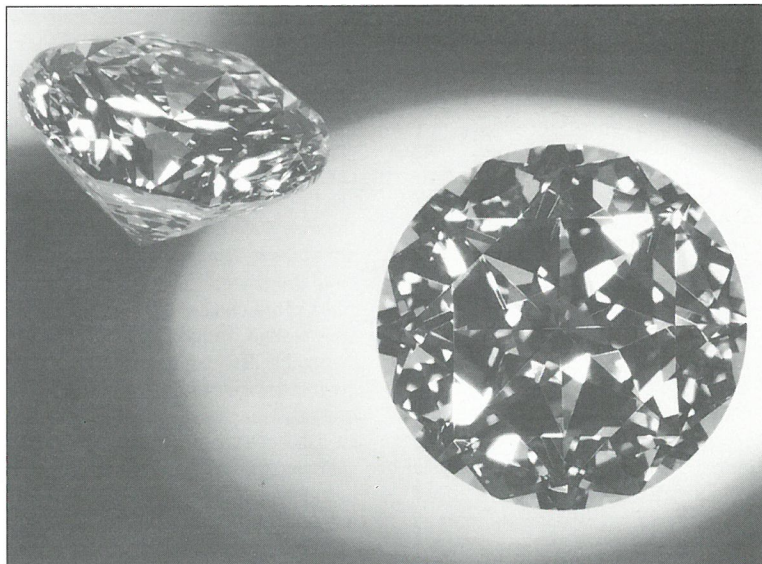
Asprey & Garrard, London, have introduced a new diamond cut into their jewellery collection. The new cut, patented worldwide, has a unique petal design around the culet that creates a soft, diffuse brilliance.

Creating a new diamond cut is a challenging process. Gabi Tolkowsky, a master cutter, cleaver and polisher, widely regarded as one of the most highly respected experts in the diamond world, worked on his creation for more than two years to achieve a cut with a diffusion of light and inner fire.

Each Eternal Cut diamond girdle is micro-lasered with Gabi's initials.

Whilst a traditional brilliant-cut diamond has 57 or 58 facets, the Eternal Cut has 81 facets in total – 40 facets on the crown, 1 table facet, 8 pavilion facets, 16 pavilion halves and 16 petal leaf facets around the culet.

It is the unique petal design around the culet that increases the light refraction from the stone, whilst the double brilliant faceting of the crown increases the circle of light effect around the stone, creating a soft diffuse brilliance. Gabi's inspiration for the Eternal Cut is best encapsulated in his own words:



The Eternal Cut

*The flower keeps the most transparent, the purest water of life from its roots to the outer outline of its petals.*

*The diamond represents the transparency and scintillation of the purest water of life from the depth of its heart to its outline.*

*Flower and diamond  
Diamond and flower  
Interlaced for the pleasure of  
humanity.  
Forever.'*

The jewellery collection featuring the Eternal Cut is available at Asprey & Garrard worldwide.

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# Editorial

Under the auspices of CIBJO much time and effort has been spent recently in revising and selecting the most appropriate terminology to describe coloured stones – and with the wide range of substances now employed in jewellery and decorative items generally, the most acceptable, comprehensive and useful single word to describe such substances proved to be 'stone'. The definition of stone adopted for the CIBJO book is "a natural substance or artificial product used in jewellery or *objets d'art*, with the exception of metals".

This is a good start because in the UK there is a continuing dialogue with the Trading Standards authorities about how fairly to describe gem materials so that labels do not mislead the public.

But what does the general public understand by the terms in common use such as stone or pearl?

In current dictionaries such as the *Concise Oxford* and the *Collins*, there are at least 20 meanings listed for the word stone and those do not include some of the choicer slang expressions. They range from the most familiar meanings like gemstone, pebble and gravestone through the hard part of a fruit to a measure of weight and then to its use as a modifier in such expressions as stone deaf. Such a range of meaning makes the context of the word crucial to understanding the message.

There is one apparent potential problem for the CIBJO approach in one definition of stone which reads "something that resembles a stone" – however, the example quoted to illustrate this is hailstone (*Collins dictionary*) so the meaning of that form of words is clear. Any other allusion to imitation or to synthetics among the meanings of stone is absent. So in the context of jewellery there should be no reason for a member of the public to question the meaning adopted by CIBJO.

However, for pearl the situation is different. In *The Concise Oxford Dictionary* and the *Collins Dictionary and Thesaurus*, the meanings given for pearl include "an imitation of this" (referring to the previous phrase describing a natural pearl) and "any artificial gem resembling this" respectively.

At first sight these meanings are directly at variance with the guidance given in the *CIBJO Pearl Book* – particularly:

*Art. 6 Natural Pearls*

a) The designation "pearl" without qualification can only apply to natural pearls defined under A1 to A3. It is unfair trade practice to use the unqualified word "pearl" to refer to any object or product which is not in fact a natural pearl.

*Art. 7 Cultured Pearls*

a) The designation "cultured pearls" can only apply to cultured pearls defined under B1 to B2. This applies to cultured pearls with or without a solid or organic nucleus, whichever method was used to obtain its formation . . ."

*Art. 8 Imitation Pearls*

a) Imitation pearls defined under D must be designated as such. The word "imitation" or "simulated" must always be an integral part of the designation.

b) It is forbidden to use the term "pearl", "cultured pearl", "cultured pearl-like" or "cultivated pearl" or any such expression when referring to an imitation pearl.

However, the rigour of these definitions is justified on the basis of the position adopted earlier in the *Pearl Book* in Section 2, Rules of Application, Art. 1 (b) where it states that "Terms and rules of nomenclature have been established with reference to the commercial usage of pearls . . .".

So the CIBJO nomenclature for pearls has been established for the benefit of orderly commercial practice by the trade, in the trade and for the trade. The widespread public perception of pearls is too simplistic and inadequate to deal with the scope of such items that can be traded – ranging as it does from the rare natural pearl to mass-produced bead imitations.

However, it is a sobering thought that with such definitions for pearl established in two of the most popular dictionaries in everyday use, this difference of understanding between the public and the professionals is likely to last for a long time. The consequence is that the explanation of the finer points of jewellery set with pearls (of whatever kind) will remain a task for the retail jeweller for the foreseeable future.

Roger Harding

## 1999 CIBJO Congress – Laboratory Register to be established

The annual CIBJO Congress held in Bern during the weekend of 8 May was one of the most active in recent years.

After much preparatory work the *Gemstone Book* has been fully revised and approved by the Congress, and a steering group has been set up to revise and up-date the *Pearl Book*. Meanwhile, those involved with the *Gemstone Book* have been asked to come up with a booklet for the special care of natural and treated gemstones and this could be used to aid disclosure at the retail level.

### Laboratories

In the early days the representative national associations drew on the expertise of their laboratories when necessary. Over the years the status of many laboratories has changed and although some retain their positions as Chamber of Commerce services, others are independent with consequent changed links with the trade. It is now more realistic to consider laboratories as registered with CIBJO rather than recognized by CIBJO and a motion to this effect was approved.

The register will give information about laboratories, stating what they are able to do and their various services. Criteria will be established to assess new laboratories who apply for CIBJO registration, and the high standards demanded by CIBJO will not be compromised. This work will be done by the Laboratory Registrar following discussions with the existing CIBJO laboratories and consultations with those outside CIBJO.

### Structure

A task force has also been set up to look at the CIBJO structure, its statutes and regulations, and recommendations are to be made at the next Congress to be held in Kobe (Japan) in May 2000.

Harry Levy

## What is CIBJO?

**CIBJO is the International Jewellery Confederation and the acronym stands for the French – Confédération Internationale de la Bijouterie, Joaillerie, Orfèvrerie, des Diamantes, Perles et Pierres.**

The Confederation was set up in the 1920s by several European countries to promote international cooperation in the jewellery industry. Since these countries all had established jewellery industries of comparable structure they divided CIBJO into four sectors:

*Sector I* – manufacturers

*Sector II* – wholesalers

*Sector III* – dealers handling materials used in the manufacture of jewellery such as diamonds and gemstones

*Sector IV* – retailers

CIBJO was not open to individual traders, but rather for representative national trade associations. Different associations contributed to the national representative association, and delegates were chosen by the associations to represent them at the congresses. Sectors were allowed to meet as and when they wished, with a proviso that all the Sectors would meet annually at a congress.

The UK is represented by the Jewellery Industry Consortium (JIC), which consists of the National Association of Goldsmiths (NAG), the British Jewellers Association (BJA), the Jewellery Distributors' Association (JDA) and the GAGTL.

### International standards

With the advent of diamond grading, CIBJO tried to bring order into an expanding diamond market by setting up a group to establish international standards and methodologies for grading diamonds, and recognizing certain laboratories (normally one per country) to produce

accurate and honest grading reports or certificates. The group consisted mainly of members from Sector III, as this was the sector containing the experts in the diamond community. It became known as the Diamond Commission under Sector III. This was soon followed by a Coloured Stone commission and finally a Pearl Commission.

As these Commissions involved all sections of the jewellery industry, it was opened to the other sectors and these Commissions became Inter-Sectoral, rather than remaining solely under Sector III.

We now also have an Education Commission, a Harmonization Commission (for precious metals) and a Laboratory Commission.

### Expansion

As the work of CIBJO became better known, it was decided to open up membership and soon countries such as the USA, Australia, Japan, India, Thailand, China and others became members. A category of Associate membership for international companies also exists and De Beers and the Gold Council are such members.

One problem with some new countries wishing to join CIBJO was that their jewellery industries are not structured in the same way as those of the existing CIBJO members. They may not have a national association to represent all four Sectors. A country may be a producer of gemstones, but have no jewellery manufacturing industry or association of retailers. It was felt that such a country should be in CIBJO, but perhaps could only be represented in one Sector. This has been accommodated within CIBJO.

Sector III has produced *The Blue Book* containing the *Diamond* ►

# Pegasus diamonds – Myth or fact?

◀ *Book, the Gemstone Book and the Pearl Book, and these give the nomenclature, rules of application, use of names and methods of disclosure for treatments with the aim both of protecting the end user and of promoting the best practice within the jewellery industry.*

English has become the official language for CIBJO and its publications, but members translate the standard terminology for use in their own countries.

## Treated gemstones

As gemstones, diamonds and pearls are subjected to an increasing variety of treatments to improve their appearance, CIBJO has become the foremost forum for revising and updating rules for the disclosure of such treatments through the work of the commissions and approval by the General and Executive assembly of the delegates. Such changes cannot all be done at an annual congress, so smaller groups meet in between congresses and make the changes for final debate by all the delegates at the Congress.

*Harry Levy*

## Tucson 2000 Trip

**'Tucson' means gems and minerals by the million, in hundreds of rooms in over twenty locations (and also rooms full of books and fossils and equipment and lots more). Not to mention contact with suppliers, gemmologists and enthusiasts from around the world, plus seminars, gem and mineral shows and social events.**

We plan to run a trip to the 2000 Tucson Show, probably from 31 January to 13 February.

For further details please contact Lorne Stather at GAGTL on 020 7404 3334 or e-mail her at [gagtl@btinternet.com](mailto:gagtl@btinternet.com).

**The past few weeks have seen announcements and trade articles about a new process to improve the colour and brightness of some diamonds.**

The process has been announced by Lazare Kaplan, and they are using a General Electric patent method to modify diamonds in a supposedly undetectable way. The stones are to be marketed by a company called Pegasus established in Belgium.

Almost no information has been given about the process, and at the time of writing it is described as being carried out in equipment also used to produce synthetic diamonds.

From the information so far available Lazare Kaplan intend to market these stones through the Pegasus

company and they will be known as 'Pegasus diamonds'. To date, no such stones have appeared on the market, probably at this stage to avoid causing problems on the polished diamond markets. Lazare Kaplan will brand all such stones, giving lasered information on the girdle of the stone. Thus, all such processed stones will be clearly detectable, via information given on the girdle, and should cause no problems in the diamond market – at least initially. But one might ask what happens if the girdle of a Pegasus stone is subsequently polished.

If the process is undetectable as the distributors claim, then the Pegasus problem is here to stay.

*Harry Levy*

## Book Shelf

**Ilias Lalaounis: Modern Revival of Ancient Gold, A.B. Chadour-Sampson, I. Lalaounis-Tsoukopoulou, E. Hamalidi, D. Plantzos, Hardbound, 132 pages, 172 colour illustrations 25 x 27cm. ISBN 960-7417-04-2.**

This book was published by the Ilias Lalaounis Jewellery Museum in conjunction with the exhibition 'Ilias Lalaounis Contemporary Jewellery 1957-1997' at the Pushkin State Museum of Fine Arts, Moscow from October 1998 to January 1999. While the aim of this book is undoubtedly to publicize the manufacturing and retail jewellery firm of Lalaounis, few such publications can have been produced that are both so attractive and informative.

There are eight chapters. The first 'Ilias Lalaounis, artist and jeweller', deals with the history of the firm and the chain of production. There then follow five chapters explaining the inspiration behind the collection: – 'In Classical Spirits: following the development of Greek and Byzantine jewellery', 'Farther Afield: jewellery inspired by

other cultures', 'Visions of Modernity: collections designed in the Seventies', 'From Prehistoric Man to Modern Woman': jewellery as a link with our past', and the 'Shield of Achilles: Greek Myth and genre in a revised art'. The penultimate chapter deals with jewellery based on childrens' designs, and with the educational activities of the Museum. The final chapter on goldsmithing techniques explains repoussé, filigree, granulation and chain hand weaving. A useful select bibliography ends the book. The impressive list of

*'While the aim of this book is undoubtedly to publicize the . . . firm of Lalaounis, few such publications can have been produced that are both so attractive and informative.'*

authors have produced well written, interesting texts which together with the really excellent illustrations make this a desirable addition to the bookshelves.

This is particularly so at the special offer price to members of the SJH and the GAGTL of £24.50 including registered postage. Cheques should be payable to Ilias Jewellery Museum and sent to 12, Kallisperi Street – Acropolis – Athens 11742 – Greece (postage 30p + Airmail sticker).

*Nigel Israel*

# The Crown Jewels

## The Coronation Regalia in HM Tower of London

### SJH Symposium and private view in the Jewel House

The City Conference Centre with an evening reception in the Jewel House in Her Majesty's Palace and Fortress, The Tower of London, provided two memorable settings for the Society of Jewellery Historians' symposium on the Crown Jewels. The event was held to celebrate the recent publication of the *Catalogue Raisonné of the Regalia*.

Over a hundred people attended the lectures including David Thomas (The Crown Jeweller), Christian Bailey (Curator to the Prince of Wales), John Perkins (Assistant Exhibitor) and Chris Dyerson from the Jewel House, and two Yeoman Warders.

The Society was privileged to have as speakers five of the authors of this long awaited work – fifteen years in the making. Nigel Israel, Chairman of the Society, started the day by paying tribute to Shirley Bury who died suddenly in March (see *Obituary* p.42). She was a major author of the book and had been greatly looking forward to taking part in the Symposium. Her immense knowledge and enthusiasm would be greatly missed and the Society was dedicating the day to her memory. Although it was impossible to replace her anticipated contribution to the day, Nigel Israel was offering a talk on previous regalia and coronation publications, and the Society was extremely grateful to Anna Keay, Assistant Curator Historic Royal Palaces, for agreeing at extremely short notice to talk on the Jewel House and historic Crown Frames.

Nigel Israel gave the first talk of the day. Whilst there were records of early coronations in manuscript documents, the first coronation recorded in a major publication was that of Charles II in 1660. Sir Edward Walker, the Garter King of Arms, produced a manuscript of Charles's progress to London and the coronation. This was, however, not actually published until 1820 when the forthcoming coronation of George IV (the first for sixty years) produced great interest and several publications. The book contains several plates of the regalia, some of which Nigel showed. It was appropriate to start with the coronation of



*Alan Jobbins, Nigel Israel and Roger Harding enjoying the reception in the Hall of Monarchs at the Tower of London before the private viewing of the Crown Jewels.*

Charles II, as all the old regalia had been destroyed by the Commonwealth. New regalia had to be created for the occasion, and this formed the start of the current collection. The next publication was Sandford's magnificent *Coronation of James II*. Much further material was discussed and illustrated right up to the new enormous work. A brief history of the Jewel House was given, together with some details of the public exhibiting of the Regalia, and of the strange attempted theft by Captain Blood in 1671 (he was personally pardoned by Charles II and actually given a pension!).

After coffee Claude Blair, Editor and co-author of the new book, talked on the six swords in the Jewel House. The Sword of Offering (often erroneously called the Jewelled Sword of State), the Swords of Temporal and Spiritual Justice, the Curtana or Sword of Mercy (with a blunt end), the Sword of State and the Irish State Sword. The latter is not used in the Coronation ceremony. The earliest representation of a sword as a symbol of regality seems to be in a raised relief on a gilt copper-alloy brow plate from a late sixth century Lombard helmet. This shows the Lombard King Agilulf (crowned 591-d.616) receiving two crowns with a sword across his left knee. The Lombards had only recently converted to Christianity so it is likely that the sword as a symbol of authority had pagan roots. The first reference relating to an English King is in Abbot Aelfric's *Life of St Edmund* (martyred 870). A late eleventh-century manuscript illumination of St Edmund's

Coronation shows two sword bearers. We have detailed descriptions of the use of swords in Richard III's coronation in 1487. The Sword of Offering was, in the past, made new for each coronation and was usually quite simple. The current magnificent jewelled sword was made by Rundell, Bridge and Rundell for George IV's coronation in 1821 and cost £5088. This contrasted with that of George III which cost £1.15s.0d! (a typical example of George IV's extravagance).

Claude also talked about the Spurs, which are given to the Sovereign as a symbol of chivalry, and the Ampulla. The latter has often mistakenly been said to pre-date the Commonwealth, but was certainly made by Sir Robert Vyner in 1661.

The last talk before lunch was by Roger Harding of the GAGTL. Roger gave a detailed account of the gemstones that are set in various items of the Regalia, in particular the Sovereign's Sceptre with Dove, St Edward's Crown and the Imperial State Crown. He led us through the gems, describing the cut and origin of the diamonds, emeralds, pearls and sapphires, etc., with the commonest stones being topaz and aquamarine as used in St Edward's Crown. The gems in the Orb, Sceptre and Crown have a proven history since 1661. A particular personal favourite was the Imperial State Crown. He also outlined the major features of the Black Prince's Ruby [long known to be a spinel (ballas ruby)] and the Stuart Sapphire.

After an excellent lunch, Arthur Grimwade (lately of Christie's and a renowned authority on silver) talked on the Royal Plate in the Tower of London. Although apart from the Ampulla and Coronation Spoon the plate is not actually part of the Coronation Regalia it is a very important part of the Jewel House collection. The Coronation Spoon re-appeared after the Commonwealth and dates to the second half of the twelfth century. It is listed as being preserved in 1349 in an inventory of 1359. A particularly interesting piece is the Queen Elizabeth Salt of 1572. Arthur had ▶

◀ been able to compare this with the 1569 Salt owned by the Worshipful Company of Vintners. The pieces were not known to have been seen together before. The maker's marks were identical and this is confirmed by the feet coming from the same mould. This mark is recorded on at least 15 pieces from 1554 to 1579 and can reasonably be attributed to Affabel Partridge who is known to have been Goldsmith to Queen Elizabeth *circa* 1558–76. However the quality of workmanship is so superior to that of other contemporary London goldsmiths that it may have been executed by a German or Flemish immigrant employed by Partridge.

### *Heaviest English Plate*

After describing several other items, including the Exeter (or State) Salt, Arthur finished with a look at the Wine Cistern (later known as the Grand Punch Bowl). This was made for George IV in 1829, but was possibly not delivered until after his death. It was made by Rundell, Bridge and Rundell, bears the maker's mark of John Bridge, and cost £9800. The gold and gilding alone appears to have cost £1300. It weighs 8000 ounces (troy) and is the heaviest recorded item of English plate. A similar size bowl of 1732 by Charles Kandler is in the Hermitage, but weighs about 2000 ounces less.

Many people later commented how particularly fascinating they had found both Arthur's superbly presented talk on the Plate, and Claude's on the Swords. Most already knew quite a lot about the jewelled items, but very little about these pieces.

Ken Scarratt (Director of AGTA Laboratory New York) had only landed at Heathrow at 10 a.m., but gave an extremely spirited lecture on the gemstones in the Jewelled Sword of Offering, the Exeter Salt and the Imperial Crown of India. He also talked about some of the major diamonds and the ways in which they were analysed, including the use of spectrophotometers. The Koh-i-nûr diamond (now set in Her Majesty Queen Elizabeth the Queen Mother's crown) was exhibited in the Great Exhibition of 1851, but then, probably at the instigation of Prince Albert, recut from c. 186 old carats to its current weight of 105.602 metric carats. Both the Koh-i-nûr and Cullinan I are D colour type IIa diamonds.

### *The Cullinan*

Ken went on to describe Cullinan I (First Star of Africa) which in 1911 was set in the specially re-modelled Sovereign's Sceptre with Cross. At 530.20 ct Cullinan I remains the largest colourless cut diamond in the world. The next item he described, with almost ecstatic enthusiasm, was the Jewelled Sword of Offering. This has a gem-set gold covered leather Scabbard. The Sword itself has a jewelled hilt and a steel blade decorated with partly blued and gilt-etched strapwork including foliage and the national emblems of England, Scotland and Ireland (rose, thistle and shamrock), and various other devices. The Sword and Scabbard are set with c. 3500 diamonds and coloured gemstones, including many high quality Burmese rubies and Colombian emeralds. Another particular favourite of Ken's is the Imperial Crown of India, which contains 5972 diamonds, plus 22 Colombian emeralds, 4 Mogok rubies and 4 sapphires. The coloured stones are all of superb quality. This crown was specially made for George V to wear at the Delhi Durbar of 1911, as the other crowns may not be taken out of the country. It has not been used again.

### *Crown Frames*

Anna Keay started the final session after tea. She gave considerably more information about the history of the Jewel House. She then explained how it was usual for the precious stones in crowns to be hired from the Crown Jewellers for Coronations and returned afterwards. This together with remodelling meant that crowns changed considerably from coronation to coronation. After Rundell, Bridge and Rundell went out of business in 1842, three unmounted crown frames eventually passed into the private possession of the noted collector and bibliophile William Tyssen-Amherst, the future Lord Amherst of Hackney. These were the State Crown of George I (also used reset by George II and III), the Coronation Crown of George IV and Queen Adelaide's crown of 1831. For many years until the mid 1990s these were on loan to and displayed by the London Museum, now the Museum of London. They were then sold to Asprey, who applied for an export licence. Fortunately Asprey were themselves purchased by Prince Jefri

of Brunei who donated the frames to the nation. They now form an important part of the new historical exhibition in the Martin Tower.

Anna's truly excellent talk was particularly impressive when it was remembered that she had had such a short time to prepare it.

The final speaker of the day was Alan Jobbins (lately Curator of Gems and Minerals, Geological Museum). He showed a progression of monarch's portraits which included portrayals of regalia. He also talked in detail about the Sovereign's Sceptre with Cross (including the cutting of the Cullinan). George IV's Circlet (worn by Her Majesty The Queen in the depiction of her on stamps and most coins), and Mary of Modena's Diadem. He used most helpful layout plans to explain the distribution of the various stones.

### *A fascinating discovery*

The examination of the Sceptre with Cross revealed that the Amethyst 'sphere' (between the Cross and Cullinan I) was in fact two hemispheres with the join hidden by the setting. This discovery was confirmed by using a fibre optic light beam which showed that light was not transmitted through the 'sphere', but was reflected from the central plane where the two hemispheres joined.

Alan's talk was followed by a lively half hour of general discussion. Nigel Israel then thanked all the speakers, but before he could bring the symposium to a conclusion, Judy Rudee proposed a vote of thanks to him for organizing the day, and presented him with a bottle of Champagne.

### *The Jewel House*

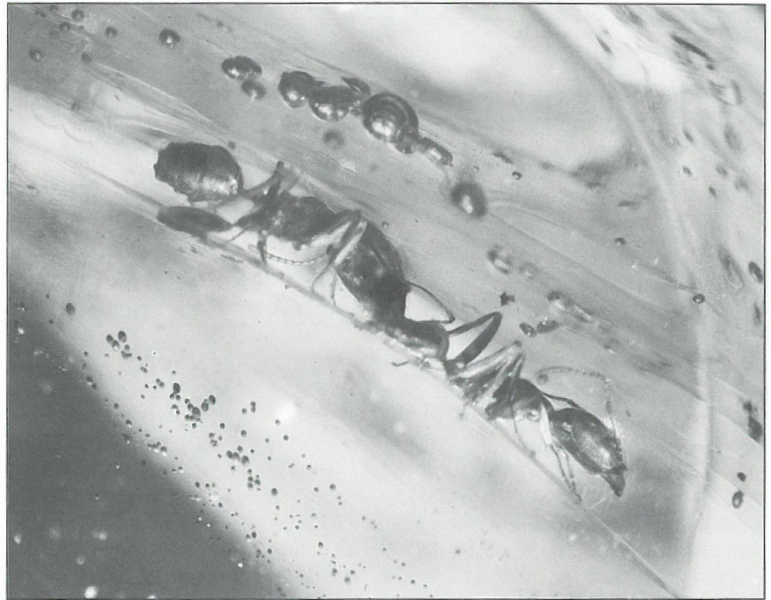
A five minute walk took us to The Tower where we were greeted by Yeoman Warders and conducted, with historical anecdotes, to the Jewel House. After excellent canapes and sparkling wine, we and our guests were privileged to be able to examine the Regalia, Robes and Plate in calm uncrowded conditions (travelators off!), and to discuss them with the enthusiastic experts, including the Crown Jeweller, Speakers, Exhibitors and Wardens. The Society is most grateful to the Resident Governor of The Tower, Major General Geoffrey Field, CB, OBE, for his kind permission to hold the reception.

# Insects in amber

Amber is a light organic mineral that first originated as resin that exuded from the bark of trees millions of years ago. The resin was deposited in sediments and then fossilized into amber. Resin is produced by trees as defence against disease and insect attack. It is sticky, so small insects are readily trapped within it.

The oldest insect-bearing ambers come from Lower Cretaceous deposits in Lebanon and the Isle of Wight, UK, and are estimated at 125 million years old. Unfortunately it is very difficult to date amber. This can only be done by studying the fossils in the sediments that the amber comes from, but this only gives a minimum age as it is not possible to tell how old the amber was before it was deposited. The best known insect-bearing ambers are Baltic and Dominican amber as these are the most common types of amber that are used for jewellery; they are about 40 and 20 million years old respectively.

Insects and other inclusions are very well preserved in the amber and usually belong to extinct species. They are particularly interesting to palaeontologists because if it weren't for the amber then there would be no record that any of the species ever existed. The insects can yield a lot of informa-



*Dominican amber containing an ant that has grasped hold of another ant's body to try to pull itself out of the sticky resin. Length of ant on left 3.2 mm.*

tion on the ecology of the ancient amber-producing forests from looking at their modern descendants and how they live today. It is possible to work out which insects lived in the different habitats – in the leaf litter of the forest floor (e.g. cockroaches), in rotten logs (some beetles), feeding on leaves

(caterpillars), pollinating flowers (bees), scavenging in ponds and streams (caddis flies). Many would in turn be parasitized by other insects (parasitic wasps) or preyed upon by other animals (spiders). Of particular interest is where a piece of amber shows evidence of animal behaviour (fruit flies with parasitic mites attached, or where ants grab hold of other insects to try to pull themselves free of the sticky resin) which would not otherwise be preserved in the fossil record.

*Andrew Ross*

## The 'In and Outs' of Amber

Has this whetted your appetite to delve into the fascinating world of amber?

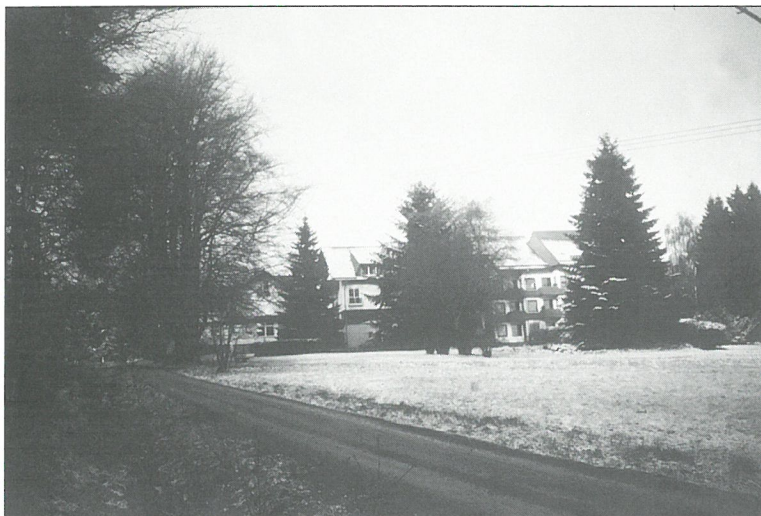
Join Andrew Ross and Maggie Campbell Pedersen at the GAGTL workshop to be held on 2 November. Further details are given on p.47



*Fruit fly (*Drosophila*) in Dominican amber with a parasitic mite still attached to its body. Length of fly 2.9 mm.*

Andrew Ross has recently published *Amber, The Natural Time Capsule*. The Natural History Museum, London 73pp.

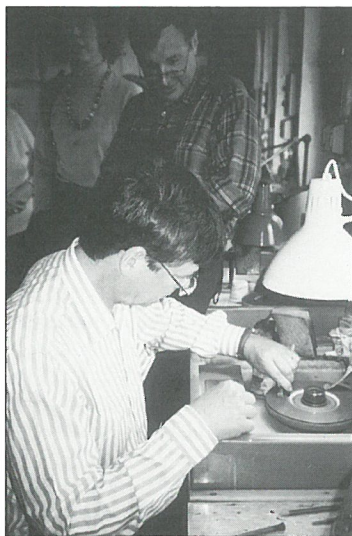
# Idar-Oberstein for the Fifth Time



Gethmann's Hotel.

**The red-carpet treatment was again rolled-out for us by our friends in Germany during this fifth annual visit to Europe's gem centre.**

A record number of GAGTL members and friends enjoyed the comfort of our own coach and the marvellous Gethmann's forest hotel, not to mention the good food, the coffee, the indoor swimming pool, the leisurely breakfasts and the most hilarious table-tennis tournament in the 'fitness'



Pat Daly tries his hand.

room (and, please note, this is a *Silence Hotel*). Despite these distractions, the real purpose of our visit was always apparent from the sight of people clustered around the quiet comfort of cream cakes and hot apple strudel on the tables by the bar, circulating the day's hoards of twinkling goodies and stories.

Again our breath was taken away by the sheer quality and quantity of gem materials and the willingness of our hosts to enable us to study them very closely. My breath was further taken away when Professor Bank again told me that we are all invited to share a meal *nach Hause*. I said that we have even more people than last year. 'No problem!', came the reply; and we were duly treated to a wonderful welcome and midday meal – a Brazilian speciality of Mrs Bank – all of us in the 'playroom' surrounded by the famous Bank family jigsaw exhibition. Such hospitality was the culmination of a week of delight (despite the rather persistent sleet on Monday and Wednesday) in which we experienced the reality of amethyst, jasper and agate geodes set in their mother rock inside the galleries of the old Steinkaulenberg Mine, the traditional water-powered agate workshop of the Biele family and the intricate work in progress at a top cameo designer

and engraver (and that was just the Monday).

Together with the added hospitality of the German Gemmological Association, we had seen a lifetime's supply of gem materials by the Wednesday, when we again experienced the strange surroundings of very expensive crystals being grown, in the Research Institute for Precious Stones and precious Metals in Oberstein. Watch this space, for an added delight is hopefully being organised in conjunction with this visit next year. The two very different gem museums in Oberstein and Idar are a knock-out. The world standard of the material on display, the excellent lighting, the brilliant temporary display of stone eggs at Idar, all make those visits alone worth the trip. Then it snowed. That brought the cameras and walkers out into the forest around the hotel to sample the delightful scene. I watched from the breakfast table (well, I've seen it before!). And this breakfast is not to be hurried – Herr Gethmann's freshly home-made bread, etc., etc.

To relax in the museum-like surroundings of Friedrich August Becker is to be sorely tempted by the thought that you would like to be surrounded

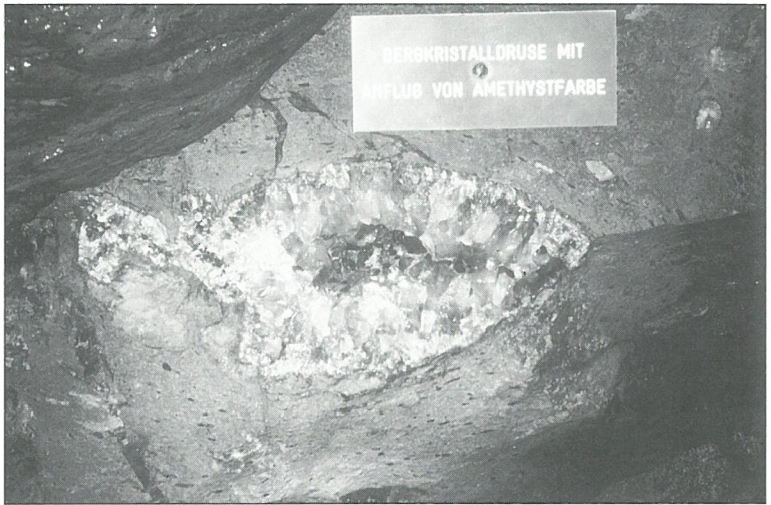


Gerhard Becker surrounded by treasures.



by much of this endless delight back at home. When Gerhard gave us a most congenial welcome and opened the showroom, how could one resist? It was our great pleasure on two evenings to share our table with Gerhard Becker and with Professor and Mrs Bank. Add to all that the breathtaking demonstration of crystals and gems given by Professor Bank at the Gebrüder Bank workshop, with the added stone-cutting demonstration (that's Pat Daly in the DIY jamb-peg demonstration picture) and Professor Bank's extra 'student demonstration' on Friday (infiltrated by invited non-students of course!) which was again very much appreciated.

Our 'non-mystery' stop in Trier on the way back was enhanced by sunshine and the first replenishment of chocolate: the second fill-up being the Belgian service station at Wanlin, where you can pay for chocolate in any of a great range of European currencies. And so we staggered back under our loads of edible and non-edible gems, just catching the earlier ferry for a second pond-smooth crossing. Before we had even stopped in Farringdon we had taken bookings for



*Amethyst and rock crystal in the mine.*

next year! This year we had over a dozen 'returners' and next year would seem to be set for more; so, please, if you think this trip is likely to be your ideal Spring break, book as soon as possible. Full details and a booking form are available from Sarah Kimber on 020 7405 3351, fax 020 7831 9479, e-mail [gagtl@btinternet.com](mailto:gagtl@btinternet.com). Information will soon be on our web site at

[www.gagtl.ac.uk/gagtl](http://www.gagtl.ac.uk/gagtl) so please log-on regularly for this and plenty of other GA news and information.

The date for 2000: 9 to 15 April. Remember: Idar-Oberstein. Gemstones and carvings galore. Cream cakes and coffee. Walks and swimming. Free day for rest cure or highly-depleted bank balance. The choice is yours.

*Ian Mercer*

## Edward Warren and the Lewes House Gems

**On 12 April 1999 the SJH was privileged to hear a lecture on Edward Warren and the Lewes House gems given by Professor Sir John Boardman. The audience was treated not only to an elegantly clear exposition of how the detailed study of Greek and Etruscan engraved gems developed, but also to a fascinating glimpse into the rarified world of Classical scholars and collectors such as Warren, Beazley and Marshall in the early years of the twentieth century.**

Sir John's summary of his talk follows.

E.P. Warren was the major collector of classical antiquities at the turn of the century, and responsible for the building up of the notable collections in his home town, Boston, and later for the Metropolitan Museum in

New York, Bowdoin College and elsewhere. American by birth, he lived for much of his life in Britain, at Lewes, which became a centre for various scholarly activities in the arts, including visits by Berenson and several classical archaeologists and art historians. He was much assisted by his friend, the classicist John Marshall, who was better trained as a scholar, though Warren's own skills were varied (he commissioned the copy of Rodin's *The Kiss*, now in the Tate Gallery). In his later years (he died in 1928) he specialised in collecting Greek and Roman engraved gems. His collection had been much visited by John Beazley, the connoisseur of Greek vase painting and soon to be appointed Professor of Classical Archaeology and Art at Oxford, and it was probably at Lewes that Beazley

acquired an interest too in gems. As a result he was invited to publish a choice of the collection in *Lewes House Gems* in 1920. Beazley's eye for detail and profound scholarship made this publication the first in what might be regarded as the modern style, with a detailed description and analysis of style and iconography, which has seldom been matched since. He practised on it principles of study which he had perfected in his studies in vase painting, and the publication ensured that the subject could not be relegated to a 'minor art' and the collections to the cupboards of coin rooms. The collection, for its size, is one of the finest ever assembled, with prime pieces signed. It is now in the Museum of Fine Arts in Boston, and an updated reissue of Beazley's publication is in hand.

# Obituary

Mrs Shirley Bury, F S A, President of the Society of Jewellery Historians 1980–83, died on 25 March 1999. She was born on 27 February 1925.

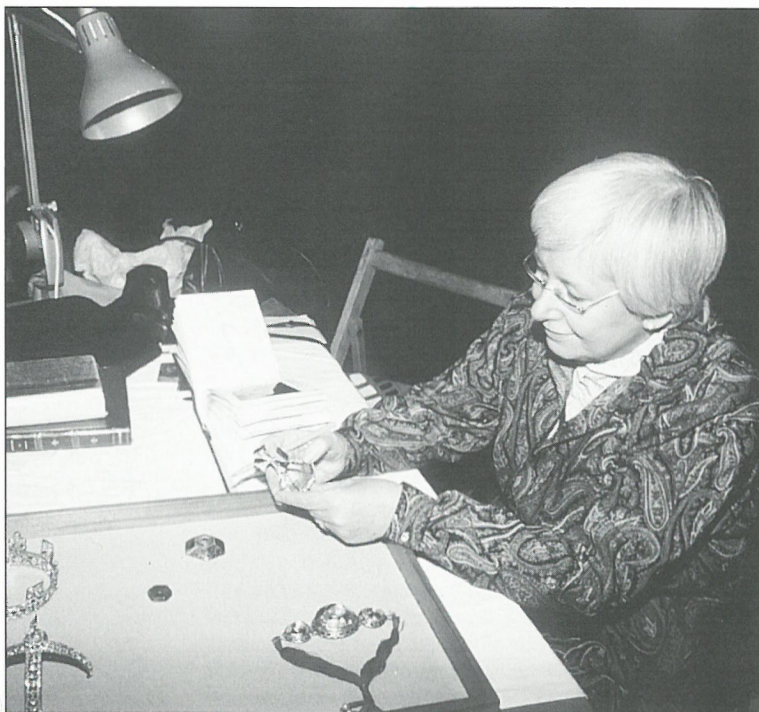
**Of this Society's seven founder-members, Mrs Shirley Bury is the second to be snatched away by death.**

In that testing decade immediately following the inaugural meeting on 21 November 1977, our Society was to be generously served by Shirley and, on behalf of the present membership, this tribute has been written lest her quiet, but essential, contribution be forgotten.

For the first three years of the Society's life, Shirley was Honorary Secretary and, from her office in the V & A's Department of Metalwork where she was Deputy Keeper, she nurtured this 'fledgling' with skill and tact. Indeed, her Director – Dr Roy Strong – signalled his approval and support by agreeing to deliver the first lecture in the 1978 programme. His subject was 'Tudor and Stuart Royal Jewels' and provided just the kind of kick-start that we needed to stimulate a healthy demand for membership – a demand that Shirley happily fostered, since in those days there was no Membership Secretary to help her.

Shirley herself undertook to open the second year's programme with a lecture: 'Jewellery in nineteenth century portraits'. It presented so memorable a survey that (according to the report in *SJH Newsletter* No.5, October 1978) it had 'whetted our appetites for the book on 19th century

jewellery which Mrs Bury is writing' – an early reference to her ambitious project that finally materialized as a large two volume book: *Jewellery 1790 – 1910: The International Era* (1991), some six years after she had retired from the Museum.



Shirley Bury examining the Regalia in the Jewel House, HM Tower of London

Among the earliest indications of Shirley's scholarly interest in jewellery is an article that emerged as an off-shoot of her wider studies in the hitherto rather neglected field of 'Victorian Church Art'; it was entitled 'Pugin's Marriage Jewellery' (*V & A Museum Yearbook*, Vol. 1, 1969, pp. 85–96). By the mid-seventies, Shirley's preference for concentrating on the Museum's jewellery collection and, especially, for researching the complex history of European jew-

ellery in the nineteenth century, led to her publication of 'Alessandro Castellani and the Revival of Granulation' (*Burlington Magazine*, October 1975, pp. 664–8) and 'Rossetti and his Jewellery' (*Burlington Magazine*, February 1976, pp. 94–102).

The latter, based partly on her thorough sift through the V & A archives, yielded a fascinating glimpse of the Museum's 'William Morris Collection' saga, the birth of the 'Morris Room' idea, and, above all, the significance of the jewellery in the May Morris Bequest.

In November 1980 Shirley Bury was elected President to succeed the eminent historian of ancient classical jewellery, Dr Reynold Higgins, who was retiring having completed his three-year term.

The Society's fortunes prospered and nowhere was Shirley's firm, but

light, touch more appreciated than in the SJH Committee meetings, which she unfailingly chaired throughout the following three years. Her contribution on the Pigot Diamond appeared in the *SJH Newsletter* (Vol. 2, no 1, November 1981) and at the 1982 AGM she presented a paper on 'William Burges and his goldsmiths'. That year saw the V & A Jewellery Gallery re-open after five long years of improvements to its security. The re-vamped Gallery, with Shirley's new displays

and *Summary Catalogue*, was the venue for a privileged evening for members and their guests, who were also invited to visit the Temporary Exhibition of recent jewellery by Wendy Ramshaw that Shirley had helped to organize.

At the end of her three-year term, the Society was delighted to learn that she had agreed to stay on the Committee, even though she was now Keeper of her Department and busier than ever. Many members had come to know her well during that first decade and each will have regretted that, especially after her retirement from the Museum in 1985 and her husband's illness, she gradually became a less frequent attendee. Sadly, she never published in our Society's *Jewellery Studies* but two of her less well-known articles – one on 'French and English Contributions to Neoclassical and Later Jewellery' and the other on 'Queen Victoria and the Hanoverian Claim to the Crown Jewels' – are to be found in *The Handbook to the International Silver and Jewellery Fair and Seminar*, The Dorchester, London, 1986 and 1988 respectively. It was particularly good news, therefore, when she appeared at the head of the list of speakers at the Society's one-day symposium on 'Nineteenth Century Jewellery' (30 October 1993) and gave a typically enthusiastic introductory lecture on 'A century of changing style'.

When she died suddenly last March, Shirley was again in the midst of preparing to talk to our Society. Her lecture was to have been delivered at The Crown Jewels Symposium (see report on pp. 37–38) and would have been a great celebratory occasion because, for the past fifteen years, she and her seven co-authors had been involved in the production of a particularly magnificent two-volume official *catalogue raisonne'* of *The Crown Jewels* (ed. Claude Blair) London, 1998, price £1000. Her tragic absence from the Society's symposium vividly brought home a sense of our loss and reminded us of our good fortune in that first decade (1977–87) when all our deliberations benefited so richly from Shirley's expertise laced with shrewd and humorous comment.

Hugh Tait

## Scottish Branch Conference

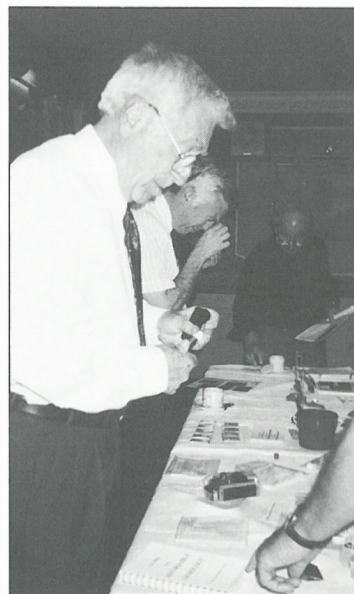
**Lady luck was shining on us and allowed the sun to do the same. The 'Fair City of Perth' lived up to its name and provided the venue for the Scottish Branch Conference and AGM.**

On Friday evening we were gently broken in to the forthcoming events by the author and historian, Dr Rosalind Marshall. Entitled 'Historic Scottish Jewellery', Dr Marshall gave an illustrated talk demonstrating how gems have been worn in Scotland from the 16th century onwards. She provided not only a fascinating insight into the jewellery of the times and how it was worn, but also the social and political factors that affected jewellery design. I was pleased to observe that due to the general appeal of this lecture, it attracted several people from outside the jewellery trade. This was followed by a meal at a local restaurant and then back to the hotel to 'put the gemmological world to rights' over a few drinks.

### Affordable gemmology

We were privileged to start the Saturday morning with Dr Bill Hanneman, the author of *Affordable Gemmology*, who delivered an illustrated lecture with the same name. Dr Hanneman, the champion of the impoverished gemmology student, gave a résumé of his many inventions, all of which provided economical solutions to potentially expensive problems. Dr Hanneman's sense of humour and modesty allowed him to give equal emphasis to his failures as well as his world famous successes. He has a reputation for tackling problems head on and showed how his instruments developed from the prototypes, most of which seem to have been constructed from items found in most peoples garden sheds and kitchen cupboards!

If Dr Hanneman provides cheap solutions to costly problems, then Alan Hodgkinson, our next speaker, surely provides simple solutions to complicated problems. Alan illustrated, with



Dr Bill Hanneman gives a demonstration of his 'affordable' instruments.

his usual enthusiasm, a lecture entitled 'Practical gem identification for the busy jeweller', a subject close to the hearts of most people present. Alan gave a fascinating account of the many situations he has found himself in and how his method 'Visual Optics' has helped him out, simply and accurately. Moissanite, of course, was under discussion and Alan advised us of some simple tests to aid identification, particularly those involving parcels of diamonds, using simple techniques and sometimes involving rather unorthodox equipment (I am not sure if a domestic cooker has ever been part of the gemmologist kit before!).

### Pegmatites

The afternoon saw Dr Judith Kinnaird deliver an entertaining and interesting talk entitled 'Pan-African Pegmatites'. To the non-geologists amongst us, quite a daunting title, but we need not have worried. Judith gave a fascinating insight into her work with the E.C. Humanitarian aid to Africa, which involved mapping sites ►



*A group of the Scottish Branch Conference delegates on the steps of Scone Palace.*

◀ for gem bearing pegmatites in Somaliland.

Her interest in gemmology stemmed from stubbing her toe on a topaz crystal, and she brought lots of large crystals with her (including the offending one). After her talk we were wanting to rush out to Africa on a field trip!

### Classifying garnets

The final session was delivered by Dr Bill Hanneman, entitled 'Garnet Classification'. When it comes to naming a particular species of gemstone, garnets do not play fair! There is a lot of confusion and use of misnomers. Dr Hanneman, as well as a gemmologist, is an analytical chemist and is well placed to bring some sort of order to the wonderful family of garnets. He has organized the garnet types by chemical composition. To help anyone interested in this, he has developed a three dimensional model which allows you to plot the position of any garnet into its correct series.

### Pairman Cup presented

There followed the AGM where the past year's events were reviewed and many suggestions were made for the forthcoming year. Yet again it seems that the Scottish branch is very active and going from strength to strength. The committee were happy to present Judith Kinnaird with the Pairman Cup, which is awarded to the Scottish candidate achieving the highest mark in the Preliminary Gemmology exam.

It was then time for fun and fellowship at a nearby restaurant where a large gathering assembled to relax and enjoy the Perth hospitality (does it really take over four hours to eat a meal?). On the Sunday, members of the group enjoyed a visit to nearby Scone Palace that houses a magnificent collection of ivory carvings.

*Adrian Smith*

## Midlands Branch Practical Gemmology Sessions

**The Midlands Branch are introducing a 'Play Group' offering members, students and friends the opportunity to examine, with expert guidance, known gemstones exhibiting particularly interesting features, numbered stones for identification and a set of stones, so far untested, for identification and discussion.**

There will be some sets of instruments available but participants' own equipment will be most welcome. The session will be for all, whatever the level of knowledge – those with an interest in gemstones, students and FGAs wishing to keep their hand in with practical experience.

The first two Play Groups, to be held at Barnt Green, have been planned for Sunday 4 July and Sunday 26 September 1999 from 3 p.m. onwards. Further details from Gwyn Green on 0121-445-5359.

## Scottish Branch at Aberdeen Show

**Members of the Scottish Branch participated in the first ever gem and mineral show to be held in Aberdeen (4 May 1999).**

During the two days there were hands-on demonstrations of various gemmological techniques. These were run in conjunction with poster displays of the Scottish Branch activities and leaflets explaining the range of GAGTL educational and laboratory activities available. The response from the public was very encouraging. There appears to be a latent source of people keen to develop gemmological interests and the Branch are considering the best way to meet this need.

## Gemmology in China

Ian Mercer, Director of GA Education, was delighted to meet delegates from seven Chinese-language Allied Teaching Centres (ATCs) recently to discuss the GA courses and examinations. At one meeting, arranged with the kind assistance of Professor Zhou Zuyi at Tongji University, Shanghai, delegates outlined the histories of their involvement with GAGTL and voiced their ideas and thoughts concerning our continued involvement. In central Shanghai

later, Ian chaired a meeting to review these points in more detail. After such a useful review and the many individual discussions, Ian came away with optimism reinforced; quite obviously the dedication and enthusiasm of those who run the 'FGA' and 'DGA' courses remains undiminished in all corners of the world. After several visits to China, Ian has enjoyed an ever-improving relationship and friendship with our many friends in the Chinese-language teaching centres. A hectic visit to Hong Kong, followed by a useful three days in Wuhan, preceded Ian's Shanghai ATC meetings.



Shown seated with Ian at Tongji University are Professor Zhou (left) of Tongji University and Professor Chen Zhonghui of the China University of Geosciences who will be remembered by those who were lucky enough to have received their Diploma from him in the GA Awards Ceremony at the Goldsmiths' Hall in 1997. Professor Chen first started teaching gemmology in association with the GA more than ten years ago. The picture shows, standing from left to right: Zeng Chun Guang of the Far East Gemmological Laboratory ATC Singapore, Zhang Liangju of the Guilin Institute of Technology ATC, Yuan Xingqian of the Wuhan ATC, Wu Chao Ming of the Taipei ATC in Taiwan, Wu Ming Hsun and Mrs Feng Hsiu Yun of Taiwan Earth ATC at Taichung, and Qiu Zhili of Zhongshan University ATC at Guangzhou.

## Learn stone carving and cutting skills

**R Holt & Co. are planning to set up the first professional stone cutting school in the UK.**

Taught by their award-winning team of lapidaries, candidates will learn how to cut and fashion different gemstones.

If you are interested and would like further information please contact the London School of Stone Cutting, R. Holt & Co. Ltd, 98 Hatton Garden, London EC1N 8NX or telephone 020 7405 5286.

## Gemstones and Geology

**A course combining lectures and laboratory work with fieldwork in Scotland**

This course, to be held from 24 to 31 July 1999 in Scotland, will present an insight into the geological factors that control gemstone formation. The emphasis will be on how to identify natural gemstones and distinguish them from simulants and imitations. Lectures and practical laboratory studies will be integrated with field trips to the Fife coast and central Scotland. The cost of £317 includes accommodation, all meals, field trips and tuition.

Further details available from the Kindrogan Field Centre on 01250 881286, Fax: 01250 881433, email: Kindrogan@btinternet.com or contact Judith Kinnaird on 01333 310227 email: geonet@globalnet.co.uk

## A request for information

I am a conservation student researching a thesis on two forms of ornament combining silver and organics, specifically **blue Morpho butterfly jewellery** (iridescent blue wings cut to shape and set under crystal in mass-produced jewellery and trinkets) and **kingfisher inlay or 'enamelling'** (an historic Chinese technique in which iridescent feathers are adhered to silver filigree hair ornaments and jewellery). I would be grateful for *any* information – scientific, historical or anecdotal – about these crafts, and/or for the opportunity to examine or photograph any privately-held examples. I can be reached on 01243 818243 or at West Dean College, West Dean, Chichester, West Sussex, PO18 0QZ.

Julia Harrison

# Identifying synthetic moissanite

A review by Peter Read

Several recent articles about the new diamond simulant, synthetic moissanite, have described a number of tests designed to distinguish it from diamond.<sup>1,2,3</sup>

The simpler tests have ranged from the detection of moissanite's large double refraction (doubling of pavilion facets when viewed through the side crown facets) to the use of Hodgkinson's 'visual optics' technique and the measurement of the gem's surface reflectivity on a reflectance meter (which produces a reading close to that of synthetic rutile). With unmounted stones, a simple diagnostic SG test using di-iodomethane will separate synthetic moissanite (which will float) from diamond (which will sink).

## Thermal conductance

Among other tests which have not yet been fully covered in these articles, is that of thermal conductance. Because the thermal conductance of synthetic moissanite (around 200–500 W/m<sup>2</sup>/°C, i.e. in the region of silver) is far closer to that of diamond (1000–2600 W/m<sup>2</sup>/°C) than any other simulant, the majority of thermal testers are not able to discriminate between the two materials. There is, however, a far more sensitive instrument, the *Alpha-test*,<sup>4,5</sup> which was able to do this on earlier samples of synthetic moissanite when they became available for testing. Unlike other thermal testers, this instrument was designed to identify not only diamond and its simulants but also other non-diamond gemstones whose thermal conductance lies below corundum's value of 40 W/m<sup>2</sup>/°C.

## Alpha-test

The method employed by the Alpha-test is to measure the relative time taken for the test probe temperature to fall between two preset levels when in contact with the surface of a gemstone. Typical digital readings pro-

duced by this method range from 170 for emerald to 100 for quartz and 40 for ruby and sapphire, with diamond registering the lowest at 25.

Tests made on this instrument with the early samples of synthetic moissanite produced readings of around 35. Because of the small difference in thermal conductance readings between diamond and moissanite (and to allow for calibration errors), it was prudent to use the Alpha-test as a comparator when attempting to discriminate between

*'... tests made with a more recent batch of synthetic moissanite have shown that their thermal conductances are much closer to that of diamond ...'*

the two materials. However, even when taking this precaution, tests made with a more recent batch of synthetic moissanite have shown that their thermal conductances are much closer to that of diamond than material tested earlier. With readings taken from diamond and synthetic moissanite now virtually identical, the Alpha-test instrument (together with any of the standard thermal probes) no longer offers a means of identification for the new diamond simulant.

## Megger Tester

Another instrument (developed by the GAGTL and advertised in the October 1998 edition of the *Journal of Gemmology*) is the Synthetic Moissanite Megger Tester (named after the 'Megger' (megohm) insulation resistance tester). This equipment detects the residual electrical conductivity of moissanite which appears to be caused by impurities inherent in the manufacturing process. To eliminate other diamond simulants which are non-conductors of electricity, the Megger Tester should be used in conjunction with a thermal tester. (Note – the extremely

rare colourless Type IIb diamond also conducts electricity (as does the naturally coloured Type IIb blue diamond). If the stone is unmounted, an SG test in di-iodomethane will serve to separate synthetic moissanite from diamond.)

## Brewster angle meter

A third test instrument capable of identifying synthetic moissanite (together with a wide range of other gems) is the Brewster-angle meter (developed by the author for GAGTL).

This uses a miniature solid-state laser to detect the Brewster-angle of polarisation of a gem. The relationship between the angle of polarisation and the refractive index enables gems to be identified over an RI range of 1.43 (fluorite) to 3.2 (hematite) without the need for any contact fluid. When tested on a Brewster-angle meter, synthetic moissanite produces a clear polarisation null at 69 degrees, compared with diamond's 67.4 and rutile's 68.02, 70.03. An initial batch of Brewster-angle meters will shortly be marketed by the GAGTL.

## References

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3. Nelson, J., 1998. Synthetic moissanite – the latest diamond simulant. *Gem & Jewellery News*, **8**(1), 4–5
4. Read, P.G., 1984. The Alpha-Test gemstone identifier – a test report. *Journal of Gemmology*, **19**(3), 261–5
5. Read, P.G., 1990. Detection of synthetic emeralds by thermal conductance. *Journal of Gemmology*, **22**(4), 233–4

## The Intellectual Observer

I promised to comment on Alec Farn's remark (*GJN*, 1999 Vol.8, No. 2, p.25) that the *Intellectual observer* did not form part of the collections of the (now) British Library. I am afraid Farn was misinformed by the late C. B. Oldman or one of his staff at the time. A quick search through the computer catalogue shows that the first title, *The Recreative observer*, with its successors *The Student's guide and intellectual observer* (and another) are

stated to be in the stacks at St Pancras where they live at pressmark PP 1918. I have not yet sent for them!

It should be mentioned that access to The British Library is by Reader's Ticket only and these are issued only after a rigorous check of the intending reader's intentions and background. The former Day ticket which used to be issued to almost everyone is a thing of the past and many would-be casual readers are now turned away who might have 'got in' under the former arrangements.

*Michael O'Donoghue*

## GAGTL London Gem Tutorial Centre

### Short Courses and Workshops

- 15 September Preliminary Workshop**  
£44 + VAT (£51.70) – includes sandwich lunch  
GAGTL student price £32 + VAT (£37.60)
- 6 October Pearls Today**  
Price £80 + VAT (£94.00) – includes a sandwich lunch
- 26 & 27 October Synthetics and Enhancements Today**  
Price £198 + VAT (£232.65) – includes sandwich lunches
- 2 November The 'Ins and Outs' of Amber**  
Price £104 + VAT (£122.20) – includes a sandwich lunch

For further details contact the GAGTL Education Department:

Tel: 020 7404 3334  
Fax: 020 7404 8843

e-mail: [gagtl@btinternet.com](mailto:gagtl@btinternet.com)  
Internet: [www.gagtl.ac.uk/gagtl](http://www.gagtl.ac.uk/gagtl)

Members of the GAGTL wishing to raise issues concerning GAGTL activities are reminded that they may contact the Chairman of the

Members' Council, Colin Winter, c/o the GAGTL, 27 Greville Street, London EC1N 8TN.

## I think most people who tried our last competition found it easy and got the answer right.

The square had four simultaneous equations which were easy to solve. Some wondered why I had asked for solutions but not for answers to the problem. The trick to the question was not that you got the answer right but how you went about arriving at this answer.

All the answers I received calculated the value of each symbol and then through simple addition gave the value of the column in question to be 27. In the lead up to the question, I said that all the past problems I have set appear to be difficult, they require lateral thinking, and once you have this insight then the problem melts down to a very simple one. As with the past problems this last problem had a 'simple' solution.

You were not asked to find the values of each symbol, but rather the total value of a column. The sum of the total square can be arrived at by either totalling the rows or totalling the columns. Since the rows have all been totalled, their sum gives the value of the square. By adding the sums of the three columns and subtracting this from the total of the rows you will get the required answer.

A non-mathematical problem for this edition. Find the missing letters :

A S M A E P T P H H Y I \_ \_ \_ \_

P T E O A P \_ \_ \_ \_

And one for the jewellery historians:

F R I E L P I O G U R S \_ \_ \_ \_

## Problem for our next issue

If you find it difficult to solve the problems, why not send one of your own for us to try, and perhaps publish, in our next issue.

*Harry Levy*

## Gemmological Association and Gem Testing Laboratory of Great Britain

### London Branch

Unless otherwise stated, meetings will be held at the GAGTL Gem Tutorial Centre, 27 Greville Street (Saffron Hill entrance), London EC1N 8TN, at 6.00 for 6.30 p.m. Entry will be by ticket only at £4.00 for a member (£6.00 for a non-member).

**28 June.** AGM followed by a Reunion of Members and Bring and Buy Sale. GAGTL members only (free of charge)

**14 July.** Demantoid garnet and other new gems and minerals from Namibia  
*PROF. PETER R. SIMPSON*

### Scottish Branch

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

**4 and 5 July.** Field trip to Aberdeenshire, a source of tourmaline and other minerals.

**5 August.** An apatite for faceting.  
*ART GRANT*

### GAGTL Conference

#### New developments in the gem world

**Sunday 31 October 1999 – The Barbican Conference Centre, London**

A full programme of lectures, demonstrations and displays has been arranged. Lectures will include:

*The challenges of gem identification at the close of the 20th century*  
by Jim Shigley, Director Research at the GIA Gem Laboratory

*New African gemstones and their acceptance into the market place*  
by Campbell Bridges of Nairobi, Kenya

*Colourful language or a treatment in store: retailing in a gem minefield*  
by Dr Jack Ogden, Secretary General of CIBJO.

Full details will be published in the September issue of *GJN*.

### 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. Gem Club is held from 3 to 6 p.m.

**26 June.** Summer Supper (Barnt Green, Worcs).

**4 July and 26 September.** Play Groups – afternoon practical gemmology sessions at Barnt Green (for further details see p.44).

### North West Branch

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

**15 September** Photographing gems and their inclusions.  
*JOHN HARRIS*

**20 October.** Window to beauty  
*PIERO DI BELA*

**17 November.** AGM followed by Diamonds and Simulants.

## 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.

**21 June – LECTURE CHANGE.**

*IRENE COCKCROFT*

*Enamelling for Equality: an audio-visual presentation on the art of Ernestine Mills (1871–1959), Suffragist, and Arts and Crafts enameller.*

**4 October.** *GERTRUD SEIDMAN*

*A gift from Gabriele d'Annunzio and some other engravings on precious stones*

**8 November.** *GEOFFREY MUNN*

*The Tiara – elegance abandoned. A light-hearted look at an evolution of style*

**6 December.** *GRAHAM HUGHES*

*The International Exhibition of Modern Jewellery, Goldsmiths' Hall, 1961*