

Gems & Jewellery

April 2007 Vol. 16 No.1



The Gemmological Association of Great Britain & The Society of Jewellery Historians

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One hundred years of Gem Education

The year 2008 will be an exciting and very special one for gemmology. Next year will mark one hundred years since the seeds of gem education around the world were sown.

The Gemmological Association's Diploma in Gemmology, the highest-status international gemmology qualification, is the direct descendant of the gem course that was first proposed for the jewellery trade at the 1908 annual meeting of the National Association of Goldsmiths of Great Britain and Ireland. The Gemmological Committee set up to oversee that educational development matured into the independent Gemmological Association, now also known as Gem-A.

Gem-A is planning a variety of events and initiatives around the world during 2008 to mark this centenary and these will be announced over the coming months. These celebrations will involve other gem and gem-teaching organizations around the world, many of which were originally modelled on us or who began life as our Gem-A affiliates or branches.

That's why we are proud to be celebrating 100 Years of Gemmological Education, not simply 100 years of our educational involvement.

The celebrations will include special Gem-A events during 2008 in Tucson, London and Hong Kong, culminating in a three-day conference in London in the autumn. This conference will also host the launch of our fully revised Gemmology Courses, up-dated and interactive courses that retain the excellence and practical relevance of our renowned gem course with exciting new ways to improve its accessibility worldwide.

The next few months will be very busy and very exciting for all of us here at Gem-A as we finalize and then implement the ambitious plans we have been working on. We will be celebrating one hundred years of gemmological education and, more importantly, setting the standards for the next hundred years.

Jack Ogden
 Chief Executive Officer, Gemmological Association

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Gems&Jewellery

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Cover:



Castellani mosaic necklace and brooch set with steatite faience scarabs. Photo courtesy of Sotheby's. See Castellani and Giuliano, p. 20.



Siberian chrysoberyl; a hand-coloured and varnished lithograph with crushed mica. See Discovery and naming of alexandrite, p. 8.



Ring by Stacey Whale. Two blue diamonds appear to be 'floating' under a synthetic sapphire lens. © Stacey Whale™ 2006, all rights reserved. See Gem-A Scholarships, p. 19.



Red beryl crystal. See Tucson 2007, p. 6.

Erratum

Please note that the August 2006 issue of *Gems & Jewellery* was mis-labelled on the cover as Vol. 16 No. 2. It should have been Vol. 15 No. 3. We apologize for the error.

NEW

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The Society of Jewellery Historians was formed in 1977 with the aim of stimulating the growing international interest in jewellery of all ages and cultures by publishing new research and bringing together those seriously interested in the subject, whether in a professional or private capacity. The membership includes archaeologists, museum specialists, collectors, art historians, dealers, gemmologists, practising jewellers and designers, scientists and restorers, all united by their enthusiasm for the subject.

The Society holds eight evening lectures a year at the prestigious apartments of the Society of Antiquaries of London, as well as occasional symposia. The lectures cover all periods from ancient to modern, and a living jeweller is normally included each year. Refreshments are served after lectures, and this provides an opportunity for members to meet.

Jewellery Studies is published in colour on an occasional basis, and contains full length articles, book reviews and other information. Members also receive *Gems & Jewellery* five times per year. The current maximum annual subscription is twenty eight pounds.

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'Blood Diamond' - fact or fiction?

HARRY LEVY looks at issues that have resurfaced following the release of this film

By the time you read this many of you will probably have seen the film *Blood Diamond*. As the film was being made, there were rumours that it was exclusively about the conflict diamond issue and that it would greatly harm the diamond industry. Anyone who has seen the film will realize that it is exciting. Its main story line is the greed shown by several individuals to recover a large pink diamond which was found and hidden by a native of Sierra Leone. He had been taken prisoner by rebels and forced to look for diamonds in the river beds in that country.

If anything, it showed the ferocity of the civil war in Sierra Leone and it is Sierra Leone that has complained most bitterly about the way in which the country and its people have been depicted in the film.

The media, TV programmes and chat shows have tried to concentrate on the diamond aspect only and have levelled much criticism at the diamond industry. If one listens to this depiction of the diamond industry, one could conclude that Africa and countries such as Sierra Leone lived in peace and tranquillity until diamonds were discovered. Then rebels appeared trying to get hold of these diamonds. The reason given is that they needed the diamonds in order to purchase arms to continue the civil wars. If this is an accepted scenario, that diamonds are used to continue the wars, then it is not diamonds that were the cause of the civil war. There is no explanation as to why there was a civil war or if they were fighting to get hold of diamonds for their own worth in order to get rich, to use them to buy arms, or kill and be killed to get more diamonds. One reason given is that most of the people lived lives in grave poverty and the rebels materialized, as they will, to create a new order.

Those who advocate the scenario that it is diamonds that have caused or been used to prolong the civil wars, have put out the message that should there be no diamonds there would be no civil wars, or if the diamond industry ceased to exist they could find no market for the diamonds, the wars would cease and there would be peace and tranquillity again in these African countries.

To enforce this analysis, in the initial media coverage mention of diamonds was accompanied by pictures of impoverished native civilians, men, women and children, with limbs amputated because of diamonds. Again the message implied was that if there was no diamond industry none of these cruelties would occur.

To its credit the film does not convey this message, and in the scene when the rebels have overrun a rural village and killed many of the inhabitants, they select a few for amputation and the leader says that they are having their hands and arms removed in order to prevent them from voting, to put fear in others that they could suffer a familiar fate if they did vote. Some are taken to work for them, yes a few in



the diamond fields, and children are kidnapped to be trained to join and fight on the side of the rebels. There is no link to diamonds in the use of this type of torture.

Alluvial diamonds

Now let us try to unravel exactly what occurred historically. The first association with rebels getting hold of diamonds was in Angola towards the end of the twentieth century. There had been severe floods and alluvial diamonds had been exposed in river beds. As the floods receded diamonds could be found in the river beds and the native population started panning and searching for these stones.

Determining the true source of these alluvial diamonds, that is where they were formed in the ground and then come to the surface, is thus almost impossible because they can be found many miles away from where they first came to the surface. Many of the stones found in Sierra Leone, for example, are large and fairly clean crystals, although water worn as they are

alluvial diamonds and their true sources are not known.

One of the conditions proposed by those who want to boycott diamonds coming from a certain country is that dealers should not buy stones from that country. If the provenance of a certain stone or parcel is not known, no one can subsequently test it to determine origin. So the determination of origin must be made in the country from which the stones are exported.

Documentaries

Many have a cynical approach to the diamond industry. They think that it is composed of heartless people who will buy any stone no matter where it comes from or how it has come on to the market. A few years ago a reporter came to London with a 'conflict diamond' and went into several shops in the Hatton Garden area trying to sell the stone. The programme was shown on television and the very few dealers/ shopkeepers shown who said that they would buy the stone had probably never seen a rough diamond in their lives. The way they handled the stone and looked at it showed that they had no idea what they were looking at. Periodically 'dealers' come to London to sell rough stones; the ones that have been referred to me have invariably carried fakes made of glass or plastic designed to fool. Those few who did offer to buy the conflict diamond would probably buy anything for a price. So, a few mavericks do not reflect the attitude of the whole trade.

More recently in conjunction with the film *Blood Diamond*, a documentary has been made in which someone goes around the New York diamond industry with the claim that eighteen people out of the twenty shown a 'conflict diamond' said they would buy it. I have not seen this film, but anyone who knows the diamond district in New York knows that it consists of a large number of booths whose owners deal in almost anything they are offered. Those who handle rough diamonds professionally work out of offices and workshops, know what they are buying, belong to respectable associations and are responsible people. ▶

Other claims are made that the market is flooded with conflict diamonds. One claim was that parcels of large diamonds, 25 ct plus, were bypassing the controls set up. Just how many 25 ct plus stones appear on the market? My guess is very few indeed. Other claims are that there are dealers who will buy conflict stones, no questions asked. Again the question is how many? Very very few, I should think.

Kimberley Process

Anyone seeing the film and reading the media reports and NGO reports will think that the diamond industry has been trying to hide this aspect under the carpet. As soon as the trade became aware of this issue of conflict diamonds, they immediately took action by forming the World Diamond Council (WDC) which worked very closely with governments, United Nations and the NGOs, to counter this problem and to eliminate it. All this was done years before the film was even conceived. It is an integral part of the Kimberley Process which was set up to control the movement of rough diamonds across national frontiers.

Most of the traders care very much indeed about the misery and death that have been attributed to the trade. The WDC constantly monitors the diamond trade and its members. Every trade association has passed resolutions and inaugurated into its rules the instant expulsion of any member caught handling conflict diamonds. In the UK the British Jewellers Association (BJA) and the National Association of Goldsmiths (NAG) constantly update their members on this issue, and encourage them to train their staff to ensure that they are being supplied with conflict-free stones. Doing a survey on a Saturday morning in a shopping mall and questioning the staff in the shop is often unreflective of the trade, as these salespersons may be working in a supermarket one day, a jewellery shop for a few weeks, and then move on to a shoe shop. Their knowledge of the trade is no clear indication of the state of the trade.

The NGOs complain most bitterly on the lack of knowledge of the average consumer. Again this is not a trade fault. Jewellers cannot stand outside their shops 'educating' the public on this issue. Nor can every ring have a 'health warning' on it.

Another myth to dispel is that many within the trade are advocating a Kimberley Certificate to accompany every

diamond sold. This Certificate applies to rough diamonds only and is used to enable such stones to be sent across international borders. Rough stones have to be sealed in a tamper-proof packet in the exporting country, and then sent via a government office in the importing country to ensure that the seal and contents have not been tampered with. One weakness in this system is what stones are put into the box in the exporting country; it is up to the government officials to satisfy themselves that all the stones are conflict free. Further smuggling of such stones is difficult to detect, but those handling rough stones have to satisfy their own authorities that the stones they handle are conflict free.

In the UK the Foreign Office set up a Diamond Office. All the trade was canvassed and those dealing in rough diamonds had to give a detailed inventory of their stock before the Kimberley Process came into force. They can be subjected to searches to ensure that they can account for their stock and their purchases and sales. Similar situations apply to all the countries that handle rough diamonds. It is difficult to cheat within the system unless there are corrupt officials.

It is impossible to set up an audit trail for polished stones as they may come from different sources within the same parcel or batch. The trade with the blessing of governments, the UN and most NGOs agreed to a system of warranties, whereby each trader ensures that he has a written warranty from his supplier that the stones he has been supplied with are conflict free. He then has to give such a warranty when he sells the stones. Within these systems it is difficult to envisage a trade absorbing vast quantities of conflict diamonds. If you have ensured that all the rough stones are conflict free then it follows that all polished stones derived from them are conflict free.

Change of approach

An interesting result of the *Blood Diamond* film is that the NGOs have been forced to change their approach to the issue. African governments have profited greatly from the legitimate diamond trade. Countries such as Botswana have a great social programme, free education for all up to the age of twelve, road building schemes and so on. At its height the conflict diamond quantity was agreed to be about 4%. With all the legislation put

into place it is now very much less than 1%. Stars and media who advocate the ban on diamonds are doing a great deal of harm to those they are trying to help. It is reputed that the diamond industry is worth over \$8 billion to Africa. Yes, a small percentage of this is still a large quantity. So the message going out now from the NGOs and others is that people should not boycott diamonds, but rather they should ask questions as to the source of the diamonds and assure themselves that they are not conflict ones, and this has been supported latterly by *Blood Diamond* star Leonardo Di Caprio.

Funding via other goods

In an article written by Kate Reardon in the magazine section of 10 February 2007 in the London *Times* newspaper, she gives some of the accepted arguments about conflict diamonds but her last paragraph reads: "Areas still of concern include Liberia, Central African Republic and the Ivory Coast, which although a member of the Kimberley Process, is subject to a rough diamond embargo. This is because a United Nations panel stated that rough diamonds are being smuggled into neighbouring Mali, which is not a member of the Kimberley Process. Ivory Coast's New Force rebel group admits to funding itself via the sale of cocoa, cotton and timber, but denies using diamonds. So if you are of a mind to boycott African diamonds, you might want to review your cotton, chocolate and paper needs, too."

We do admit that diamonds have been a means of supporting wars in Africa. Most of us care greatly, but we cannot continue to hang our heads in shame and apologize for all the sorrows in Africa. Much good comes to diamond producing African countries. The jewellery trade, with the DTC and NGOs, have recently set up processes to ensure that the wealth from diamonds is passed down from the governments to their people.

To eliminate the wars one has to eliminate the causes and not the means to these wars. As long as there is no political solution, the rebels will use any means available to enable them to purchase the arms they need. Diamonds are a useful source of wealth, but eliminating them from the equation will not stop the wars. □

CIBJO Congress

CIBJO (the World Jewellery Confederation) held its annual Congress in Cape Town between the 12 – 15 March. In the shade of the majestic and highly photogenic Table Mountain, jewellery industry delegates from around the world met to discuss trade issues, standards and nomenclatures. The theme of the Congress was how to best deliver a responsible, sustainable and profitable global industry.

industry. This became almost literally true in 2006 when CIBJO became the only organization in the diamond, gemstone and jewellery sectors to receive official consultative status with the Economic and Social Council (ECOSOC) of the United Nations. This new status enables CIBJO, on behalf of the international gemstone and jewellery industries, to serve as a technical expert, adviser and consultant to



Gaetano Cavallieri, President of CIBJO, with Abbey Chikane, Chairman of the Jewellery Council of South Africa.

CIBJO began in 1926, with the founding of a body called BIBOA in Paris, whose mission was to represent and advance the interests of the jewellery trade in Europe. BIBOA was restructured as CIBJO, a worldwide body, in 1961. Now more than 40 countries are represented within CIBJO, as well as global industry players including the Diamond Trading Company, the World Gold Council, the Platinum Guild, the World Diamond Council, the Gemological Institute of America and ABN AMRO Bank.

CIBJO has often been described as a sort of United Nations of the jewellery

governments and the UN Secretariat.

Its ECOSOC role is one reason why the Congress devoted much discussion to the whole industry's responsibility to the environment, social infrastructure and ethics. The Conflict Diamond and Dirty Gold issues of recent years have shown industry members and consumers alike the vital importance of ethics the whole way through the supply chain. The problems, from environment pollution to child labour to health and safety issues, can only be remedied through the proactive involvement of all in the supply chain. It is no longer valid for any in the industry to

say that these issues are not relevant to them. But there are no quick fixes, it will take coordinated work, government lobbying and an increasing realization that some of the revenues higher up the supply chain will have to be passed back to help the social infrastructures in some producing and processing countries.

Also, of course, CIBJO delegates discussed the latest gemstone treatments, terminology and disclosure. It was agreed that the common process of bleaching cultured pearls should be declared – the main stimuli here were the 'chocolate' coloured cultured pearls produced by 'bleaching' black cultured pearls and the lack of durability of some drastically bleached Chinese fresh water cultured pearls. It was also agreed that consumers should receive clearer disclosure information about the treatments to gemstones. CIBJO delegates also agreed that work should start on the development of a precious metals *Blue Book* to provide guidance on terminology.

The criticism is often voiced that CIBJO is all talk, but then nothing happens. This is a misunderstanding of CIBJO's structure and role. When delegates from the industry around the world agree to a CIBJO resolution about, say, the treatment disclosure, CIBJO can neither enforce nor police this. That role belongs to the individual national industry associations who have the responsibility to notify their members of the resolutions and then do their best to ensure that they are followed. This can only be done by industry associations with well defined Codes of Practice and the will and the strength to insist that their members follow industry guidelines. It must be remembered that CIBJO guidelines are there to protect the consumer as well as the jewellery and gem industry.

Following the CIBJO Congress, Gem-A will be taking a major role in looking at the environmental, ethical and sustainability issues in the gem and jewellery issue and providing input for the proposed precious metals *Blue Book*. □

Jack Ogden

(Secretary General of CIBJO, 1995 –2000)

CIBJO Blue Book

The revised and up-dated *Blue Book* may be downloaded from the Gem-A website at <http://www.gem-a.info/information/noticeBoard.cfm>

A guide to the *Blue Book* is planned, further news of which will be published in a future issue of *Gems & Jewellery*.

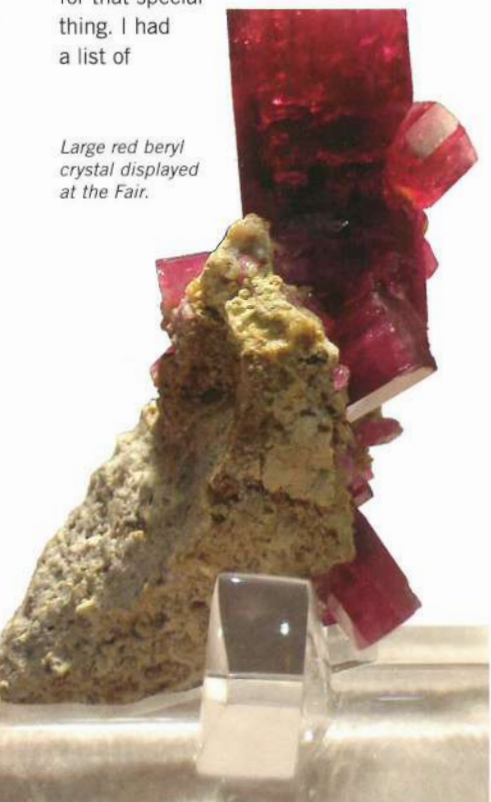
Tucson 2007

A member of the Gem-A group that visited Tucson, DR ELIZABETH PASSMORE gives her impressions of her first visit to the world's largest Gem and Mineral Fair.

Having read the account of last year's Fair in *Gems & Jewellery*, a number of members were inspired to join the Gem-A group visiting Tucson to see it for themselves. The visit on the first day to the Desert Museum set the tone for our stay: lovely weather, beautiful scenery, much to see and learn about, and gems and minerals too. For very modest sums we immediately started adding to our collections. Our purchases included wulfenite crystals, celestite and native copper.

In Tucson we benefited from the knowledge of Gem-A instructors Doug Garrod and Claire Scragg. They took us to 'the strip', a mostly outdoor area open to the public, Starr Pass using the courtesy stretch limo and other venues, to see some of the hundreds of booths selling everything from tat to the highly desirable, unusual or simply beautiful. We could look and learn together or wander alone among the booths searching for that special thing. I had a list of

Large red beryl crystal displayed at the Fair.



minerals and gemstones I would like to see and maybe buy; top of which, being in the U.S.A., were red beryl and hiddenite. Other members were keen to find top-quality gemstones, specialized tools or beads.

Highlights included finding all the items on my list, not just the top two. Red beryl rough and faceted stones, and those set in jewellery – was being sold by a mine owner and his family. They were keen to talk and show off their wares, finding for me a small, beautifully formed crystal. When asking about hiddenite at gem and mineral fairs previously I've been offered pale green spodumene which came nowhere near the description I had read in Webster's *Gems*. But one stand specializing in the rare and unusual had two specimens of hiddenite, just over 3 ct each and costing over \$2500 per carat. They were of an unforgettable, lovely emerald-green; just as they should be. Another gem on my list was pezzottaite. I found rough (the cheapest was \$60 per carat) some of which clearly showed its distinctive crystal structure, faceted stones and cabochons, the largest



Rough red pezzottaite for sale at Tucson.

of which was 60 ct and for sale at \$1000 per carat, although the asking price for some stones was even higher.

Oregon sunstone was popular and boxed sets showing the colour range through orange and green were particularly attractive. Other 'lines' of stones that caught my eye were certificated natural coloured sapphires from Madagascar, not only the usual range of blues and pinks, but one that spanned yellows, oranges and greens – spectacular! A 325.13 ct faceted tsavorite was displayed, claimed to be the largest clean tsavorite in the world. There were pearls of every quality and colour, tanzanite in profusion, very few Paraiba



A student at a Gem-A spectroscope seminar.

Gem-A at the AGTA Show

Many members and students took the opportunity to visit the Gem-A booth at the AGTA Show for updates on the Association's activities, advice on their studies or simply to meet Gem-A personnel.

As part of the AGTA seminar programme, Gem-A senior tutor Doug Garrod gave hands-on seminars highlighting the correct use and practicalities of the spectroscope. The seminars, attended by a wide selection of people from trade members to hobbyists to educators, proved very popular with the first being over-subscribed.

Our thanks for practical support at the fair go to Dr Annie Law and to Eric van Valkenburg of High Pressure Diamond Optics for his help with the trip. □

Claire Scragg



The 325.13 ct tsavorite.

Photo courtesy of <http://www.multicolour.com>

tourmalines from Brazil but many more from Mozambique, including some stunning examples of stones before heating. Diamond beads, both rough and faceted were on view, purple jadeite from Turkey and some gorgeous jewellery, especially in the displays from Idar-Oberstein.

Having viewed jewellery at some of the auctions in London last year, I strolled through the estate jewellery section in Tucson interested to see the range for sale and compare prices. There were relatively few people around and staff were keen to talk, but I was slightly disappointed despite seeing some fascinating pieces, because the items I admired were either too expensive or their condition left much to be desired.

Not all our purchases turned out to be what they were supposed to be. Some 'chalcedony' beads seemed to be very attractively priced, or was it just too cheap, and why were there small glass beads separating the larger pretty pale blue beads? At a few dollars a strand they were worth buying, even if they didn't feel quite right. Later that evening when viewing the beads in a different light the colour changed to a lovely lilac. Closer inspection with a loupe revealed telltale bubbles. Three of us owned some very reasonably priced colour-change glass!

The final mineral fair had many displays including gold nuggets, emeralds from Hiddenite, North Carolina, and a large display from Australia. The crocoite pictured on the show's poster was attention-grabbing as was the display of specimens of this bright orange-red lead chromate.

Wandering among the displays of some truly magnificent specimens was a fitting end to an unforgettable fortnight. As Claire Scragg said in her report of last year's fair, Tucson is a "must see" at least once in your life. □

Photographs by Liz Passmore, Doug Garrod and Claire Scragg, unless otherwise stated.

Visit to the peridot mine

The Gem-A group ventured out of Tucson to a peridot mine in the San Carlos Indian Reservation. We followed our Apache hostess to her mine where her son and two granddaughters assisted us in our hunt for specimens.

There was no shortage of apple green peridot, but most of the material



Claire Scragg searches for peridot (left) and the peridot in situ.

we saw was rather small. They usually find material yielding at least one 4 ct plus peridot per week and a lot of smaller stones.

The visit ended with a memorable meal cooked by our hostess herself.



The Morenci copper mine

The group also visited the Morenci copper mine which covers over 80 square miles and includes the company-owned town. Hard hats on, we set off to see mining in action: huge haulers taking ore to the in-pit crushers, ore held on leaching pads, leach-liquor pumped into tanks at the solvent extraction plant, then to the electrowinning tanks. We finally saw the copper collected on the cathode then removed and transported from Morenci.

The ore left for visitors yielded samples of azurite, malachite and chrysocolla; later we added some pure copper to our haul. Figures abounded: millions of tons of ore mined annually for their half percent copper; over 400 pounds of copper in an average house; and over 2500 people working to keep the mine going 24 hours a day. A splendid visit: eastern Arizona landscape, twenty-first century mining and something to think about back in Tucson when looking at the native copper for sale. □

The Gem-A group sort through the ore from the copper mine. Right, a sample of the ore containing azurite, malachite and chrysocolla.



Discovery and naming of alexandrite

ASBJØRN HALVORSEN and HELEN MOLESWORTH give an account of the history of Russian alexandrite

The Urals have for centuries been an important source for metals, minerals, and precious stones. Tsar Peter the Great (1672 – 1725) was the first of the tsars to recognize the rich deposits of the Urals and encouraged visits by mineralogists and mining experts, inviting even skilled foreign specialists to explore the area. This resulted in discovery of exploitable deposits of first copper, then silver, iron and gold, and from 1745 Ekaterinburg was known as the 'gold valley'. Ekaterinburg, named after Peter the Great's wife Yekaterina, had been established as the administrative centre for the Urals in 1723, followed by the opening of the Mineral Chamber (the city's first collection of minerals and rocks) in 1732. The Ekaterinburg Stone-cutting and Faceting Factory followed in 1751. Today Ekaterinburg is the third largest city in Russia, in an area with serious environmental problems caused by pollution from mining.

Discovery of chrome: the element of colour

In 1766 J.G. Lehman, a German medical doctor and mining adviser, described a new mineral from Beresowsk, north of Ekaterinburg, for the Russian Academy of Science; he later named it *crocoite*. The composition of this was uncertain until 1797, when French chemist L.N. Vauquelin found it to contain a new metallic element. In metallic salts derived from this mineral, he observed a range of colours and named the new element *chrome*, from the Greek word for *colour*. Vauquelin was also the first to identify chrome as the colouring agent in emerald.

Discovery and naming of alexandrite

To the present day, alexandrite has captivated the interest and imagination of mineralogists and historians. The

most widely disseminated accounts of its discovery date it to the birthday of the tsar prince Alexander Nicolajewitsch, either in 1830, 1831 or 1834, whereupon it is said to have been named in honour of the young future Tsar Alexander II. In fact, passion and persistence led to the discovery of naming of alexandrite.

The mineralogical society Russisch-Kaiserlichen Gesellschaft für die Gesamte Mineralogie, established in St. Petersburg in 1817, was a forum for mineralogists working in the region. Its members contributed to the discovery of a number of new minerals. In 1842 came the first volume of the publication, *Schriften der in St. Petersburg Gestifteten Russisch-Kaiserlichen Gesellschaft für die Gesamte Mineralogie*. Of the 399 members listed in 1842, 155 were foreigners. A detailed review was given of mineral discoveries and of scientific work done by the members from 1817 to 1842. The following information about the



Siberian chrysoberyl: left in normal daylight, right in transmitted or reflected candle light. Hand-coloured and varnished lithograph with crushed mica. Painted by Franz von Wörth and lithographed by J. P. Hubert. Illustration in volume 1 of *Schriften der in St. Petersburg Gestifteten Russisch-Kaiserlichen Gesellschaft für die Gesamte Mineralogie*, 1842.

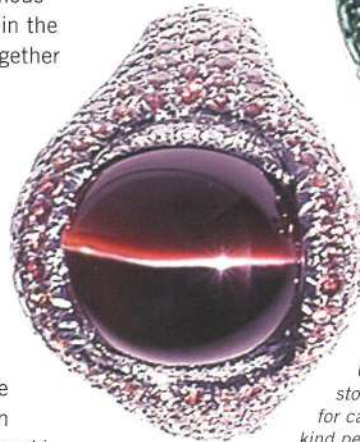
discovery of alexandrite is primarily based on this review article.

Emerald was discovered about 80 km northeast of Ekaterinburg in 1831, at the Tokowaia River. Other localities were found in the following years. In 1833, Count Petrowski brought some small crystals from an emerald mine in Wald district, 170 km from Ekaterinburg, to the Gesellschaft. Knight Franz Ivanovitch v. Wörth, one of the founders and member of the directory board, analysed the crystals and identified them as *chrysoberyl*. Petrowski came back in 1834 with an extraordinary crystal of the same mineral, and requested a new examination by N.G. Nordenskiöld who then observed a special optical behaviour: the crystal was emerald green in daylight and raspberry red in candle light. Illustrations by Wörth (shown on the opposite page) show Petrowski's chrysoberyl. Wörth identified chrome oxide as the colouring agent in this chrysoberyl. He had previously studied the optical behaviour of chrome solutions and had observed change of colour between red and green, depending on type of lighting. It is stated that Nordenskiöld then found the same property in Petrowski's chrysoberyl. Such chrysoberyl should be differentiated from normal chrysoberyl (from Ceylon), in the same way as emerald is differentiated from beryl. In Nordenskiöld's opinion, clear, transparent crystals of chrysoberyl, with the peculiar property of being pyrope red in candle light and beautiful emerald green in daylight, should be placed in the first rank of precious stones. In consideration of this, comparing the rank of this mineral as a precious stone with the rank of tsar prince Alexander Nicolajewitsch as the future Russian emperor, Nordenskiöld made a play on words and suggested naming this stone *alexandrite*. Even more pertinently, Nordenskiöld was alluding to the special day on which Petrowski's chrysoberyl was coincidentally found in Siberia: the day the coming of age of Alexander Nicolajewitsch was being celebrated in St. Petersburg. In contrast to the common coming of age at 21 years, the successors to the Russian throne came of age at 16 years. Alexander Nicolajewitsch was born 17 April 1818, but the celebration of his full age took place on the 25 April 1834, or 8 May according to the new Russian calendar introduced in 1918 (information from Alexander Institute, University of Helsinki). Nordenskiöld's naming of alexandrite was also reported by N.W. Kokscharow in *Materialien zur*

Mineralogie Russlands in 1861. Here Kokscharow attributed the review article of *Schriften der in St. Petersburg Gestifteten Russisch-Kaiserlichen Gesellschaft für die Gesamte Mineralogie* in 1842 to Wörth and further added that it was Gustav Rose who gave the first comprehensive crystallographic description of alexandrite in *Annalen der Physik und Chemie von Poggendorff* in 1839.

During the famous geognostic travel in the Urals in 1829, together with Alexander von Humboldt and Christian Gottfried Ehrenberg, the mineralogist Rose discovered five new minerals. The first time he saw colour-change chrysoberyl was in 1839, when Petrowski showed him a large crystal during a visit to Berlin. Rose did not use the name *alexandrite* in his description.

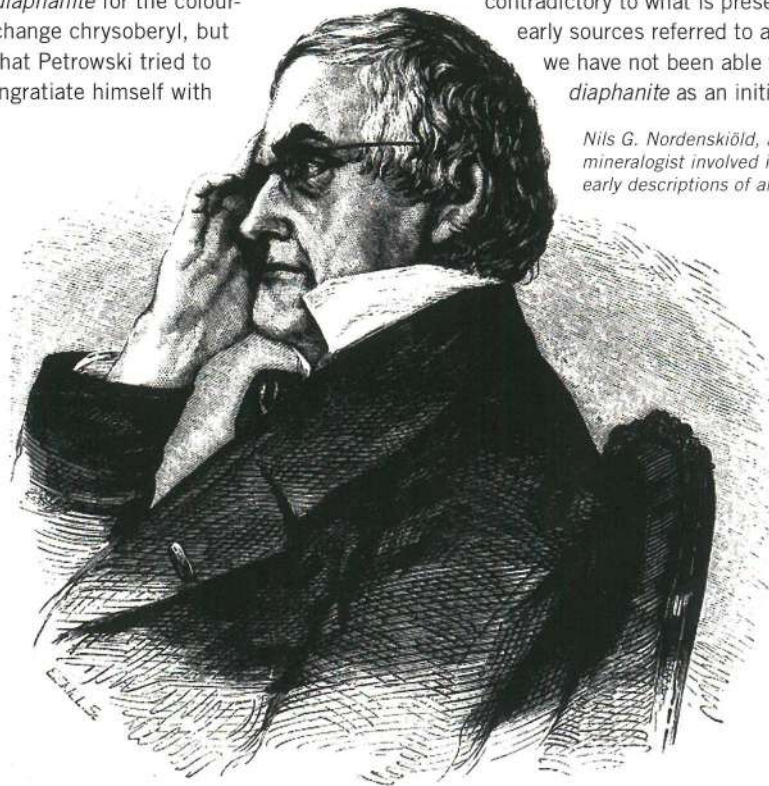
In some recent references it is stated that Nordenskiöld first suggested the name *diaphanite* for the colour-change chrysoberyl, but that Petrowski tried to ingratiate himself with



Proving the position of first rank of precious stones: an 11.95 ct cat's-eye alexandrite in a mount pavé-set with alexandrites, sold for US\$ 277,000 in Christie's Hong Kong, 2005. This superb stone holds the world record price at auction for cat's-eye alexandrite. Images reproduced with kind permission of Christie's Images Ltd.

the Imperial family by presenting the rare specimen to the future Tsar and naming it *alexandrite* in his honour on 17 April 1834. This version of the naming seems contradictory to what is presented in the early sources referred to above and we have not been able to confirm *diaphanite* as an initial name. ▶

Nils G. Nordenskiöld, a mineralogist involved in the early descriptions of alexandrite



NILS GUSTAF NORDENSKIÖLD.

N.G. Nordenskiöld

In 1809, Finland gained independence from Sweden, but was under Russian protection and had a government chosen by the Russian emperor. Nils G. Nordenskiöld (1792-1866) was born in Finland, but had Swedish ancestors. After having received his degree in law, he studied mineralogy and chemistry. In 1823 he was appointed as the Finnish mine superintendent and in 1838 he founded the Finnish Society of Science. He visited the Urals several times and was also member of the *Gesellschaft*. The influence of Nordenskiöld on the development of the field of mineralogy is remarkable. He developed a mineralogical classification system that was further elaborated by Gustav Rose and used for arranging portions of the mineral collection of the Natural History Museum of London. Nordenskiöld also identified and named *phenakite* (1833) and *demantoid* (1853), both from the Ekaterinburg area. Further, he identified and named *kämmererite*, from Saranowskaja, about 200 km north of Ekaterinburg. *Kämmererite* is a soft mineral with a greenish or reddish violet colour. In 1841, Nordenskiöld presented analyses of this mineral in a paper published by the Finnish Society of Science. He described *colour change between daylight and incandescent light*, but not as marked as seen in alexandrite.

When Nordenskiöld suggested the name *alexandrite* for the Siberian chrysoberyl, he also remarked that red and green were the Russian military colours. His son, Adolf Erik, seemed unable to share the same enthusiasm for the tsar and the Russian colours. He received his PhD in mineralogy at age 23 in 1855, the same year as Alexander Nicolajewitsch was crowned as Tsar Alexander II. Two years later, Adolf Erik made a strong patriotic speech that upset the Russian authorities and he was banished from Finland. He later became superintendent for the Mineralogical Department of the Swedish Museum of Natural History, and conducted also several arctic expeditions.

Colour-change tourmaline

In 1883, Cossa and Arzruni described colour-change chrome tourmaline from chrome-iron deposits near Sysstert, south of Ekaterinburg, in *Zeitschrift für Kristallographie und Mineralogie von P. Groth*. They suggested that this new tourmaline variety was a perfect counterpart to alexandrite. Gustav Rose had already collected such tourmaline samples in 1829, but did not observe the colour-change.

Concluding remarks

Recent descriptions of the history of alexandrite are to various degrees contradictory to each other and to the descriptions given in the above references. The detailed review article of 1842 in the *Schriften der in St. Petersburg Gestifteten Russisch-Kaiserlichen Gesellschaft für die Gesammte Mineralogie* was presented while the mineralogists who had been involved in the early research of alexandrite were still active, suggesting that the historical account presented here is the most reliable. □

Asbjørn Halvorsen of Son, Norway, is a geologist with underground construction as his main field of activity. His paper on the Usambara effect was published in *The Journal of Gemmology*, 2006, **30** (1/2), 1-21. Helen Molesworth FGA (Dist.) is a Jewellery Specialist in Christie's Geneva.

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Pearls in the Gulf

Some local collections

In the early Classical and Near Eastern civilizations there is little indication for the use of pearls before the time of Alexander the Great's expeditions to the East around 300 BC. However, in the Persian Gulf, there is evidence for a far longer history. For example, the use of pearls pierced to form beads can be traced many millennia BC in Kuwait, at Al-Buhais in Sharjah, at Al Door a hill settlement in Umm Al Quawain and Al Qusais, just north of Dubai. The pearls shown here (1) are from tombs at Al Qusais and date to between about 2000 and 1000 BC. These pearls, along with other jewellery from the site, are now in Dubai Museum. Other museums in the region possess collections related to the pearl trade. For example, the rope and lead weight used to speed the divers to the sea bed is on display at the museum at Al Ain (2).



Pride of place among pearl museums must go, of course, to the Pearl Museum at the National Bank of Dubai. This museum honours both the late Ali Bin Abdullah Al Owais and his son Sultan Bin Ali Al Owais. Ali Bin Abdullah Al Owais was a wealthy pearl trader who dreamed of establishing a financial institution to serve local needs. His son brought this vision to fruition and became the first chairman of the National Bank of Dubai in 1963. Under his leadership, the Bank was able to play a vital role in developing Dubai into the Gulf's leading commercial business and financial centre. By the time of his death in 2000, Sultan Bin Ali Al Owais had amassed one of the largest pearl collections in the world. He gave this collection to the people of the gulf under the custodianship of the National Bank of Dubai, where the collection is now magnificently housed on the 15th floor headquarters of the National Bank of Dubai Headquarters. (The Pearl Museum at the National Bank of Dubai can be visited by invitation only.)

The exhibits on display in the Pearl Museum range from a truly astounding quantity of natural pearls loose (3) and in jewellery (4), to the sieves, weights, loupes and tally books that record the day-to-day life of the pearl traders and divers. In the period 1830 – 1900, the output of the pearl industry was worth an average of about USD 1,750,000 per annum. The region had approximately 1200 pearling vessels (of which 335 were from Dubai) working on the oyster banks during the season. It is interesting to note that Chardin recorded that there were about 1000 pearling vessels in the Gulf in the early seventeenth century.

The Gem-A Conference 2007 will include more on the history of pearls, the natural pearl market today and the film 'The Pearl Coast', a documentary from the Pearl Museum, The Bank of Dubai, that includes historic footage of pearl diving will be shown (see p.28).

I would like to thank Hayfa Matar, Conference Director and guide extraordinaire, for making my visit to the Emirates so interesting and memorable. Also Nathalie Sfeir, the Curator of the National Bank of Dubai's Pearl Museum, for her invitation to visit the collection and her enthusiasm and hospitality. □ J.O.

The Allure of Pearls



Gem-A Chief Executive Dr Jack Ogden was in Abu Dhabi and Dubai in January 2007 as the guest of the Abu Dhabi Authority for Culture and Heritage. The event was the conference

'The Allure of Pearls' and Jack presented a talk entitled 'The Pearl Trade: A Voyage through Art, History and Literature' in which he discussed the development of the pearl trade over 2000 years between about 300 BC and AD 1700. In his presentation, Jack illustrated this large natural pearl – it is about 5 cm high and perhaps the largest natural pearl to have passed through Gem-A's gem testing laboratory. The pearl shows signs of age and parts of the present gold mount may date back to the eighteenth century. □

Photo reproduced with the permission of the owner.

1. Threaded pearls from tombs at Al Qusais, Dubai, 2nd millennium BC. Dubai Museum.
2. Lead weight and rope as used by pearl divers in the gulf. Al Ain Museum.
3. A selection of the thousands of loose pearls on display at the Pearl Museum at the National Bank of Dubai. (Photos: 1 and 2, Jack Ogden; 3 courtesy Pearl Museum, National Bank of Dubai.)
4. Pearl jewellery on display at the Pearl Museum at the National Bank of Dubai. (Photo: courtesy of the Pearl Museum, National Bank of Dubai.)



Quartz 'sapphire'

GRENVILLE MILLINGTON identifies a large rough sapphire fake

It had to happen. It hadn't happened to me before. But, now it had. Someone 'phoned to say he had got a 100 ct plus rough sapphire for testing and about 40 minutes later there it was on my counter. It had taken two people to bring it in owing to the value and they were willing to leave it with me for no longer than half an hour.

Well, it didn't need half an hour to test, but I wanted to try and get a few photos. It was a single quartz crystal (rock crystal),

1. The rough 'sapphire' brought in for testing.



about 36 mm long, which had been coloured deep blue, and with some crushed rock glued to the outside to make it look 'real'. In fact it looked almost black (1), but holding it up to the window it showed deep, rich cobalt blue. Under the high intensity lamp the colour was richer (2), but in one direction almost colourless (3).

The shape and cross-striations on one face made it easy to identify as quartz. Through a smooth part of the outer surface doubling could be seen with a 10x lens. The Chelsea filter reaction was deep red.

When it was collected later, I was told the asking price had been £10,000, but it was worth a lot more. However, the buyer wanted it tested first. The two people were adamant they hadn't paid for it yet, and I believed them because they didn't stagger and their eyes didn't glaze over when I told them what it was (reactions I've seen before!).

So, having seen many quartz or glass 'emeralds' and 'rubies', here was the first quartz 'sapphire' I had seen. □

GRENVILLE MILLINGTON is an independent gemmologist who has provided a gem testing service in the Birmingham Jewellery Quarter for many years



2. The stone under a high intensity light.



3. In one direction the stone appeared almost colourless under high intensity light.

Freeform gemstone carving



Stone carver Memory Stather was the Guest Specialist at the Gem Discovery Club in February, providing members with an expert practitioner's insight into how a gem material could be transformed into a work of art. Or, more poetically, how a work of art could be released from the chosen piece of gem material. By means of slides and examples, Memory explained the whole process from choosing materials through the design thought processes, to the tools and skills needed for creating

Amethyst perfume bottle © Designs by Memory.

the final object. She explained how she worked with detailed sketches, but how the envisaged form may change dynamically as the carving progressed, to take account of the characteristics and textures of the material. Finish was of paramount importance.

After her talk, members were able to examine a wide selection of Memory's finished objects as well as raw materials, tools, sketches and works in progress. Appearance, beauty and suitability for carving dictated choice of material more than rarity, and materials that Memory had transformed into art works, from ornaments to jewellery to perfume flasks, include organic materials and gemstones.

Details of Spring Gem Club Specialist Evenings are given on p.28. □

A strange catch

SUSAN STOCKLMAYER describes unusual organic gem materials mounted in a brooch

For gemmologists with a special interest in organic materials, the bar brooch illustrated was an interesting chance discovery.

Purchased recently from an antiques shop in the Natal, South Africa, the brooch contains a pair of unusual white objects mounted in a plain gold frame in open claw settings, and open on the reverse. The brooch is handmade, not unexpectedly as the 'gemstones' are not run-of-mill objects. The retailer had already researched the objects and informed me they were 'salmon ears'! Curiosity persuaded me to purchase the brooch.

The objects are confirmed as otoliths – paired bones that are part of the sensory or hearing apparatus in some fish. Their properties are similar to our own hearing equipment and in fish the bones combine with sensory hairs through a gel-like medium to aid the brain in maintaining balance and equilibrium. Expert fish anatomists are able to interpret much from a study of otoliths and it is possible to identify the species, its age, gender and even certain environmental conditions. The otoliths featured in the brooch are particularly large (30 mm) and are calcified. They are from a fish named *Argyrosomus japonicus*, commonly known as a Daga salmon or Kob, also called a Kabeljou in South Africa or Mulloway in Australia. It has been estimated that these

otoliths may have originated from a fish that weighed about 30 kg. This would make the brooch trophy jewellery.

As the otoliths are a well known part of fish anatomy, all the zones of these surfaces can be described by appropriate terminology. Those featured are the left and right sagittal otoliths; to gemmologists this is sufficient information to identify the objects and testing would confirm the material.

These otoliths are a white and translucent material and as a pair show distinct left and right-handedness in form. Their long oval shape is flatter along one edge and these two faces have been mounted towards one another at the brooch centre. The oval shape gradually curves to pointed narrower distal ends. The surfaces have a well-worn and polished appearance and overall are uneven but smooth. They are finely crackled which may be due to age and dry conditions. Certainly

their environmental conditions have altered. The central portion of each one rises to a promontory that is about 12 mm thick at that part.

Examination by intense transmitted light shows that the edges have a concentric growth pattern, like the growth zones seen in shells, but no other structure was apparent. A drop of dilute hydrochloric acid (applied to the reverse) produces a vigorous reaction, confirming that the otoliths are calcium carbonate. Aragonite is the principal mineral in otoliths (described in detail at http://life.bio.sunysb.edu/ee/seatrout/fish_otoliths) together with a protein known as otolin, but no other tests were performed to determine microscopic structure or composition.

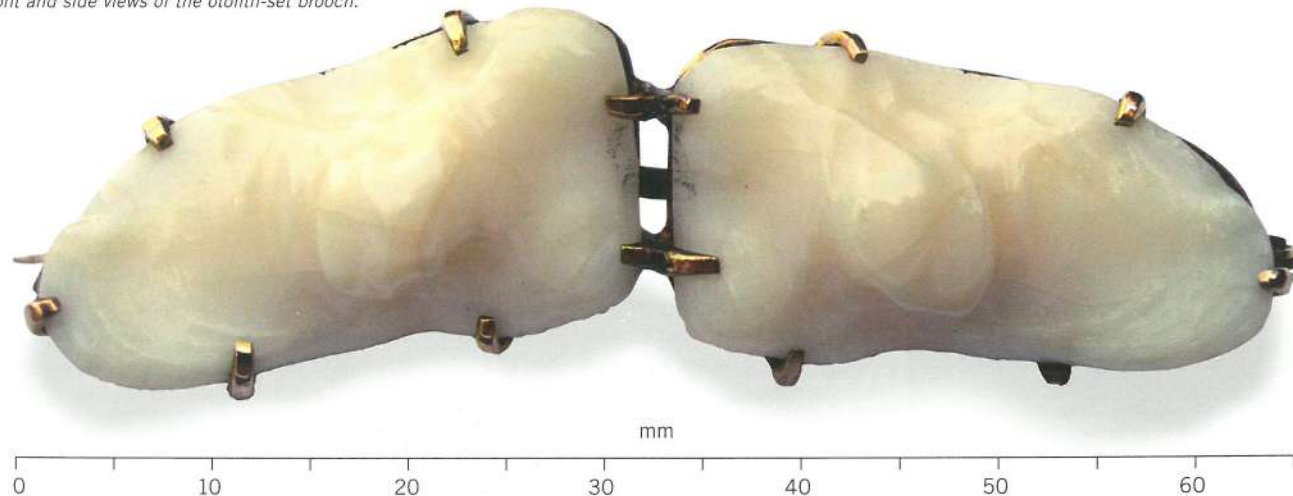
To the valuer, although it contains 'gems' of low cost, to replicate the brooch would involve several hours work with materials an additional cost. The frame is not stamped with any gold standard mark, but tests equivalent to 14 ct gold.

The brooch is not a beautiful item of jewellery but does provide an interesting 'talking' point. It also serves to enlarge the list of organic materials used in jewellery. □

Susan Stocklmayer FGA of Perth, Western Australia, is a Gem-A Examiner.



Front and side views of the otolith-set brooch.



Traditional Indian ear ornaments

WALTRAUD GANGULY summarizes the lecture she presented to the Society of Jewellery Historians in September 2006

Whether simple, or sophisticated and spectacular, all traditional earrings go far beyond mere functionality; as individual works of art, they bear symbolic and religious significance in an ancient canon of pattern and design. One of the reasons for the unrivalled culture of earrings in India is the historical significance associated with the ear itself, since it was the organ by which learning was acquired, rather than by means of the written word.

To the Indian, feelings both divine and human, intermingle incessantly; all forms of life are on one level. The relation of man with nature is much more intense in a tropical country. It is believed that ornaments transfer their secret energies to the wearer, who keeps them close to herself or himself, and that there is no more intimate physical contact than fastening an earring to the body. Thus human beings ensure continuing bonds.

For Indian women, earrings are of manifold importance, reaching beyond pure ornamentation and beautifying of the body.

1. Bali, Himachal Pradesh. Silver, weight up to 250 g.
2. Gokhru from Himachal Pradesh. Gold, with babul work covering the surface. Attached support chain.
3. Jhumka from Rajasthan. Silver, consisting of a kamphul stud for the slightly distended lobe and the dangling bell shaped jhumki.
4. Anchina wale from Karnataka. Gold, require distended lobes.



(acupuncture) points, activating constant protective and healing powers and act as a kind of amulet, protecting the wearer from evil spirits entering the body through the ear.

At the Persian court in the fifth century BC, men's earrings were a sign of fidelity to the Emperor, and in Mughal India, the piercing of Muslim men's ears was popularized by the Emperor Jahangir (1605-27). In Hindu society, the ear lobes of boys and girls were pierced in the first months of life in a ceremony karna-vedhana sanskara, granting purification from the taint of sin leading to rebirth. Deliberately elongated earlobes were considered a sign of supremacy and royal dignity.

Jewellery is worn by all, irrespective of social status or wealth, and it is also a form of identification with a group or as an individual. Since women of particular communities use identical earrings, the wearer can easily be identified as coming from a certain locality. It is an essential unifying factor in the geographical, historical and cultural diversity of the country.

Jewellery also represents security and private investment for a woman. But should the owner sell it when in need of money, she would make sure that the upper ear ornaments are the last pieces to be relinquished. Earrings also serve a medical purpose since they stimulate the marma

Three lines of evolution

Most traditional earrings have evolved from three distinct sources: Mesopotamia, Greece and Persia as one, an indigenous Hindu line, and from natural forms.

From Mesopotamia, Greece and Persia were imported, among others, crescent forms and loop earrings: an influence from the west. Some contemporary lunate earrings bear striking similarities to pieces from ancient Greece, Cyprus, Achaemenid Persia, Armenia and Georgia, of the sixth to third century BC. Crescent forms of Islamic origin are an essential part of earring designs in North



5. Pokhani from Gujarat. Gold over wax core, with fine granulation. Require distended lobes. 6. Nothengpi (silver) and thuria (gold with cloisonné enamel) from Assam. Require distended lobes. 7. Cabochon shaped silver filigree stud (karnphul – ear flower) from Madhya Pradesh. Requires distended lobes. 8. Visiri murugu from Tamil Nadu. Gold over wax core, with kirtimukha face.



Annular earrings are a standard type found in medieval bronze and stone sculptures. Their natural model is the palm leaf scroll. Contemporary types of gold and silver are worn by farming and herding communities (4).

Greek reels of the fourth century BC, which strikingly resemble actual Indian forms, are embellished with the finest granulation or studded with rubies (5). Historic cylinder earrings date from Barhut (second century BC) and studs of a similar shape are still common in Assam (6). The cabochon type is related to Indian finds of the third century BC, the most widespread kind of stud consists of a decorated front plate with a plug soldered to the back (7). The third line is based on forms from nature, surroundings and beliefs:

- The poochookudu: The cylinders of decorated gold sheet are interpreted as 'insect's nest', but could also imitate the characteristic shape of a gopuram (entrance tower of South Indian temples).
- The kirtimukha ('face of glory'): a frequently seen mythological figure on temple towers, doors and ornaments, he is believed to have devoured his own body, save the head, by command of Shiva. On earrings, the figure is seen as a means of protection by the god (8).



- The magar kundal: makara are crocodile-like sea-monsters in Buddhist stone carvings and Hindu temple architecture. Makara earrings are usually restricted to men and are presented to a singer, actor or scholar as a sign of prestige.
- Snakes: Mythological snakes are semi-divine beings, guarding the nether regions and possessing spectacular treasures. They are venerated as the protectors of home and wealth and as a symbol of eternity. Snake earrings are still common in various regions. The cubistic shaped pambadam and the nagavadura, worn in South India as a display of wealth and prestige, represent a stylized egg-laying cobra on her nest.

Other shapes are reminiscent of spiral hair and ear ornaments from Greece (fourth century BC) (9a, b and c). □

India, where they are called bali, with a weight up to 250 g per pair (1). The fundamental idea of the Assyrian (ninth century BC) triple-armed earring survived via Persia and South Russia, in the modern gokhru earrings, covered with babul work (spiky surface decoration) (2). Vase-shaped earring pendants from ancient Greece, Persia and Taxila evolved into an open bell with pendants and, combined with genuine Indian studs, eventually amalgamated into one of the most common pan-Indian earrings: the karnphul jhumki (3).

The second, more Hindu indigenous line, comprises studs of various shapes, as attested by ancient sculptures and archaeological finds: Archaeological disc earrings (diameter 55-65 mm) of terracotta, crystal or jasper. Today their use is mainly restricted to adivasi (scheduled tribes).



9a. Nagali from Gujarat. Soldered gold wire with enamel and glass stones. 9b. Nagulu from Andhra Pradesh and South Orissa. Silver or brass, screwed into the distended lobe. 9c. Nagavadura from Tamil Nadu. Gold. Representing a cobra on her nest. Requires slightly distended lobes.

Waltraud Ganguly has recently published *Earrings – Ornamental Identity and Beauty in India*. iv + 284 pages, over 400 colour illustrations. Hardcover. ISBN 817646587-9

Available at the Probsthain bookshop, as well as the Victoria & Albert and British Museums, London.

Rings of Power

JOHN CHERRY summarizes a lecture he presented to the Society of Jewellery Historians at the Royal Society on 27 February

William Jones, author of *Finger Ring Lore* (1877), was fascinated by the amuletic use of rings. This talk looked at the use of rings to have significance beyond their own physical nature, and examined the way in which rings were thought to have influenced outside events. The ring as a circle was a magical shape. Zoroaster, perhaps the father of magic, is shown standing in a ring.

The three main ways in which rings could affect events were to heal, to become invisible and to serve as a symbol of the ruler or allegiance to the ruler. Healing in rings was related both to the stones with which they were set, which goes back at least to Pliny's *Natural History*, and to inscriptions engraved on the ring. Many stones have particular amuletic qualities. The English monarchs distributed cramp rings from the fourteenth to the sixteenth century. They could also heal through touching for the Kings Evil or scrofula.

The ability to disappear through using a ring appears in Plato's *The Republic*, who told the story of Gyges, who found a gold

ring which could make him invisible. He used this power to seize the throne. Plato was interested in the moral implications of the story.

Rings associated with the rulers of Egypt, such as Tutankhamen, showed Gods protecting the ruler. Solomon is supposed to have had a magic ring, which protected him and the Temple. When stolen, it was thrown into the sea and recovered from a fish. Rings were used in medieval coronations and the image of the king on signet rings gave authority to documents issued in his name.

In the sixteenth century the distribution of cramp rings by the English kings and queens ceased with Elizabeth, although the touching for scrofula continued and only disappeared after the death of Queen Anne in 1714. Scientific scepticism about the magical and amuletic use of rings grew, though Robert Boyle still accepted that there might be a medicinal use. In the eighteenth century the collecting of amuletic rings commenced. The wearing of rings may have declined in the eighteenth century.

The portrait of Madame de Senonnes by Ingres shows the wearing of rings in the Romantic period, and in this period rings were made with medieval scenes, such as knights, on the bezel. Sir Walter Scott was a great collector of antiquities, and medieval sagas and romances provided a rich field for Romantic poets, playwrights and composers. Richard Wagner came to the story of the ring through his acquaintance with medieval literature and his reading of such sagas. He particularly used the Volsunga saga written down in Iceland between 1140 and 1220.

The ideas that Wagner derived from the Volsunga saga were the origin of the gold in the hoard of the waterfall guarded by a dwarf, which he changed into the Rhine maidens. The gold was stolen from them, and Alberich made the ring from the gold. The principal way in which Wagner changed the story was to make the ring all powerful. Wagner may have taken the idea from an insignificant line in the Nibelunglied, which says that the Nibelung treasure contained a tiny golden wand that could make its possessor the lord of all mankind. Wagner gave invisibility to the Tarnhelm, not to the ring.

This provides a contrast to J.R.R. Tolkien, whose ring combined both power



Bezel of gold ring from the thieves hoard from the tomb of Tutankhamun, from Thebes, eighteenth Dynasty. The king kneels before the great sun god Re, while divine bird gods wings encircle and protect the group. Cairo Museum.

and invisibility. The ring in *The Fellowship of the Ring* was of pure and solid gold and the markings only appeared when the ring was heated. Two rings might have inspired Tolkien. The first is the gold Roman ring, found at Silchester, which has the name Senecianus on the outside. This has been linked to a lead curse found at Lydney which was published by Sir Mortimer Wheeler, for whom Tolkien produced a report in the Lydney publication. The second is a gold ring with runic inscription, found at Greymoor Hill near Carlisle in 1817.

Finally J.K. Rowling avoids the inscribed ring favoured by Tolkien. In *Harry Potter and the Half Blood Prince* a gold ring with a black stone contained a fragment of the soul of Voldemort.

Although there were Egyptian and Classical precursors, the ring in the Middle Ages could be a mark of protection, secular power, healing or of ruling. While it could serve one of these purposes, the belief that rings could have any such power declined in the period of the Enlightenment. It was to be revived with the Romantic movement, when the idea of an all-powerful ring became a feature of imaginative literature and opera.

While William Jones wrote in his *Credulities of 1880*, that 'steam, electricity and other achievements of science are dissipating many popular delusions; ghosts, goblins and fairies are losing their hold on the imaginations of even children', the continuation of the presence of rings of power in literature, opera and film from Wagner to Tolkien to Harry Potter, suggest that his hopes were misplaced. □



Coventry Ring. Gold fifteenth-century ring found at Coventry with inscriptions in Latin saying that the five wounds, the Cross and Passion of Christ are the wearer's medicine. British Museum.

John Cherry is President of the Society of Jewellery Historians.

Guillotine jewellery

DEIRDRE O'DAY gives an insight into these 'cutting edge' pieces

A pungent counter-French Revolutionary cartoon entitled *A Republican Belle*, depicting a grotesque and ragged woman, was published in March 1794. It was the work of the English caricaturist Isaac Cruikshank (1756?-1811?). The figure, which is undoubtedly intended to represent Marianne, the symbol of Liberty and the French Republic, is supremely ugly. Her broad grin, as she casually shoots a youthful aristocrat, reveals her rotten teeth. The figure wears a pendant and earrings which are quite clearly in the form of the guillotine.

This one could accept as Cruikshank's artistic invention, were it not for the fact that such jewellery did in fact exist, and must have been known across the Channel in England.

A similar, though more elaborate, demi-parure in gold and gilded metal is in the collections of the Musée Carnavalet in Paris. A model of the guillotine forms the central component of the earrings and it is surmounted by a phrygian bonnet decorated with the tricolore, symbolizing the revolutionary struggle itself. Beneath hangs a crowned and upturned king's head. Less controversial revolutionary jewellery is the better-known type which memorializes the historic events and personalities, rather than the instrument responsible for the death of French aristocrats and dissenters.



Isaac Cruikshank: *A Republican Belle*, *A Picture of Paris* for 1794, March, 1794. Reproduction courtesy of BnF.



Earrings in gilt metal, French, early nineteenth century. Musée Carnavalet, Paris. Inventory no: FL II 646.

These mass-produced emblematic pieces included rings, pendants and watch keys of gold, silver and iron, featuring revolutionary symbols and stamped portraits of such leading figures as Jean Paul Marat and Louis-Michel le Peletier de Saint Fargeau, who were murdered for voting for the execution of Louis XVI. Other souvenirs were made from debris of

the Bastille, supplied by the chief contractor responsible for demolishing the building.

Examples of revolutionary jewellery can be found in the Musée Carnavalet and the Musée des Arts Décoratifs, the Koch Collection and in the collections at the Victoria & Albert Museum and the British Museum.

My thanks to Beatriz Chadour Sampson and Jane Perry for additional information. □

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Gem-A Scholarships

Two Practical Diamond Certificate Scholarships awarded by Gem-A at the Goldsmiths' Craftsmanship and Design Awards 2007

Gem-A's Practical Diamond Certificate Scholarship was awarded to two most inventive young designers at Goldsmiths' Hall in London during the 2007 Goldsmiths' Craftsmanship and Design Awards in February. In this 100th year of the Goldsmiths' Craft and Design Council, Gem-A gladly continued its support for such an exciting link between the understanding of gem materials and the practicalities of jewellery design.

The winners, Stacey Whale and Hau Kan Hui, both stressed their concern that they must know far more about the gems they are using in order to improve design potential. "I want and need to know, for ethical, professional and design reasons, all there is to know about stones," said Stacey. "As a jeweller it is essential that I understand what I am selling to my customers, and what stones are on the market. My jewellery making and design course was a practical view of the arts and crafts combined, but I missed out on learning gemmology." Now a fast-rising self-employed designer/maker, Stacey aspires to use a variety of unusual stones in her excitingly creative and dynamic settings.

Sketch of a ruby-set white gold head ornament by Hau Kan Hui, designed to be worn under the hair to allow the rubies and spikes to be revealed with the movement of the head.



The two winners, Hau Kan Hui and Stacey Whale, with Scholarship judges Anthony Elson, Ian Mercer and Terry Davidson. Photo © Steve Tanner.

Hau Kan Hui at the University College for the Creative Arts in Rochester, explains: "The Scholarship will allow me to improve design and practical aspects of my work, enabling me to express designs in both 2-D and 3-D to their best advantage. A good opportunity for a challenge! It will help me a lot in both study and employment in the future."

Ian Mercer, Gem-A Director of

Education, explained that this year's entry gave all three judges a challenge. The design inventiveness in the use of gem materials in jewellery was particularly high and the judgement was finely balanced. There were five particularly outstanding entries, and the judges had

full opportunity for interesting and lively debate on gem and jewellery design before deciding on the two winners.

A previous Scholarship winner, Monika Kuchard, has now gained success with the full Gem Diamond Diploma, enabling her to use the membership letters DGA after her name. Monika is now



A ring from the range submitted by Stacey Whale. Two blue diamonds appear to be 'floating' under a synthetic sapphire lens. Mounted in 9ct gold and silver. © Stacey Whale™ 2006, all rights reserved.

taking the Diploma in Gemmology course as an evening class at Gem-A, as she aims at the highest world gemmology status of FGA. Meanwhile, last year's Scholarship winners, Vicki Purnell and Ai Morita, have both gained their practical certificates.

We wish all our Scholarship winners every success in their endeavours for in-depth practical understanding of diamond and other gem materials. □

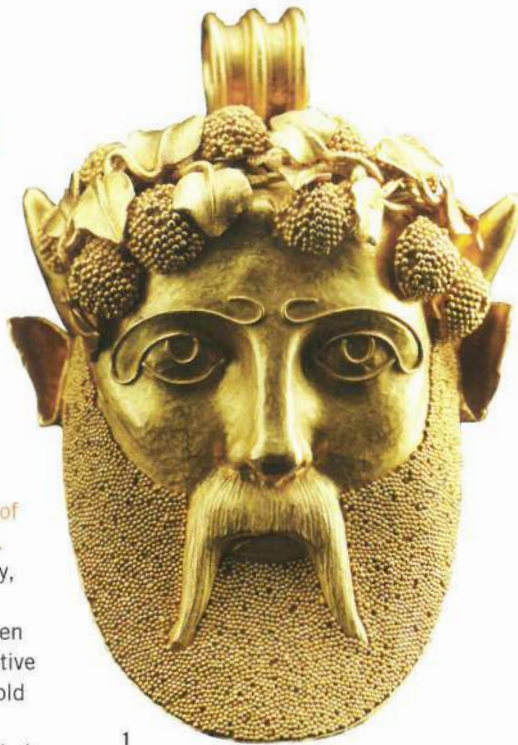
Castellani and Giuliano

Record prices at Sotheby's New York sale

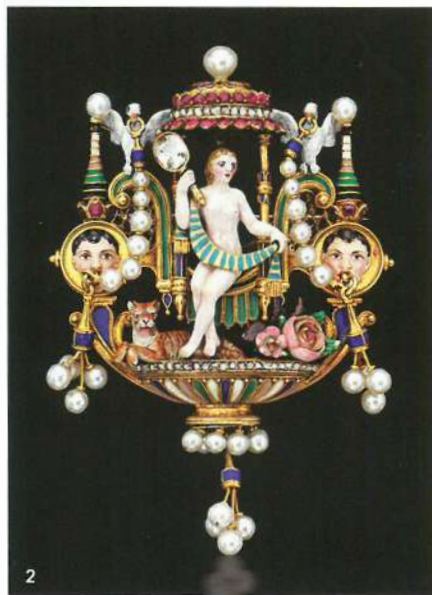
World record prices were set for both Castellani and Giuliano at Sotheby's in New York on 6 December when the largest single collection of their jewels and works of art was sold to enthusiastic bidders.

Specializing in revivalist jewellery, the firms of Castellani and Giuliano became known to a wider public when Geoffrey Munn published an exhaustive survey of their work in 1984. The gold jewellery in the archaeological style created by Castellani in Rome revealed meticulous research in its craftsmanship and sources. 'The jewels of Castellani transport us to another time, another place [...]' commented Carol Elkins, Vice President of Sotheby's jewellery in New York. Indeed Fortunato Pio Castellani, the founder of the business, had formed an important collection of ancient Etruscan and Roman jewellery, and the pieces he made in tribute to them were similarly decorated with intricate filigree, granulation and micro-mosaic, or set with ancient coins, scarabs, shell cameos and hardstone intaglios.

Castellani's talented pupil, the Neapolitan Carlo Giuliano, first managed Castellani's premises in London before establishing his own business there in the 1880s. Although the earliest of his pieces were in the Neo-Classical taste, he soon widened his repertoire. Remarkable confections in the Renaissance style decorated with distinctive delicate enamels were most characteristic of his work, either set with fiery coloured gemstones or more modest moonstones and star sapphires. However he also drew from other sources, producing Egyptian style fringe necklaces decorated with subtly graduated coloured enamels and Indian style parures set with chrysoptase, rubies and pearls. He even incorporated enamelled panels in his work bearing Arabic calligraphy or painted in the Limoges sixteenth-century taste. His versatility captured the imagination of several Pre-Raphaelite artists who



1



2

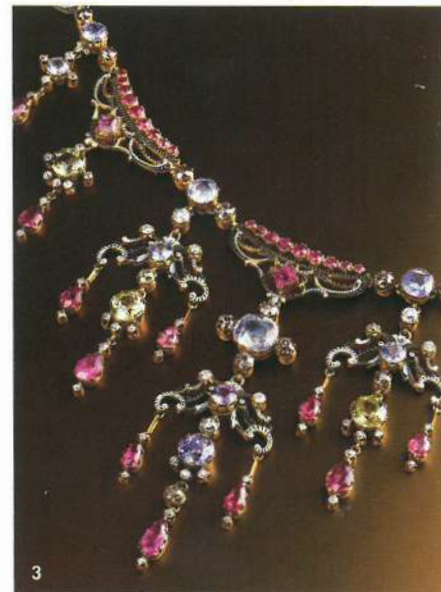
asked him to make up jewellery to their own designs. Although the work of Castellani and Giuliano can be seen in a number of public museums across Europe and the United States, few collectors own more than a dozen examples of their work, and a collection of 150 such jewels was not only unprecedented but by definition uniquely comprehensive. Revealing the vast and astonishing range of the pieces, the lavishly illustrated catalogue included not only those for sale but also loans to the Metropolitan Museum and gifts to the

Victoria & Albert Museum. Indeed failing to reproduce them would have been a grave omission, given the rarity of each piece. Amongst these 17 works were a remarkable Byzantine style diadem of gold, agate, glass beads and enamel, a necklace of woven gold cord with tasselled terminals framing a sapphire cameo of Veronica's Veil, and a gold inlaid aluminium dagger by Castellani; loans and gifts of Giuliano's work included an extraordinary bandeau of banded onyx, a trapezoid shaped brooch set with purpurine, and a pair of hair ornaments with matching brooch set with coral.

1. Iconic Bacchus head by Castellani after the Achelous pendant in the Campana collection.

2. Giuliano Venus under a canopy.

3. Gem-set necklace by Giuliano.



3

enamelled paper knife in the Byzantine taste by Castellani; the delicate parure of opal and chrysoberyl elements alternating with black and white enamelled panels by Giuliano; the theatrical Renaissance style brooch by Giuliano centred with an



4

4. Gold and micromosaic brooch by Castellani.

enamelled Venus under a canopy (2); the restrained pendant cross in the Byzantine taste by Castellani entirely decorated with black and white enamel and micro-mosaic; the flamboyant Egyptian revival brooch by Giuliano centred with a Nubian head wearing a diamond-set headdress flanked by a pair of white horses; the dazzling necklace suspended with girandole drops set with multicoloured gemstones by Giuliano (3). In this vast array were some of the greatest examples of jewellery of the nineteenth and early twentieth century.

For those unfamiliar with the names of Castellani and Giuliano, there was little chance they would escape Sotheby's powerful publicity machine, which involved sending groups of pieces on a promotional world-wide tour for some weeks prior to the auction. A long article in the *New York Times* devoted to Castellani and Giuliano and to the origins of this remarkable collection formed by Ms Judith Siegel, a

5. Gondola brooch by Giuliano.



5



6

6. Castellani micromosaic necklace and brooch set with steatite faience scarabs.

London-based American, made fascinating reading. A number of the jewels by Castellani in the sale had been included in a recent exhibition organized by Susan Weber Soros at the Bard Graduate Center for Studies in the Decorative Arts, Design and Culture. The exhibition, entitled 'Castellani and Italian Archaeological Jewelry', had travelled to London and Rome. However many more Castellani jewels were to be included in the auction, as were of course all the Giuliano pieces in the Siegel collection. Daniela Mascetti's introductory

lecture on the Sunday before the sale was therefore eagerly attended, as was the pre-sale viewing at Sotheby's York Avenue premises. Remarkably, the frenzy of interest before the auction was not reflected in attendance numbers, and the vast upstairs saleroom looked sparsely populated with only some 60 seats filled.

This had no bearing on the frenzied bidding, in which not only those people in the room but 27 others on the telephone participated. No less than 15 times its estimate was achieved for a gold and micromosaic brooch by Castellani (4), another pastiche of a jewel in the Campana collection, which sold for \$234,000 (lot 78). Probably the most poetic piece of all, a brooch in the form of a gondola by Giuliano (5) and the very last item in the sale, fetched \$168,000 (lot 154), while the previous lot, a spectacular necklace with brooch in the Egyptian taste by Castellani set with steatite faience scarabs and decorated with geometrically arranged multi-coloured micro-mosaic (6), was the highest selling lot at \$475,000 hammer price. Achieving the dizzy total sum of \$7,404,800, a historic collection formed over two decades was dispersed in a matter of hours. □

Photographs courtesy of Sotheby's.

An example of early diamond cutting

A rare antique diamond-set brooch is to be auctioned by Christie's King Street on 13 June.

The diamonds of the central rosette probably date from the early sixteenth century. Because of the high cost of diamonds in the early fifteenth century, cutters introduced the rosette to give the illusion of size. The first rosettes were composed of four shield-shaped diamonds forming a clover leaf which gradually evolved to more complicated designs with up to ten single petals.

In about 1480 the development of the 'double' rosette began, which consisted of two different diamond cuts; a fan and a lozenge/kite shape. The juxtaposition of the diamonds was technically very difficult to achieve due to the angles and wastage needed to successfully create a lively rosette. Examples with ten to eighteen



diamond segments are known, as seen in a sixteenth-century pendant belonging to Duchess Anna, daughter of King Charles III of Denmark and Dorothea of Saxe-Lauenburg (1532-1585).

It was the usual practice for the rosettes to be closed-back mounted and their overall brilliance was enhanced by small pieces of foil reflecting the facets of the diamonds. However, over time moisture tended to enter through the tiny gaps between the petals which caused the foil to tarnish. The present rosette might well have survived because it was adapted to an open-back setting in the early nineteenth century, when the rose petals were added to create a brooch more in keeping with the period. □

The diamond rosette set in diamond and ruby rose petal surround, mounted in silver and gold. Diameter 3 cm. Photo courtesy of Christie's.

An auctioneer's lot is not a happy one

This is the intriguing title of a presentation to be given by Auctioneer Stephen Whittaker at the Gem-A Scottish Branch Conference in early May.

Stephen Whittaker, a Managing Partner of Fellows & Sons of Birmingham, will discuss some widely varied, interesting and unusual items which have recently passed through the auction house. Said Stephen: "My interest in antiques came about when I met and married Jayne Fellows and joined the family business in 1986."

For details of the Scottish Branch Conference and a booking form call Catriona McInnes on 0131 667 2199 or visit the Branch website at: www.scotgem.demon.co.uk.

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King Street, London (t: 020 7839 9060)
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www.sothebys.com

New Bond Street, London (t: 020 7293 5000)
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WOOLLEY AND WALLIS

www.woolleyandwallis.co.uk

Salisbury, Wiltshire (t: 01722 424500)
Jewellery: 25 April

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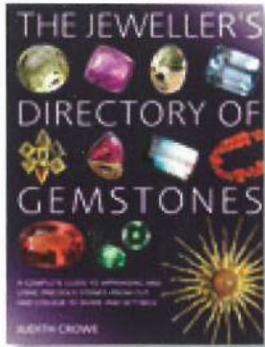
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Idar-Oberstein, Germany

The 75th anniversary of the German Gemmological Association (Deutsche Gemmologische Gesellschaft e.V.) is to be celebrated with an international gemmological symposium.

The event, the First European Gemmological Symposium, will include important topics in gemmology and current developments in the jewellery trade presented by an international panel of speakers. The Symposium is to be held at the Stadttheater, Idar-Oberstein, on Saturday and Sunday, 23 and 24 June, with a Welcome Reception at the Parkhotel on the Friday and an Anniversary Banquet at Göttenbach-Aula on the Saturday evening.

For further information visit www.dgemg.com or call the Symposium Office on +49 6781 50840.

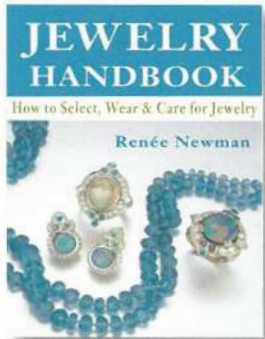
New titles from Gem-A Instruments



The Jeweller's Directory of Gemstones

Judith Crowe, 2006. A & C Black Publishers, London. 176 pp. Paperback, ISBN 0-7136-7656-6. £16.99.

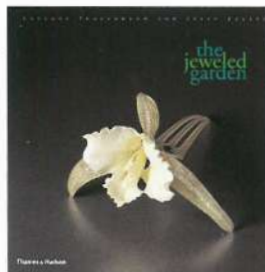
Aimed as a reference book for goldsmiths, jewellery makers and collectors, this is a comprehensive guide to identifying, buying, using and caring for a wide array of jewels and gems. Discover the origins of gemstones and understand the process of selecting the raw material. Practical advice is given on how to assess the quality, rarity, grade, durability and cut, how gems are treated to improve both colour and clarity, and how to spot synthetics and fakes. Useful information is also given on care that should be taken when working with the stones. There are clear illustrations and colour photographs to aid the identification of the different types of gemstone available and to demonstrate how they may be used in a vast variety of designs and settings. Cuts and facets, settings both old and new, appraising, buying and handling gemstones are also covered.



Jewelry Handbook - How to Select, Wear & Care for Jewelry

Renée Newman, 2007. International Jewelry Publications, Los Angeles. 177 pp. Paperback, ISBN-13: 978-0-929975-38-2. £17.50.

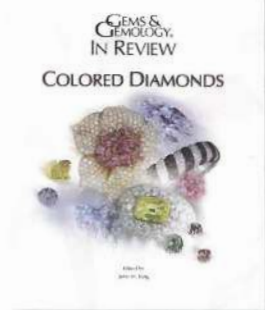
A practical guide to selecting jewellery, this book tells you how to choose versatile, durable jewellery that flatters you. Written for both lay people and professionals, the book also gives information on the various metals used in jewellery and terms used to describe metal content, gem shapes and cutting styles, manufacturing methods, benefits and drawbacks of setting styles, and caring for your jewellery. The *Jewelry Handbook* also provides information and colour photographs on gemstones, birthstones and fineness marks, and has a chapter devoted to jewellery for men.



The Jeweled Garden

Suzanne Tennenbaum and Janet Zapata, 2006. Thames & Hudson, London. 216 pp. Hardback, ISBN 0-500-51329-5. £29.95.

The natural world has been a muse for artists throughout the ages, and jewellery designers have always shared that inspiration. *The Jeweled Garden* presents the most beautiful and important flora- and fauna-themed jewellery creations of the last 200 years. The authors explore the evolution of garden-inspired jewellery from the nineteenth century to the present day displaying important pieces from world-famous jewellers. This volume, illustrated by 375 colour photographs and design drawings, will delight jewellery aficionados and gardening enthusiasts alike.



Gems & Gemology in Review: Colored Diamonds

John M. King (Ed.), 2006. GIA, Carlsbad, USA. 317 pp plus 20-page booklet of colour grading charts. Paperback with slipcase. ISBN 0-87311-052-8. £49.95.

The book contains a collection of articles originally published in *Gems & Gemology* on coloured diamonds. The articles have been grouped in sections, each with its own introduction. The first section is Historic and notable colored diamonds, followed by Characterization of coloured diamonds, Color grading of colored diamonds, and Colored diamonds with unusual characteristics. The separate booklet gives three hue circle charts, followed by a series of tone/saturation charts.

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Be all and end all

The situation regarding beryllium treatment of corundum reminds me of some rapidly mutating virus. Just when you think you've got it sussed, it jumps on a stage.

When beryllium treatment of corundum first came to the attention of gem dealers and jewellers in 2001, it was a case of "Oh heck, a new treatment – that explains all those 'padparadschas' on the market". But, no problem, simply immerse the stone and the coloured fringe showed up. So any halfway decent gemmologist could spot them. Not for long. It was then announced that not all treated corundum had the colour fringes – with some 'second generation' treated corundum the beryllium treatment extended to the cores.

We were back to being suspicious of all those bright orangey-yellow sapphires on the market. There was certainly no excuse for the companies – like the one at IJL 2006 I mentioned in the October 2006 issue (p.89) – who specialize in coloured sapphire jewellery but were seemingly unaware of any problems.

Things were compounded by the greater awareness in early 2006 that some blue sapphires were seemingly having their colour improved by beryllium treatment. Actually this was nothing new. Ted Themelis in his book *Beryllium-Treated Rubies and Sapphires* (2003), page 29, illustrates vividly the issue, but

seemingly few paid attention. So in early 2006 it was more shock horror and an impact on the blue sapphire market. But then the better equipped gem labs told us it was again safe to sleep at night – the right analytical equipment, such as SIMS or LA-ICP-MS, could detect the beryllium in any corundum.

One can imagine some gemmologist then asking what, in hindsight, was an obvious question: "Do any natural blue sapphires contain beryllium?" Yes. Sure enough, some natural sapphires from basaltic sources were indeed now found to contain minute amounts of beryllium. Back to the drawing board. Another sigh of relief. The natural sapphires with a



small beryllium content also had minute traces of the elements niobium and tantalum. Well, that's OK then.

OK, for a well-equipped lab, that is. Most gemmologists reading this will look at their 10x loupe with growing despair.

But at least the treated and non-treated beryllium-containing sapphires could be distinguished. Or could they? According to Ted Themelis at Tucson this year, things might not be quite so simple.

It is now possible to treat certain types of colourless or near colourless Sri Lankan sapphires and turn them blue in a multiple stage process. In experiments conducted by Ted, selected Sri Lankan corundum was first heat-treated with beryllium and other additives at 1750°C for about six hours. After this stage the stones are still colourless (1). In a subsequent process, the stones were placed together with crushed powder of certain type of dark blue sapphires of basaltic origin along with other additives and heated below 1000°C for 200 hours upwards. As this second heating stage progresses, the stones gradually turn a darker and darker blue. The stone shown here (2) had been heated for just 50 hours by Ted and has assumed a rather pretty pale 'Ceylon sapphire' colour. Now if the second stage includes diffusion from crushed basaltic type dark blue sapphires, might this also transfer some niobium or tantalum into the stones?



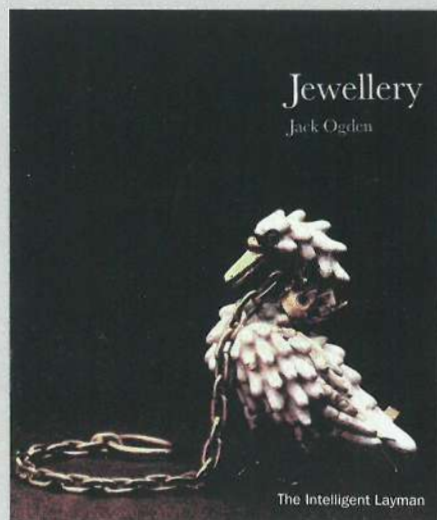
Sri Lanka corundum (1) heat-treated with beryllium and other additives at 1750°C for about six hours and (2) heat-treated for 50.

Where will it all end?

Those of you with a really warped imagination will probably suggest that eventually they will be artificially 'crackling' beryllium-treated synthetic corundum and filling the resulting fissures with lead 'glass'.

I've news for you – they are already doing it. Kilos a week of it, so I've been told. □

J.O.



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Kinetic double finger ring. Synthetic ruby and stainless steel ring, 1987, from the private collection.



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 Queen Charlotte's Jewellery.



Mezzotint portrait of Queen Charlotte in her wedding attire, 1761, by Thomas Frye. Courtesy of the British Museum.

The Queen owned prodigious quantities of jewellery. Yet today only a handful of pieces remains in the Royal Collection. The state jewels were altered time and again so that nothing remains in its original form, while her personal collection was sold six months after her death. This lecture brings together for the first time the different elements of her collection in all its astonishing diversity. It will focus on the catalogue of the sale of her personal collection in 1819, and will shed new light on Queen Charlotte as a keen follower of fashion and a woman of intellect and sensibility. □

SJH Website

The Society of Jewellery Historians now has a website, which you may reach via:
www.societyofjewelleryhistorians.ac.uk

The purpose of the website is to provide our members with a reliable, up-to-date bulletin board so that they can check the date, time and venue of lectures and special events without needing to search for the latest flyer, or the calendar in *Gems and Jewellery*. Other services to members, and potential members, will be added as needed.

SJH Meetings

All lectures start a 6:00 p.m. sharp and are followed by an informal reception with wine.

Please note the changes of venue.

Tuesday 24 April
 The Royal Society, 6-9 Carlton House
 Terrace, London SW1
CHARLOTTE GERE
 Jewels for Helen of Troy, Victorian
 femme fatale

Tuesday 22 May
 Bonhams, 101 New Bond Street,
 London W1
BEATRIZ CHADOUR SAMPSON
 Friedrich Becker (1922-1997). From
 Aeronautical Engineer to Jeweller
 Highlights from a private collection.

Tuesday 26 June
 The Royal Society, 6-9 Carlton House
 Terrace, London SW1
JUDY RUDOE
 Queen Charlotte's Jewellery

Tuesday 25 September
 The Royal Society, 6-9 Carlton House
 Terrace, London SW1
SIMON FRASER
 Men and Jewellery

Tuesday 23 October
 The Society of Antiquaries, Burlington
 House, London W1
DAVID POSTON
 My Life and Work

Tuesday 27 November
 The Society of Antiquaries, Burlington
 House, London W1
KATE HARRISON
 Jewellery to Medal-making

Meetings are open only to SJH members and their guests. A nominal charge is made for wine to comply with our charity status. For those requiring further information, contact details for the Society are given on p.2. For the latest information on forthcoming events visit the Society's website at:

www.societyofjewelleryhistorians.ac.uk

Gem-A Meetings and Events

Midlands Branch

Friday meetings will be held at the Earth Sciences Building, University of Birmingham, Edgbaston. For information contact Paul Phillips on 02476 758940 email pp.bsfcgadga@ntlworld.com

Friday 27 April

HEATHER McPHERSON

Could you be a jewellery valuer?

Saturday 16 June

Summer Supper Party

North East Branch

Meetings are held at the Ramada Jarvis, Hotel, Wetherby. For information call Mark Houghton on 01904 639761 email Mark at markhoughton@hotmail.co.uk or Sara North Sara_e_north@hotmail.com

Thursday 24 May

TRACEY JUKES

Coloured stone market

North West Branch

Meetings will be held at YHA Liverpool International, Wapping, Liverpool L1 8EE. For further details contact Deanna Brady on 0151 648 4266.

Thursday 19 April

IAN WILLIAMS

Questions and Answers

Thursday 17 May

WENDY SIMKISS

Lord Derby – 15th Earl of Derby's agate collection

Thursday 21 June

ALAN HODGKINSON

Opals

Scottish Branch

For information call Catriona McInnes on 0131 667 2199, e-mail scotgem@blueyonder.co.uk website www.scotgem.demon.co.uk

Scottish Branch Conference

Friday 4 to Monday 7 May

The Lovat Hotel, Perth

Keynote speaker:

PROF. EMMANUEL FRITSCH

South East Branch

Meetings held at the Gem-A Headquarters, 27 Greville Street, London EC1, unless otherwise stated. For information contact Peter Wates at peter.wates@dsl.pipex.com

Saturday 12 May

Viewing of a private collection of African gems and minerals

Venue: Sevenoaks, Kent

Gem Discovery Club

The Gem Club meets every Tuesday evening when we examine the widest possible variety of stones. Once a month there is a guest specialist.

Tuesday 1 May

RUI GALOPIM DE CARVALHO

Gemstones in 18th century Portuguese jewellery

Tuesday 5 June

ROY HUDDLESTONE

The development of the Lennix synthetic emerald

Annual General Meeting

The Gem-A AGM is to be held on **Monday 18 June** at the National Liberal Club, Whitehall Place, London SW1A 2HE.

Gem-A Conference 2007

Sunday 28 October

The Renaissance Heathrow Hotel

GEMS OF THE ORIENT



Gem-A's 2007 Conference will focus on pearls and jade.

Why pearls? Because this year marks two anniversaries. The highest profile one is that of Mikimoto – Mikimoto's Gold Work Factory was established in 1907 and developed into Japan's first full-scale jewellery production facility. The other anniversary is also related to cultured pearls – 300 years ago in 1707, Carl Linnaeus was born. This great natural historian and father of modern taxonomy, was intrigued by the possibility of culturing pearls and produced his own. Some survive. Presentations will cover the history of pearls, the natural pearl market today and the film 'The Pearl Coast', a documentary from the Pearl Museum at the National Bank of Dubai (see p.11) that includes historic footage of pearl diving, will be shown. For the latest information on the 2007 Conference visit the Gem-A website at www.gem-a.info/membership/conferences.htm

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