

NEWS FOR MANUFACTURING JEWELLERS, SILVERSMITHS AND DESIGNERS

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SEPTEMBER
2005

Taking an Ethical Stance

JIB looks at how some of the industry's biggest names are tackling the current issues.

The recent release of black rapper Kanye West's single "Diamonds from Sierra Leone", with its emotive lyrics about conflict diamonds and graphic video of diamonds spouting blood, demonstrates that questions about the ethical impact of jewellery can never be far from the public's consciousness. So the recent launch of 'The Council for Responsible Jewellery Practices', which has been in gestation for almost 12 months, reminds us of the need to analyse the industry's ethical impact and to develop our own solutions and responses.

This not-for-profit organisation brings together 14 organisations from all sections of the jewellery supply chain, committed to promoting responsible business practices in a transparent and accountable manner throughout the jewellery industry. Founder members include global retailers Tiffany, Cartier and Signet and the US Zale Corporation, together with mining giants Rio Tinto plc, BHP Billiton, Diarough N.V, Newmont Mining Corporation and the Diamond Trading Company. The group

also includes Jewelers of America, the global jewellery Association CIBJO and the UK's National Association of Goldsmiths.

In an early press statement the Council states its belief that a coordinated worldwide approach to addressing ethical, social and environmental challenges will maintain and promote consumer confidence in the industry.

Focusing initially on gold and diamonds the council will endeavour to develop a 'Framework' based on self-assessment and independent monitoring. It will also work to lobby others in the industry to address ethical issues and its ultimate aim is to be inclusive and to extend membership throughout the entire jewellery industry.

Philip Olden of the World Gold Council, whose member Newmont Mining is on the Council, told JIB that the WGC is 'actively engaged' and 'extremely supportive' of the initiative. He admits however that establishing a chain of custody for gold will be no easy matter. 'The sheer volume of gold produced each



Aerial shot of Diavik Island's diamond mine, Canada.

year, the amount already in stock and the distribution structure does make gold more difficult to track than diamonds" he said.

Geoff Field, CEO of the British Jewellers' Association has also welcomed the initiative but he too is under no illusion that the task will be easy. "The issues which the Council proposes to address are far-reaching and the complexity of solutions should not be underestimated, but they cannot be ignored. The industry has to work together on a global basis to protect the reputation of its products and to uphold the principles on which the CJRP is now consulting the industry. We have written to all BJA members about this and await their comments, he said."

For full details of the CRJP visit: www.responsiblejewellery.com

Legal Contracts

IJL will see the launch of a specially produced 'Contracts Pack' for all those who either design jewellery or purchase jewellery designs.

These, fully binding legal documents, are available for use under licence from The British Jewellers' Association. They are easy to use but nevertheless cover all legal aspects involved in the sale and purchase of a design.

Prices start at just £25.

See page 3 for the full story or see the BJA at IJL on Stand 302



Design Contracts bring welcome protection

The British Jewellers' Association (BJA), 'Design Contracts Pack' will be launched at International Jewellery London this September.

The contracts, which have been prepared for the BJA by the specialist intellectual property lawyers Royds, are designed for use by anyone in the jewellery industry who is involved in designing jewellery or in purchasing designs for jewellery.

The pack contains three separate contracts: a 'Confidentiality Agreement', an 'Assignment of Copyright and Unregistered Design Right' and 'A licence of Copyright and Unregistered Design Right'.

"As good design becomes an ever more important ingredient in successful jewellery production an increasing number of manufacturers and retailers are employing freelance designers to produce concepts on their behalf. These contracts ensure that all parties understand the terms of the contract being entered into and have the protection they need," says BJA chief executive, Geoff Field.

Production of the contracts was funded by the BJA with the assistance of the Worshipful Company of Goldsmiths. The contracts will be offered to all interested parties for use on a 'User Licence' basis at the extremely reasonable sum of £25+VAT to BJA members and £50+VAT to non-members.

"These contracts are excellent value for money and we believe they represent a fair balance of risk. I have no hesitation in recommending them," says Geoff Field. For further information contact Diane Thomas on 0121 237 1110 or visit www.bja.org.uk

Design competition launches

Silver jewellery collections are to be the theme for the Kayman Award 2006, which launches this September.

This well-established, national competition, which was set up some 12 years ago in memory of UK jewellery manufacturer Gerald Kayman, is organised by The British Jewellers' Association. It has traditionally been held once every two years, but now under a new and on-going sponsorship arrangement with Spring Fair Birmingham is set to become an annual event.

The 2006 competition has two separate categories:-

- silver jewellery collections designed and made entirely in the UK
- silver jewellery designed in the UK but manufactured overseas.

Entrants are being invited to put forward designs, which must be made of no less than 80% sterling silver, although other metals and gemstones can be included.

Three pieces plus

Each collection entered must comprise at least three different pieces of jewellery and the judges will be looking for fresh ideas, quality of manufacture and a strong storyline for the retailer. Entry forms are available now and the closing date for entries, which will be judged in the first instance from drawings or photographs, is 10 October, 2005. The judges will include jewellery journalists, well-known designers and buyers from a number of top retail outlets.

Winners stand to receive free advertorial in the May 2006 issue of Jewellery in Britain, a trophy to keep and a PR campaign in appropriate media. The



winning products and eight runners up will also go on display in Hall 18 of the dedicated Jewellery section at Spring Fair. Retailers visiting the show, and those who fill in a voting slip in the February issue of JIB, will be invited to cast their own vote to pick their favourite design for additional commendation. Those retailers who take part in this judging will be entered into a prize draw to win overnight hotel accommodation and dinner for two at a leading hotel during Spring Fair Birmingham 2007.

Great Opportunity

"This is a great opportunity for all silverware designers and manufacturers to gain valuable publicity and we are looking forward to a great deal of interest from all areas of the trade," says the BJA's Lindsey Straughton. Alison Jackson, MD of Spring Fair Birmingham agrees "This is a tremendous opportunity and underscores Spring Fair's commitment to the jewellery sector," she told JIB.

An entry form to the Kayman Award 2006 is included in this magazine. Full details about the competition can also be found on the BJA website www.bja.org.uk and on the Spring Fair website www.springfair.com **Closing date for entries is the 10th October 2005**



Alison Jackson
MD of
Spring Fair,
Birmingham,
sponsors of the
Kayman Award



From left to right: Roger Burman, John Joyce, Steven Jones and Ian Miller

New Board for Federation

John Joyce, a director of Kaemingk UK, the British subsidiary of the Dutch Christmas decoration giant, Kaemingk BV, has been elected Chairman of the BJGF Federation, the umbrella body of which the BJA and its five sister trade associations are a part.

Other new members to recently join the Board are Roger Burman CBE, a guardian and warden of Birmingham Assay office with long experience of the jewellery industry; leathersgoods expert Steven Jones and wholesaler Ian Miller of the Jewellery Distributors' Association returns to the Board.

UKTI agreement brings export opportunities



Martin Raven, UK Trade & Investment with Federation Chief Executive Kryszalewska (left) and outgoing President of the Federation Philippa Allan.

The BJGE has been appointed as the official UKTI representative for the jewellery, giftware and tableware sectors – the first time a non-governmental third party organisation has been appointed in this role.

As such BJGE will become the official UKTI point of contact and will deal with trade enquiries from overseas buyers and from staff in embassies and consulates worldwide. It will also be responsible for bringing parties of overseas press and buyers to UK trade exhibitions and for investigating and implementing new international opportunities.

A major new service agreement between UK Trade and Investment, the export wing of the British government, and the export department of the BJGF Federation (BJGE), looks set to benefit the jewellery industry at large.

The department will also play a leading role in disseminating export information between other organisations in the industry and on improving opportunities for UK companies.

"This role will allow us to maintain a nationwide co-ordinating role, increase opportunities for all companies in our industry and steer new and potential exporters towards all available resources", British Jewellery and Giftware Export Manager, Mike Josypenko told Jewellery in Britain.

Contact the BJGE on 0121 237 1119.

UK Jewellery Awards' Charity Bonanza



A necklace designed by prize-winning student designer Sarah Cunningham, the winner of UK Jewellery Award Student Designer of the Year 2004 competition has raised a sum of over £3500 for the 'Benevolent Society', the registered charity which supports needy ex-employees of the jewellery industry. The necklace was used as the prize in a 'Prize Draw' at the 2005 Jewellery Awards. It was won by James Hart of Fraser Hart.

First woman of manufacturing



The Confederation of British Industry (CBI) has honoured BJA Chairman Stella Dorsett. In a recently launched national Award scheme aimed at high-flying women, the CBI dubbed Stella 'First woman of manufacturing'. Dorsett, who is European President of Cookson Precious Metals, and the first ever woman in the BJA's 150 year history to chair the Association, was praised by the judges as having a number of 'firsts' to her name.

IN BRIEF



Kim Yip joins the BJA

The BJA has a new member of staff. Designer jeweller, Kip Yip has joined the team as 'Information Administrator' with special responsibility for the Association's recently up-graded website.

BJA launches Student/Graduate Newsletter

Jewellery and metal working students and recent graduates are invited to sign up for a new, free email newsletter from the BJA. This will be emailed quarterly and will contain news designed to help readers access the information they need to support the development of their career or to establish a business. To sign up for this service visit www.bja.org.uk and complete the on-line form.

BJA opposes redevelopment

The BJA has joined forces with one of the jewellery industry's most long-established businesses to try and stop a redevelopment in Birmingham's Jewellery Quarter. The Association has been lobbying both locally and nationally to try and stop the eviction of Sutton Tools from its premises in Frederick Street, where a developer is planning a retail complex including a Tesco Express.

Get your company in the press

If you've ever wondered how some companies always seem to be in the press, now is your chance to find out. On 27 September the BJA is organising a FREE seminar in Birmingham on how the media works. Speakers include trade and consumer journalists and industry PRs. Contact Carol Pyatt 0121 237 1109.

Jobs on-line

Thanks to a new service from the BJA, member companies are being offered the chance to advertise 'Positions Vacant' on the Association's website www.bja.org.uk at a cost of just £50 a month. Job seekers can also use the site to post their details in an area viewable only by BJA members. There is no charge for this service. Contact Kim Yip on 0121 237 1108.

JIB TAKES A LOOK AT THE LATEST ROUND OF EXHIBITIONS

Chelsea

For all those seeking contemporary crafts of all types, including jewellery, the Chelsea Crafts Fair is a key event in the calendar. The Fair annually attracts some 25,000 visitors and last year total sales were in excess of £2.6 million.

This year there will be 45 jewellers and 14 silversmiths exhibiting, including 25 newcomers - 19 jewellers and six silversmiths. Amongst the exciting new things on offer will be fine, foldable silver 'doilies' from recent RCA graduate, Sian Matthews, lead, silver and steel chalices and spice bowls created using raising, forging and piercing techniques from Edward James Mahony; paper and thread jewellery from Anoko Yoshizawa and unusual 'elastic' arm pieces and rings made from sheet silver and gold wire by the London jeweller, Hyunkyoung Park.

Chelsea Crafts Fair takes place at Chelsea Town Hall in two separate weeks - October 11-16 and 18-23. The show annually attracts up to 25,000 visitors and has sales exceeding £2.6 million.



Glasgow

Clarion Events has announced the purchase of two major jewellery and gift exhibitions - Scotland's Autumn Gift Fair, (2 - 4 Oct 05) and Scotland's International Trade Fair, (22 - 25 Jan 06). Discounts for members of the British Jewellers' Association, who currently receive 5% off the cost of stand space, are unaffected by the deal. The shows will be managed by Netta de la Cour and a new look is expected for the January show.

Home & Gift

To launch the new Jewellery Hall in the Queen's Suite at this summer's 'Home & Gift' in Harrogate (17-20 July) the show organiser's Clarion Events invited Jewellery in Britain to pick the jewellery for a small exhibition featuring some of the best new products to be previewed at the show. The jewellery was exhibited in two large Perspex 'mushrooms' sited just outside the Queen's Suite. Amongst the companies chosen were Martine Webster, Amber Hall, Ag Silver, Wild Touch and Jacqui Brazil.



Pieces of Eight

Eight of London's leading contemporary jewellery designers have come together to stage their own exhibition. "Studio 339" as the group is known is to present 'Pieces of Eight' at Pennybank Showcase in EC1 from 5-11 September, 2005. The exhibition has been supported by the Bullion Dealer, J. Blundell & Son, which has donated a bag of silver bullion to each member of the group from which each has made a special piece of jewellery. The eight pieces will be auctioned during the exhibition and the proceeds donated to a prostate cancer charity. The members of the group are Jo McAllister, Kathleen Bailey, Angie Boothroyd, Sonia Cheadle, Amanda Doughty, Sarah King, Wendy-Sarah Pacey (above) and Sarah Stafford.

Autumn Fair

The Autumn Fair, 4-7 September at the NEC Birmingham, will see some 200 jewellery and fashion accessory exhibitors taking part, an increase of 33%. 60 of these exhibitors, who will be sited together in Hall 4, are new to the show. The organisers have also announced that Autumn Fair, which will have over 2,000 exhibitors in total, will have vibrant new look that focuses on lifestyles. www.autumnfair.com A highlight of the Fair will be a series of 'Talking Point' Seminars, including TV's Linda Barker who will speak on 'Colour Trends'. www.autumnfair.com

Upgrade at the NEC

The national Exhibition Centre in Birmingham is to have a £40 million upgrade in the next three years. The first phase, which will be completed in time for the Autumn Fair, includes new catering facilities, refurbished toilets and cloakrooms and improvements to the public areas such as floor surfaces and ceilings - especially in the area around the Piazza.

Goldsmiths' Fair

56 jewellers and 34 silversmiths will be showing their wares at this year's Goldsmiths' Fair, 3-9 October, 2005 at Goldsmiths' Hall.

New exhibitors include silversmiths Emma Kate Francis, Peter Musson and Alexander Hammond and jewellers, Sarah Hutchinson and Kate Smith. All five have received a free stand and a bursary of £1000 from the Goldsmiths' Company to help them launch their careers.

'On the Cuff'

Goldsmiths' is also staging an exhibition celebrating cufflinks from the 18th century to the present day, (24 October to 19 November). Call 020 7606 7010 or visit www.thegoldsmiths.co.uk



International Jewellery London

Retailers and manufacturers looking to stay one step ahead will be interested to hear the fashion writer Brenda Polan, when she speaks at the this year's IJL (4-7 September at Earls Court). Polan, who takes as her subject 'Brilliant Ways to Buck a Trend', will reveal the results of a qualitative research project commissioned by Reed's team to discover predominant trends in jewellery buying for the first half of 2005.

Seminar highlights are:

Sunday

11.30 - 12.30
John Ayton - Links of London
14.00 - 15.00
Brenda Pollen - Fashion Writer

Monday

11.30 - 12.30
Diamond guru - Martin Rapaport
14.00 - 15.00
Luxury jewellery designer of the Year - Stephen Webster

Tuesday

11.30 - 12.10
Emagold UK - Patrick Fuller,
Anne Stone, Jan Springer and
Stella Dorsett

Wednesday

11.30 - 12.10
Doug Garrod - Gem-A
Man-Made Diamonds

Other speakers include representatives from Gem-A, the GIA, Birmingham Assay Office, Holts and the Diamond Trading Company

Also new is 'Bright Young Gems' an exhibition of contemporary jewellery chosen by a panel of top lifestyle journalists from the Daily Telegraph, Harpers and Queen, The Times and Quintessentially Magazine. The exhibition will be in the entrance to the show.



The world's most dazzling diamonds



An exhibition entitled simply 'Diamonds' is currently on show at the Natural History Museum. Sponsored by Steinmetz and the DTC, the exhibition is a visual feast which includes a line-up of many of the world's most spectacular diamonds including the famous 'Millennium Star', the 'Steinmetz Pink' and 'Orange Flame' (pictured left). As well as individual stones, the exhibition also includes fabulous Royal and celebrity jewellery, Mogul treasures and plenty of interesting background information. The exhibition is open daily until the end of February 2006.

Chance to view

The BJA is currently in negotiation with the Natural History Museum to organise a private view for members to coincide with its 2006 Annual General Meeting to be held in London shortly before the exhibition closes.



IN BRIEF

Fake diamond certificates

The National Association of Goldsmiths is warning the trade that it has identified a number of fake 'HRD' diamond certificates in circulation in the UK. The certificates all have the same registration number and relate to purchases made in the Turkish Republic of Northern Cyprus.

Gemstone tutorial

The Gemological Institute of America® has created a free, interactive online gemstone tutorial to increase public awareness of the diversity and beauty of coloured gems. 'How to Buy a Gemstone in 7 Simplified Steps' can be found at www.gia.edu.

The tutorial covers 20 different stones and compliments 'How to Buy a Diamond', launched by the GIA in 2000. Both are valuable resources for the trade.

Gubelin Honoured

This year's Gemmological Association's Conference which takes place on Sunday 30 October at the Renaissance London Heathrow Hotel will honour the memory of gemmological giant, Professor Edward Gubelin, who died earlier this year. The theme will be 'the Inside Story - Inclusions in Gemstones'. The keynote speaker will be John Koicula.

DTC New Appointment



Daniel White is the new Business Director for the UK and joins the DTC with extensive and valuable experience ranging from the fashion to alcohol sector with marketing, sales, retail, wholesale and manufacturing knowledge.

He will have the exciting task of spearheading initiatives in the UK and the challenge to execute the new marketing strategy with a 100% focus on the DTC's proprietary programmes.

Advocacy role for WFDB



Written by Harry Levy

In a personal view Harry Levy, explains what has happened to diamond supplies in the UK in the wake of the DTC's Supplier of Choice initiative.

In my view, when the Diamond Trading Company (DTC) set up the Supplier of Choice initiative with their Sightholders, their prime concern was the image of the diamond brand. I do not believe that they fully appreciated the impact it would have on the traditional diamond supply chain. For members of the LDBC the effects have been considerable and diamond dealers and their clients, particularly the small designer goldsmiths, are expressing real concern at the rise in prices and shortage of certain grades of diamond. The development of new markets - China and India for example - has stimulated an increase the demand for 'smalls' and the better quality polished goods. Also, as is reported weekly in Rapaport News, there is a shortage of polished diamonds of 3ct and above.

There are a number of reasons why this situation has occurred. Diamdel, the Antwerp based distributor of rough and polished diamonds to the "secondary market", was given insufficient rough to supply both their existing customers and the larger diamond polishing companies who had lost their DTC Sights. The rapid expansion of new markets in India, China & Turkey has also put pressure on supply.

I believe the situation may get more difficult as world demand for quality diamonds grows. The South African government recently proposed legislation to ban the export of rough stones and in future will sell polished goods and fine diamond set

jewellery. Some Sightholders are now manufacturing their own jewellery and manufacturers are chasing the bigger and better quality goods - preferably sorted, calibrated and certificated - so demand is high and prices are rising.

The current situation convinced WFDB to take a more visible role in the industry. Ernest Blom, Vice President of the WFDB, said in their May newsletter "...we were once an organisation that concentrated on internal matters only; the WFDB is now directing its efforts towards the downstream end of the pipeline. We are striving to sell ourselves as an important advocacy group for consumer confidence in diamonds".

At a meeting of the Executive Committee in Antwerp, it was agreed that the WFDB Mark would be adopted and used on all literature - a guarantee that the diamonds are genuine, have come from known, conflict free sources stones and have not been treated or enhanced.

Increased supplies

The presentations made to the DTC by WFDB on behalf of members has paid dividends. In a recent joint press release, DTC announced their intention to increase the supply of rough diamonds to Diamdel to \$550 million and to keep the members of all bourses informed of their Christmas marketing and consumer confidence campaigns.

For further information about the London Diamond Bourse & Club 020 7405 2625.

Harry Levy is the Vice President of the London Diamond Bourse & Club (LDBC) and President of the Diamond Commission for CIBJO

IN BRIEF

Holt's student wins CAD Award

Laura McDonagh of Notting Val Ltd of London has won a worldwide Computer Aided Design competition for jewellers. The competition was organised by Vision Numeric, France suppliers of the Three Design Jewel CAD programme. Laura, who learnt her CAD skills on the 'Holts@Solar CAD CAM pilot programme, a training initiative in Bethnal Green backed by Holts Gemstone and Jewellery School in Coven Garden, beat off 400 design entries to win the beginners contest.

Bursary for Alastair Hamer

Alastair Hamer a recent graduate of the Goldsmithing, Silversmithing, Metalwork and Jewellery Course at the Royal College of Art has been awarded the £6000 Goldsmith's Company Bursary for 2005. Hamer, who is described as being 'extremely talented' specialises in cutlery design. He now plans to set up a workshop in London and will be offering freelance design services.



Creative 8

London-based designers looking to stage an exhibition of their work are being offered a unique opportunity, not only to do so, but also to learn how the whole process works. The chance comes thanks to 'Creative 8' an initiative from the Clerkenwell Green Association & Arts Council England.

The eight designers selected will each receive a free four-week exhibition and private view, a £1500 grant to develop new work, six months tailored training and mentoring, PR and marketing support and membership of the Clerkenwell Designer Network. Two designers, silversmith Chien-Wei Chang and wallpaper designer Rachel Kelly, have already been chosen but applications for the further six places are still being accepted. Next round selection closes on 23 September. Contact Claire Gutteridge on 020 7251 0276 www.cga.org.uk

Student Designer of the Year



Jewellery by Jung Eun Chang

Jung Eun Chang a student at St. Martin's College, London has won the title 'Student Designer of the Year' in the 2005 UK Jewellery Awards.

The Award, which is sponsored by The British Jewellers' Association, seeks to reward students who have technical and design ability but whose products also demonstrate commercial viability. Chang was commended on all counts. The judges, the designers Sarah Jordan, Shaun Lean and Paul Spurgeon said:

Sophisticated style

"Her work shows a fantastic sensitivity and she engineers pieces in a sophisticated style, but with a delicate feminine edge. Some of the collection would just fly out of retail shops if it went in tomorrow".

Highly commended

Nina Koutibashvili, also of St. Martin's College was highly commended for her striking designs which were seen as being funky, fun and hugely commercial.

Graduates Brazen it out in Glasgow



Jewellery and silverware graduates are being invited to take up workspace in 'Brazen Studios' an exciting new incubator space in Glasgow.

Brazen is the brainchild of designers Sarah Raffel and Marianne Anderson, who with the backing of the Creative Pioneer Programme run by NESTA (National Endowment for Science Technology and the Arts) have established a light and airy workshop for nine independent designer makers. The workshop operates alongside 'Brazen Studios' a bold and alluring jewellery gallery in the heart of Glasgow's trendy Merchant City.



Workbenches cost £150 per month (£5 a day) or £10 a day on a casual basis and syndicates of designers sharing a bench are encouraged. As well as providing studio space Brazen also gives recent graduates using the studio the opportunity to gain commercial experience of working with a gallery and provides marketing and PR support.

An exhibition entitled 'Frontline' featuring the work of recent graduates opens on 22 September, 2005. For further information email sarah@brazenstudios.co.uk or telephone 0141 552 4551.

BJA London Prize



Brooch by Harriet Mason

Harriet Mason, a National Diploma student in 'Jewellery and Silversmithing Design' has won the BJA's annual 'Student of the Year' prize at London Metropolitan University.

Excellent application

To be considered for this award, students, who are recommended by their tutors, must have demonstrated excellent application as a student and have an impeccable attendance record.

Mason's work was considered by the judges, the jewellery designer, Sarah Jordan and the BJA's Lindsey Stratughton, to be well made and to show considerable diversity in terms of design. Mason, whose ultimate aim is to run her own jewellery design and manufacturing company, told JIB that she is to return to the University in October to commence a Higher National Diploma. She will use her £250 prize to purchase precious materials for use on her course.



Left: 3D resin models built using digital light processing from Envisiontec

Below: Layer manufacturing - R&D samples built in 18 carat gold by EOS. Please note that gold material is currently not commercially available.

'Digital Manufacturing 2005' a recent exhibition staged by the Jewellery Industry Innovation Centre (JIIC) in Birmingham provided visitors with a glimpse of some groundbreaking technologies that look set to revolutionise jewellery production. Mary Brittain was there.

The future of jewellery manufacturing

This year's 'Digital Manufacturing' exhibition, at the School of Jewellery brought together 31 exhibitors including service providers, machinery and equipment manufacturers and companies producing 3-D design software and drew some 200 visitors. Jez Banks, CAD CAM manager at Alfred Terry in London, was among them, so what did he see that was of particular interest?

EOS, which has recently developed the technique of 'layer manufacturing' using powdered gold, interested Jez. The technology builds up complex designs by depositing .02mm layers material and gradually growing 3D shapes. The technique is already well developed using other metals and will soon be available for titanium. Stainless steel is also well on stream and the technology is much used in the medical industry where pin-point accuracy is essential.

Complex designs

The EOS system creates complex hinged designs all in one piece and one operation and once the teething problems have been sorted out it should provide jewellers the opportunity to create designs, which it would be simply impossible to make in any other way. The machine is being trailed by Goldas, jewellery manufacturers, in Turkey. The JIIC research and development team is particularly excited by this technology, and is exploring the possibilities of, developing products which look and feel 'solid' but have a 'honeycombed' interior whilst still retaining the strength of a solid piece. This will have massive implications in reducing weight and intrinsic costs, especially for high value alloys.

Another exhibitor was 3D Systems showing its 'InVision™ HR' technology. This 3-D printer uses an easy-to-work acrylate polymer, with a 15% wax content which its manufacturers claim has the lowest ash content of all 3D printing equipment.

The Eden machine from Objet Geometries, sold through the company's UK agent H K Technologies, was another talking point.

The JIIC is working with H K Technologies in developing the direct manufacture of 'rubber' wax injection moulds directly from CAD data in which the moulds are built on a rapid prototyping machine without the need for a metal master.

Organic materials

If you envisage slicing an apple into thousands of slices and then turning each slice into a slide that can be shown through a projector to shine onto a tray of resin which slice by slice is 'cured' by the light, until the whole apple is built, you begin to get an idea of how Envisiontec creates 3D resin models using digital light processing.

Envisiontec allows for up to 40 different models to be built together in a period of 3 to 8 hours. Another plus for this company is a new resin it has developed, based on organic materials, which burns out cleanly in the lost wax process.

For Jez, the best all round solution to CAD CAM manufacturing was Cybamantech. "This machine can be used to make master models and bespoke pieces as well as for mass production and this is something that can't easily be done by its competitors" he said.

Another product to catch Jez's eye was 'Photo Magic' a machine from Roland DG which uses a vibrating diamond to reproduce digital photographs onto just about any flat metal surface. The machine, which sits on a desk, removes no metal in the engraving process and can produce anything from signatures to family portraits. It takes just 10 minutes to reproduce an image and costs £1500.

"The whole exhibition was really interesting. There has been so much progression since last year, particularly with laser technology. Weston Beamor has also made giant strides with their Viper machine and the Vision Numeric and Rhino design systems have also really moved on." Jez Banks told me.

Frank Cooper, who organised the exhibition, agrees. "What all these firms can offer is support and assistance in the production of a high-value-added product which simply cannot be made by cheap copyists."

Further information

A full list of exhibitors at Digital Manufacturing is available from Ruth Edwards at the JIIC, 0121 248 4582 or email ruth.edwards@uce.ac.uk

