

Gems & Jewellery

Spring 2024 / Volume 33 / No. 1



SNAPSHOTS FROM
TUCSON SHOWCASE

WOMEN OF IMPACT
IN THE GEM TRADE

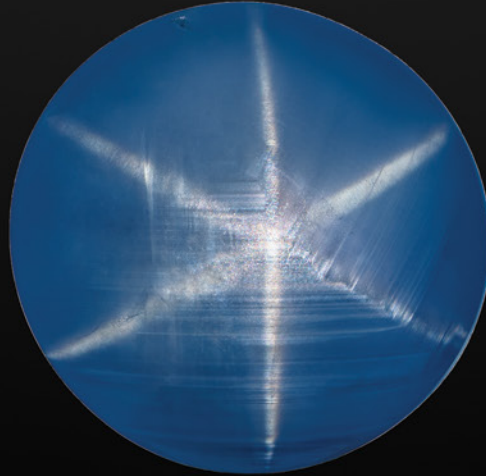
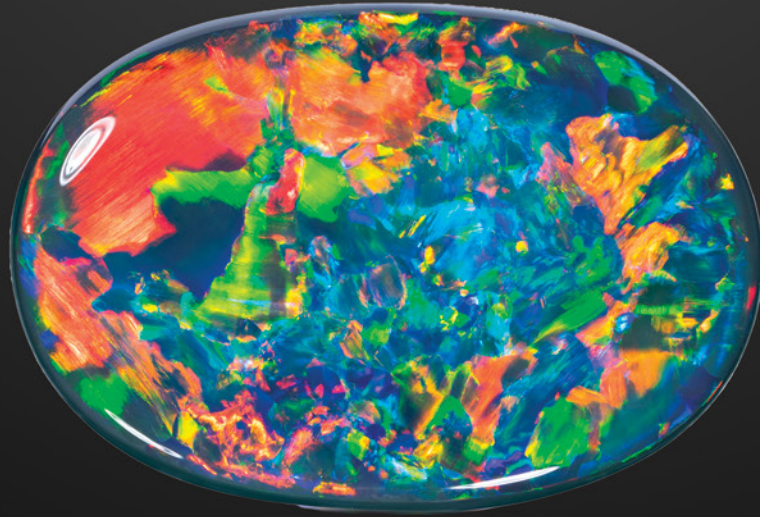
A MODERN-DAY
LOOK AT BROOCHES

RUBIES SALVAGED FROM
WWI-ERA SHIPWRECK



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Gems & Jewellery

SPRING 2024

A SNAPSHOT OF TUCSON GEM SHOWS

An overview of the year's trends, as established at the 2024 Tucson Gem, Mineral & Fossil Showcase



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WOMEN OF IMPACT IN JEWELLERY

Industry actors in different fields reflect on the growing impact of women and other issues in the gem trade.

A MODERN DAY LOOK AT BROOCHES

Brooches and pins have experienced a revival, with increasing popularity among men.



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COVER PICTURE

The Paraiba tourmaline, diamond and platinum Elentari necklace and earrings, each featuring a 25 ct quartz Wheel of Light with rough Paraiba, hauyn and sugilite in the inner ventricle, were on display at the 2024 AGTA GemFair. Photo by Robert Weldon, courtesy of Kendra Grace.

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Gem-A (The Gemmological Association of Great Britain)

21 Ely Place, London EC1N 6TD

t: +44 (0)20 7404 3334

f: +44 (0)20 7404 8843

e: editor@gem-a.com

w: www.gem-a.com

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Editor-in-Chief:

Jennifer-Lynn Archuleta

Contributing Editor: Olga González

Design and Production

Zest Design +44 (0)7768 233653

Editorial and Advertising

For editorial enquiries, media pack and advertising rates please contact editor@gem-a.com.

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Straight from the heart

Opinion and comment from CEO Alan Hart FGA DGA

For me, as for so many people, the start of spring signals new and fresh beginnings. The start of a new year seems filled with opportunities.

There are new opportunities on the horizon for those Students who are finishing their coursework this season and preparing for their June examinations. We are proud of their accomplishments and look forward to the next stages of their gemmology careers.

While technically held in winter, the annual Tucson gem showcase always kicks off the year for the trade, with its new finds and fascinating updates, and this year was no different. Our booth at the Tucson Convention Center saw traffic, from people eager to know about our courses to old friends stopping by just to say hello. We are always delighted to meet new people and be reunited with old friends, and the February gem shows give us that opportunity at the start of every year.

This year, I once again had the pleasure of giving the Gem-A Award at the Goldsmiths' Craft and Design Council on 4 March at Goldsmiths' Hall. Together with fine-jewellery specialist Joanna Hardy FGA DGA, we presented the award to Vicky Forrester for her piece, called Dyad Agate Vessel (Anima) + Native Gold Ring (Persona). For her prize, Ms Forrester may select an online Gemmology Foundation Course or a

Gem-A Diamond Diploma. However, we were so impressed with the work submitted this year that we decided to award online courses to the two runners-up: Mia C. Vilcins for Shelldon and Liu Yang for Ring "InMotion". We are happy to welcome all three competitors to the Gem-A community.

As we welcome the three award winners, I also want to send a reminder that there is still time to renew your Membership if you have not done so. Our new portal allows you to handle enrolment, and other aspects of your Membership, at your own pace. Of course, we remain available to help with any questions or concerns you may have.

Finally, spring brings the year's first issue of *Gems&Jewellery*, and there is much within these pages to enjoy. The lead story, by Jennifer-Lynn Archuleta and Olga González FGA DGA, reviews the trends observed and the expectations set for the year at the 2024 Tucson Gem, Mineral & Fossil Showcase. In discussion with exhibitors and other attendees, they found that buyers are seeking options outside of the traditional 'Big Three', that unusual cuts are attracting a great deal of attention and that potential customers are more concerned with sustainability, but with an increasing awareness of 'greenwashing' and other marketing ploys.

In recognition of the growing influence women are having on the gem trade – from the executive suite



to the lapidary wheel – Ms Archuleta and Ms González also spoke to eleven women working in different aspects of the industry. They sought to find out what it is like to be a woman of impact in the industry, and the responses they received were fascinating, engaging and educational. We appreciate all the women who took the time to take part of this article.

Other content includes an understanding of the exceptions to the rules of CITES by conservationist Jonathan Barzdo. Smitha Sadanandan discovered that brooches and pins are re-emerging as a fun and popular as a popular jewellery choice for all genders. Stephen Kennedy, Mary Montagu-Scott and Susan Tomkins discussed rubies that had been salvaged from the SS *Persia*, a British ship that was torpedoed by a German U-boat in 1915. Russell Shor provided a forecast for the industry for the rest of the year. This issue, with its engaging and diverse content, truly includes something for everyone.

We at Gem-A hope you enjoy the spring, as well as the Spring 2024 issue of *Gems&Jewellery*.

Alan Hart

Buyers are seeking out options outside of the traditional 'Big Three', unusual cuts are attracting a great deal of attention, and potential customers are more concerned with sustainability.

Gems & Jewellery

Spring 2024 Edition Featured Contributors

1. NICOLE AHLINE

Nicole Ahline FGA completed her undergraduate studies in geology at Cornell College before enrolling at the Gemological Institute of America (GIA) for the Graduate Gemologist (GG) program, followed by the Gem-A Gemmology Diploma programme. In 2016, she was hired by GIA as part of their gem identification department, where she is now a senior staff gemmologist. While at GIA she has been a frequent contributor to gemmology journals and has given talks on numerous topics. Miss Ahline's current research interests include origin of colour in coloured diamonds and geographic origin of corundum and emeralds.

2. JONATHAN BARZDO

An independent consultant focusing primarily on issues relating to the use of wild animals and plants and regulation of wildlife trade, Jonathan Barzdo supports governments, intergovernmental and nongovernmental organisations, institutions and companies to ensure that such trade is legal, sustainable and well managed. His work also encompasses organisational governance related to conservation management. In the past Mr Barzdo has served as deputy secretary general of the Convention on Wetlands; chief of governing bodies of the Secretariat of the Convention on International

Trade in Endangered Species of Wild Fauna and Flora (CITES); consultant for the European Commission, where he drafted the regulations that implement CITES in the European Union; head of the Wildlife Trade Monitoring Unit of the World Conservation Monitoring Centre; and director of TRAFFIC International. Earlier in his career, he was a wildlife consultant, warden of a bird hospital, a zookeeper and a genetics research assistant.

3. STEPHEN KENNEDY

Stephen Kennedy is a gemmologist with experience of laboratory-based pearl and gem identification dating back to 1980. The Gem and Pearl Laboratory Limited was founded in 2003; prior to this development, Mr Kennedy had worked for twenty-three years for the Gem Testing Laboratory of Great Britain. He continued in this role as a consultant for a further five years after the founding of the Gem and Pearl Laboratory Ltd. In 1988 he was seconded to help the local Ministry of Commerce open the Gem and Pearl Laboratory of Bahrain.

4. JOHN I. KOIVULA

Analytical microscopist John Koivula FGA joined GIA in 1976. He has spent more than sixty years studying and photographing the microworld of gemstones and has published numerous articles and notes on inclusions in gemstones and related

topics. Mr Koivula is a contributor to several books, including the American Geological Institute's *Glossary of Geology*; Robert Webster's *Gems; Geologica*, a book on crustal landforms; and GIA's *Diamond Dictionary*. Mr. Koivula is co-author, along with Dr Eduard Gübelin, of the *Photoatlas of Inclusions in Gemstones, Volumes 1, 2 and 3*; he is also the author of *The MicroWorld of Diamonds*. Mr Koivula holds university degrees in both geology and chemistry, as well as his GG and CG credentials from GIA and the American Gem Society (AGS), respectively. He was awarded fellowship in the Royal Microscopical Society (FRMS) and is an honorary life member of both Gem-A and the Finnish Gemmological Society. Mr Koivula was named as one of the sixty-four most influential people of the twentieth century in the jewellery industry by *JCK Magazine*. He is the recipient of GIA's Richard T. Liddicoat Award for Distinguished Achievement, the Robert M. Shipley and Richard T. Liddicoat Awards from AGS, the Scholarship Foundation Award from the American Federation of Mineralogical Societies, and the





Antonio C. Bonanno Award for Excellence in Gemology by the international Accredited Gemologists Association. In 2019, a new mineral, johnkoivulaite, a member of the beryl group, was named in his honour.

5. MARY MONTAGU-SCOTT

Mary Montagu-Scott, the director of the Buckler's Hard Maritime Museum, is the granddaughter of Lord John Montagu, who fortunately survived the sinking of the *SS Persia*. She has led the project to tell and display the remarkable story of the sinking of the ship by a German U-boat and the recovery of the wreck items, all while bringing the stories of those on board to life within the museum. She is passionate about maritime heritage and is currently working on another wreck survey, of the 1781 HMS *Agamemnon*, built in the Buckler's Hard shipyard and known as 'Nelsons Favourite', which sank in 1809 off the coast of Uruguay.

6. CLAIRE MORGAN

Claire Morgan is an independent jewellery historian specialising in Indian jewellery and material culture. She received a master's degree in decorative art and design history from George Washington University's Corcoran School where she authored her thesis, "Gilding the Lily: A Comparative Analysis of Ottoman and Mughal Royal Jewels in the Sixteenth and Seventeenth Centuries." She also holds a PhD in political theory from the University of Maryland, College Park.

7. NATHAN RENFRO

Nathan Renfro completed his undergraduate degree in geology from Appalachian State University in North Carolina in 2006. In 2007 he received his GG from GIA and completed the Gem-A Gemmology Diploma in 2014. Mr Renfro is currently the manager of the gem identification department at GIA in Carlsbad, California. He is also the editor of *Gems & Gemology's* Micro-World column.

8. SMITHA SADANANDAN

Smitha Sadanandan is a freelance journalist, specialising in the luxury industry. She tracks international trends in the jewellery and watches sector and provides an insightful perspective as an analyst. Ms Sadanandan also consults with brands on media-strategy projects. She has contributed to the *Financial Times*, *South China Morning Post*, *Prestige* (HK), *Vogue* (India), *Solitaire* (Asia Pacific), *Natural Diamond Council*, *The Adventurine*, *Solitaire International* (GJEPC) and *Marie Claire* (Arabia). She is the editor-at-large of the South Africa-based *JZA Magazine*.

9. RUSSELL SHOR

Russell Shor is the owner of Russell Shor Communications and Consulting, based in San Diego, California. He has more than forty years of experience in the diamond industry, including nineteen years at GIA as a senior industry analyst. Previously Mr Shor served as a senior diamonds/economics editor at *JCK Magazine* and as editor of *New York Diamonds*. He holds degrees from the

University of Pennsylvania and Temple University in the United States.

10. SUSAN TOMKINS

Susan Tomkins is the Beaulieu Estate and Montagu Family Archivist. She has spent many years researching the story of *SS Persia* and those people who were travelling onboard the ship at the time of its sinking. She worked with Mary Montagu-Scott on the *SS Persia* Exhibition, which can be seen in Buckler's Hard Maritime Museum. Ms Tomkins is currently working on several exciting projects connected to both Buckler's Hard and the wider Beaulieu Estate.

11. VICTOR TUZLUKOV

Lapidarist Victor Tuzlukov's professional achievements include winning the Grand Master Division of the United States Faceters Guild's Single Stone Competition with a perfect score of 100 (2008) and winning the 2010 International Faceting Challenge in Australia – the world championship in faceting – with a record-setting 299.17/300 points. Mr Tuzlukov founded the Russian Faceters Guild as well as the international faceting competition The Russian Open. He is the creator of an original direction in gem cutting, called 'Philosophical Stone,' with which he devises gem designs using symbols and images in faceting patterns. He lives and works in Thailand as a master cutter, teacher and researcher.

Special thanks to Brecken Branstrator and Dr Aaron Palke.

Gem-A News

A round-up of the latest industry news from Gem-A

NEW QEST AWARD OPEN TO UK-BASED JEWELLERS

The Queen Elizabeth Scholarship Trust (QEST) is collaborating with international luxury interior furnishings brand Sanderson to launch the QEST Sanderson Rising Star Craft Award.



The £25,000 prize aims to recognise an emerging talent in the United Kingdom who is a committed maker and who has been practising professionally in their craft field between two to seven years. Jewellers based in the UK may be nominated for the award.

Makers must be nominated by a credible person; this may include craft-industry professionals, tutors, colleagues, peers or others. The nominator must know the maker and their work well in a professional capacity. Please note that nominators can only put forward one candidate for the Rising Star Craft Award.

According to QEST CEO Deborah Pocock, who is also one of the judges for the prize, "This award will bring upcoming talent to the fore, highlighting craftspeople whose work not only deserve recognition, but also reward."

Founded in 1990, to celebrate the ninetieth birthday of HM Queen Elizabeth, The Queen Mother, QEST is dedicated to sustaining the cultural heritage of Britain through the training and education of craftspeople through education, apprenticeships, and direct training with a master craftsman. Since its creation QEST has granted more than £6 million towards the training and education of almost 800 craftspeople. The not-for-profit organisation accepts donations and offers sponsorships to further their work.

Nominations for the QEST Sanderson Rising Star Craft Award close on Friday, 17 May, with the winner announced in October. For more information on the nominating process, visit qest.tfaforms.net/f/risingstar2024. General information about the Trust can be found at qest.org.uk/.

UN GENERAL ASSEMBLY VOTES TO CONTINUE SUPPORT OF KIMBERLEY PROCESS

On 3 April, the General Assembly of the United Nations adopted a resolution to continue supporting the Kimberley Process Certification Scheme (KPCS). The resolution was concerned with the role of diamonds in fuelling conflict, in response to the challenges faced by the Kimberley Process due to ongoing geopolitical tensions and conflicts.

Tanzanian Ambassador Hussein Athuman Kattanga explained that "we are convinced that the relevant resolution is a necessary measure on the promoting states sovereignty, poverty eradication, conflict prevention and elimination of conflict demand from legitimate trade, which are the primary objective of the Kimberley Process."

According to the UN, prior to the 2003 creation of the Kimberley Process Certification Scheme, a multilateral trade regime that prevents rough material that funds 'violence by rebel

movements and their allies seeking to undermine legitimate governments' from entering the worldwide market, approximately fifteen percent of specimens in the global diamond

trade were 'conflict diamonds'. Currently, eighty-two countries have enshrined the system, and about 99.8% of the world's diamond supply comes from conflict-free sources.



In early April 2024, the General Assembly of the United Nations passed a resolution to continue supporting the Kimberley Process, which certifies that rough diamond exports are not 'conflict diamonds'. Photo by Jerry Cone/Wikimedia Commons.



Released in February 2024, Fuli Gemstones' Aura Cut uses 101 facets (including sixty-four facets in the pavilion alone). Photo courtesy of Fuli Gemstones.

FULI GEMSTONES DEBUTS AURA CUT

Fuli Gemstones, custodians of the world's largest-known peridot mine, revealed its new Aura cut earlier this year at the HKTDC Hong Kong International Diamond, Gem & Pearl Show. With a total of 101 facets (as opposed to the fifty-eight facets of a traditional round-brilliant cut), the crown has thirty-eight facets (including the table), with nine facets in each of the four sections. The pavilion has sixty-four facets, with each of the four sections hosting sixteen facets.

"Here at Fuli, we love the positive energy the peridot gemstone gives us; we hope others benefit from the same energy," remarked Pia Tonna, executive director and chief marketing officer of Fuli Gemstones.

Fuli Gemstones mines peridot from a source in northeastern China near the Changbai Mountains. Their peridot has a distinctive colour due to the material's lower iron content. The company previously unveiled its eponymous cut, a spin on the antique cushion cut, in September 2023.

HALLMARKING DROPPED MORE THAN 17% IN 2023

Assay Office London announced that the total number of items hallmarked by all four locations in 2023 was 8,020,089, a decline of 17.7% from 2022. While there were decreased numbers of total gold, silver and platinum pieces (though some subcategories saw increases in hallmarking), there was a net increase of palladium items submitted for hallmarking.

Gold hallmarking dropped 12.4% from 2022 (3,515,075 items). However, while 375 and 750 gold decreased 16.7% and 14.2% from the previous year,

respectively, all other types of gold saw an increase in numbers, with 999 gold increasing in hallmarking numbers by 24.6%.

The total number of silver pieces hallmarked also saw a decline to 4,144,620 items, a drop of 22.5%, though increases were seen in the hallmarking of fine (999) and Britannia (958) silver. Platinum hallmarking declined 7.9% from 356,325 pieces, though only 950 platinum saw a drop in numbers. Of the metals hallmarked, only palladium items saw a net increase in hallmarking, rising 2.5% to 4,069 items in 2023.



Of the four precious metals handled by the UK's Assay Offices, only palladium saw a net increase in items hallmarked in 2023. Photo by corlaffra/Shutterstock.

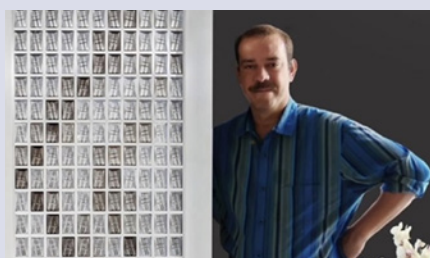
OBITUARY

Tom Munsteiner (1969–2023)

Gems&Jewellery is saddened to announce the passing of world-renowned gemstone cutter Tom Munsteiner on 28 December 2023. A fourth-generation carver and the owner of Atelier Munsteiner in Stipshausen, Germany, Mr Munsteiner's bold, unique approach to gem carving led to a multi-award-winning career and a reputation for excellence.

The son of Bernd Munsteiner, Tom Munsteiner learned the art of gem carving by training under his father, and formally joined the jewellery industry in 1997. His personal style was marked by a softer, more rounded aesthetic, as opposed to the angular style of his father. In a 2022 conversation with jewellery writer Katerina Perez, the younger Munsteiner explained his philosophy: "I can freely shape the gems to a beautiful new form. It is like a discussion with the gem, to find the

ideal design for it." Over the course of three decades, Mr Munsteiner became an innovator in the field of gem cutting. He collaborated with his jeweller-designer wife, Jutta; produced groundbreaking sculptures such as the six-foot citrine, rock crystal and smoky quartz Visions in Crystal, now found at the University of Arizona's Alfie Norville Museum; and created one-inch by one-inch hand-cut tiles of agate cut and sealed to install as windows at a church in Germany. For his work, he won multiple AGTA Spectrum Awards,



as well as Jewellery and Gem Prizes (Idar-Oberstein). In addition to his creative and trailblazing gemstone work, Mr Munsteiner was also known for his generosity and kindness within the lapidary community.

Tom Munsteiner is survived by his wife, Jutta; his son, Philipp; his parents, Hanne and Bernd Munsteiner; and other extended family members. G&J wishes to extend to them our deepest condolences.

Unravelling the (Micro-World) Matrix One Chemical Interaction at a Time

Nathan Renfro and John Koivula reveal the geologic growth conditions of an inclusion scene within a smoky quartz from Bahia, Brazil.

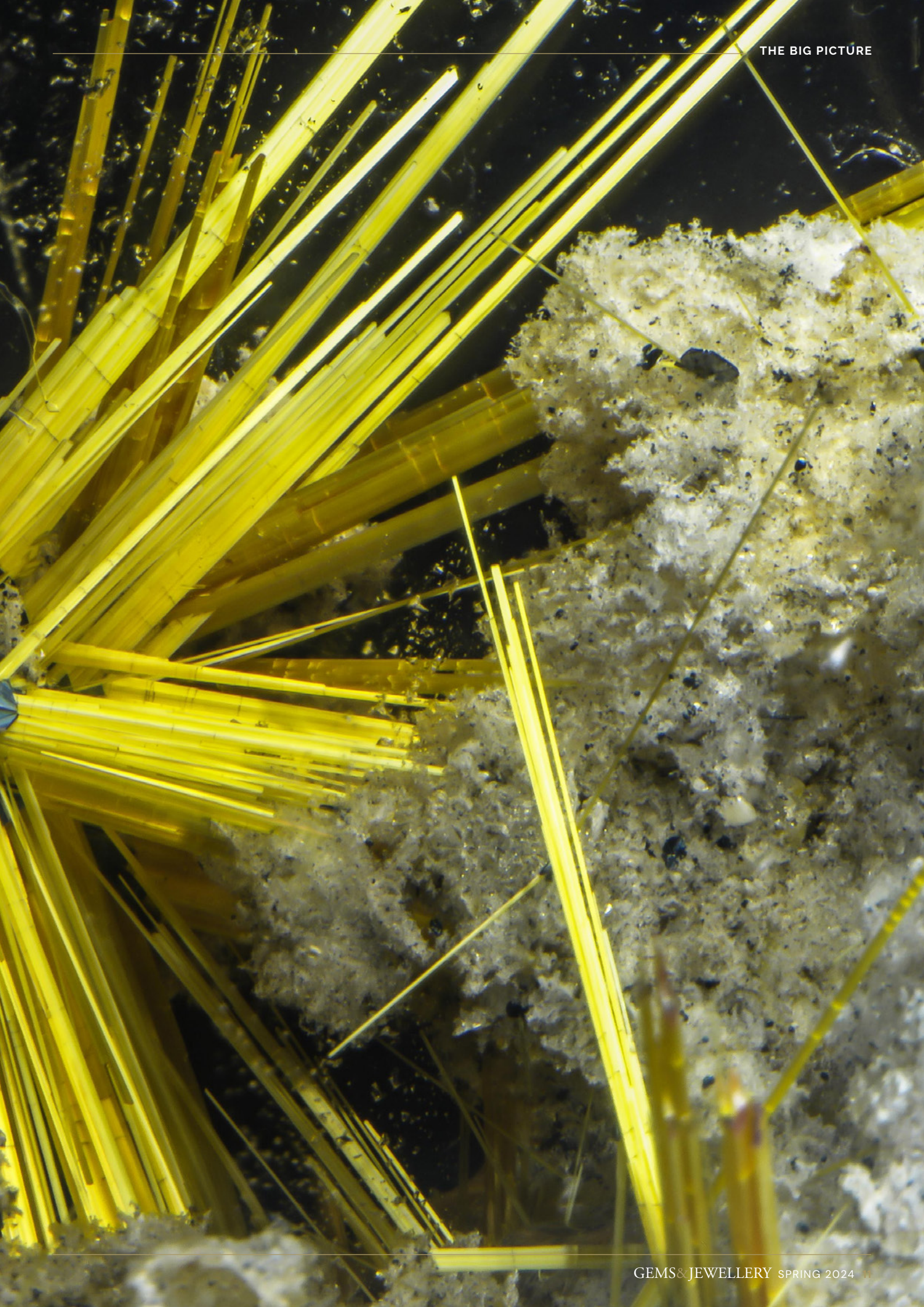
This smoky quartz from Bahia, Brazil contains a beautiful rutile star perched on a fine-grained mass of matrix minerals. At the very core of this star is a black crystal of titanium-rich hematite or ilmenite; the golden rutile needles radiate outward from the core in six directions corresponding to the hexagonal prism faces of the core crystal. While these six-spoked rutile stars are a relatively common and highly desired inclusion for the gem collector and are often used in jewellery, they also tell us a story about the geologic conditions in which they formed.

The hematite/ilmenite cores are the first component to form in the growth environment and, as they are growing, they drain the nutrient solution of iron and titanium, the elemental building blocks that these black crystals use to exist. As a result of this fractional crystallization process, the iron has been completely depleted from the growth system and the hematite/ilmenite crystals can grow no larger. However, titanium is still plentiful in the growth environment and a new mineral — rutile, which only requires titanium and oxygen to form — can start growing where the hematite/ilmenite crystal growth ended. The rutile typically forms acicular needles and, when they nucleate on the crystal faces of the remnant hematite/ilmenite, they form a beautifully symmetrical star-like inclusion.

It is also curious to note that, since the hematite/ilmenite cores have depleted the growth environment of iron, there is no iron available to incorporate into the host quartz, which might otherwise serve to colour it purple. This is why we may have never seen such a rutile star with hematite/ilmenite core in an amethyst host, and likely never will.

With a modest understanding of the chemical components of the minerals in this inclusion scene, we can readily unravel a short story of the progression of chemical interactions that were required for this beautiful inclusion to exist.

This rutile star with a hematite/ilmenite core was contained inside this smoky quartz from Brazil. Photomicrograph by Nathan Renfro, field of view 18.00 mm. Stone courtesy of the John Koivula Inclusion Collection.



A window into the 2024 TUCSON GEM, MINERAL & FOSSIL SHOWCASE

Jennifer-Lynn Archuleta and Olga González FGA DGA get a glimpse of the upcoming year's trends at the February 2024 Tucson gem shows.



At an AGTA seminar in during the 2024 Tucson Gem, Mineral & Fossil Showcase, *GemGuide* editor-in-chief Brecken Branstrator made a series of forecasts for the industry moving forward. The most significant predictions she made named green the next trending colour in gemstones; indicated a growing popularity of nontraditional gem material among designers due to price resistance; acknowledged an increasing appreciation for unique or new cuts, as well as independent cutters; and recognised increased attention to marketing claims and 'greenwashing'. "So many of the trends dominating the coloured-stone market today and the conversations around them seem to come back to the important fact that buyers and consumers alike want stones that are unique and have a story to tell, whether that is from a

physical standpoint—cut, colour, phenomena, rarity—or a responsible sourcing point of view. This is leading to an appreciation for even more gems outside of the traditional," Ms Branstrator explained.

While foot traffic at the shows was generally reported to be down by vendors, official numbers proved otherwise; registration at the AGTA GemFair was up three percent. Lowell Carhartt of Eons Expos, which runs the 22nd Street Show, reported that "Attendance was very brisk over the eighteen days of the show, reaching yet another attendance record of just over 50,000 visitors, many of them returnees." The consensus was that those who attended were there to buy. "Overall sales exceeded expectations, with higher-end loose gemstones in great demand," John W. Ford Sr., CEO of AGTA, stated in February.

Buyers were seeking out unusual cuts and carvings, such as this tourmaline slice carved with a mandala. Photo courtesy of Steven Tyler the Designer.

Sellers across various shows confirmed what Mr Ford reported, but the most significant information we heard from sellers and attendees at the various shows bore out Ms Branstrator's indications. While there were a number of trends apparent this year, including the popularity of pink gemstones and a greater presence of unisex jewellery pieces, feedback from the Tucson Showcase has established that unusual cuts, shades of green and thoughtful sustainability will affect the shape of the industry this year.

IT'S SO EASY BEING GREEN (AND PINK, AND MULTICOLOURED AND...)

While the Tucson shows are known as a haven for coloured gemstone aficionados, the varieties and hues of those gems changes over time. This year, shades of green are in vogue, with pastel tones also attracting attention. According to Dr Aaron Palke, senior field gemmologist at GIA, "This year's Tucson shows saw a continuation and expansion of a trend set in motion a few years ago of the popularisation of colours outside of the traditional Big Three — especially teals and lighter-toned pastels."



The Woz Cut (shown here on Montana sapphires), named after gem cutter John Wozencraft, was introduced by Columbia Gem House in late 2023. From left: a 1.63 ct orange square, a 2.02 ct denim elongated and a 1.60 ct bicoloured square sapphire. Photo courtesy of Columbia Gem House.

Across the shows, and within booths themselves, green of all shades and hues seemed to be king at Tucson. Fuli Gemstones, with their specialisation in peridot, had an excellent second year at the GJX Show, while Natasha Braunwart, brand and corporate social responsibility manager of Columbia Gem House, noticed a significant uptick in sales of Brazilian emerald. Niveet Nagpal, president of Omi Privé, which hosted booths at both AGTA and the Centurion Jewelry Show in Scottsdale, Arizona, said that this year the company had strong sales of loose stones, particularly demantoid and tsavorite garnets, with many of their clients asking for grandidierite. "Many of our best collector clients were excited for the new finds," Mr Nagpal recalled. Even while reporting slower traffic, Mr Nagpal found the year to be on par with 2023.



The earrings from the Le Vian Couture collection feature 8.5 tcw neon-blue Paraiba tourmaline and 2.75 tcw diamond, and the matching ring uses a 1.62 tcw neon-blue Paraiba tourmaline and 0.75 tcw diamond. Both earrings and ring use 18K white gold. Photo courtesy of Le Vian.

Feedback from the Tucson Showcase has established that unusual cuts, shades of green and thoughtful sustainability will affect the shape of the industry this year.

While the popularity of green cannot be overstated, there was also an overarching demand for shades of pink in various forms. Bolstered by the mainstream success of *Barbie* and the ubiquity of 'Valentino Pink', the trend encompasses everything from soft pastel-pink pearls to bright pink sapphires, reflecting a broader cultural shift towards embracing playful, vibrant colours in jewellery. Pink is being reinterpreted in modern designs that appeal to a wide audience. The use of pink in various shades and textures

provides a fresh and youthful energy to jewellery, making it fashionable and fun. Generation Z shoppers (those born between the late 1990s and the mid-2010s) are nostalgic for a more colourful past and are the target market for unconventionally vibrant jewels. Our vendors found the same; Dudley Blauwet told us that "Barbie pink is still popular,"

THINKING OUTSIDE THE BIG THREE

Jeweller/lapidarist Steven Tyler, who exhibited at the Pueblo Show this year, confirmed that "Faceting rough has certainly become more expensive than previous years." This has prompted many cutters and designers to turn to gemstones outside the traditional ruby, sapphire and emerald to use in their pieces.



Due to its availability and its rich colour palette, tourmaline received a great deal of attention at this year's Showcase. This gemstone is appreciated for its range of hues, from vibrant pinks to deep greens, and can be found at affordable price points. Pink tourmaline was a favourite, cherished for its warm, inviting tones that range from subtle blush to bold fuchsia. The gem's popularity is also due to its unique properties, such as its pleochroism, which can allow it to show different colours when viewed from different angles. This makes tourmaline a preferred choice among designers looking to add depth and intrigue to their creations.

Other nontraditional gems also found buyers this year. Marc Assayag of the Tookalook Gallery explained, "I am particularly interested in tanzanite and the opportunity it represents outside of the 'Big Three' gems. Given this, my booth presented over 150 tanzanite stones that have particularly good cut and colour. In addition to these gems, I had natural crystals and a few finished pieces of jewellery. The rest of the booth was eclectic as far as gems, but I pride myself on exclusive quality in any stone →

This ring by Dallas Prince features a centre trillion-cut pink Malaya garnet weighing 5.41 ct surrounded by 1.22 tcw white diamonds set in 14K yellow gold. Photo courtesy of Dallas Prince Designs.



The Ladder Climber Hoops from Alex Fitz use 1.56 tcw ethically sourced Brazilian tourmaline baguettes set in recycled 18K yellow gold. Photo courtesy of Alex Fitz.

Some of the show favourites were indicolite, Malaya pink garnet and unheated tanzanite. Also, I happen to love the new Pantone Color of the Year, Peach Fuzz, so I had a beautiful arrangement of peach morganite!" (For more on the Pantone Color of the Year, please see pp. 46-47).

Mary van der Aa, who exhibits at the Pueblo Show each year, has long been an advocate of the use of garnet and other, rarer stones in her jewellery. "This year I made a few pieces with trapiche emerald," she recounted. "Such a cool stone and so underutilised. I also worked with phenakite and sphene, some more of my favourites." Her Garanus necklace, comprising multiple types and colours of garnet (77.26 tcw) set in platinum, was on display at the Tucson Fine Mineral Gallery

that I sell. The other side of my booth was my volume product: fossil coral."

Though corundum and emerald are always sought out, some gem dealers are known to regular Tucson clientele for their outside-the-box stock and were prepared to meet such demands. Niveet Nagpal of Omi Privé reported, "While the Big Three are always big sellers for us, we are known for our rarer offerings like alexandrite and Paraíba tourmaline. This past year we included cobalt-blue spinel and demantoid garnet pieces with success." While he conceded that buyers tended to be more conservative in spending than in past years, unusual stones were still in demand.

While many dealers have worked to source new and unique material for this year's shows, others, such as lapidarist John Bradshaw of Coast to Coast Rare Stones, are relying on stock they have retained for the perfect moment; Mr Bradshaw said that "I'm still cutting from stocks of rough purchased when it was available!" Dallas Prince, who has exhibited at the AGTA show for ten years, noted that "I am truly a hoarder of fabulous gems, so some of the stones that were used in the newest designs were from my years of collecting.

after taking first place in Best Use of Platinum and Color at the AGTA Spectrum Awards.

CUTS ABOVE THE REST

In addition to standing out from the crowd by gem type and colour, dealers and exhibitors found that cut and other qualities helped set them apart from other sellers. While calibrated sizes certainly sold, a number of vendors noted that unconventional cuts reached a wide audience this year. These atypical styles, in turn, allow their clientele to differentiate themselves from other designers and jewellery lovers. Steven Tyler recalled that "we noticed an increased interest in fantasy-cut gemstones and how they are made or can be used. A lot of people asking about design possibilities," and noticed that a good number of people were interested in his Fantasy Recut Service, which re-carves old and/or damaged gemstones into new shapes. Dallas Prince agreed, remarking that "I love using unique cuts

Generation Z shoppers are nostalgic for a more colourful past and are the target market for unconventionally vibrant jewels.



Tanzanite, shown here in a variety of sizes and cuts, was a popular alternative for buyers at the Tookalook Gallery's booth at the Pueblo Show. Photo courtesy of the Tookalook Gallery.



The Garanatus necklace by Mary van der Aa features 77.26 tcw garnets, including 1.40 tcw leuko (colourless) garnet from Sri Lanka; 1.69 ct Dora Maira garnet from Piedmont, Italy; 2.47 ct ant hill garnet from Arizona's Navajo reservation; 3.55 ct hessonite from Quebec's Jeffrey mine; 3.00 ct yellow garnet from Lemshuku, Tanzania; and 2.08 ct tsavorite and 5.03 ct mint garnet, both from Merelani, Tanzania. Van der Aa also used 3.56 ct spessartine garnet from Nigeria; 5.62 ct colour-change pyrope garnet from Morogoro, Tanzania, 3.33 ct demantoid garnet from Namibia's Green Dragon mine and 3.05 ct Russian demantoid garnet with horsetail; 4.03 ct Malaya garnet from Madagascar; 5.15 ct purple garnet from Mozambique; 2.75 ct colour-change blue garnet from Bekily, Madagascar, and 3.75 ct pyrope-spessartine colour-change garnet from Ngombeni, Tanzania; 2.66 ct colour-change garnet from Kamtonga, Kenya; 5.63 ct rhodolite, 3.69 ct Mahenge garnet and 5.05 ct peach garnet, all from Mahenge, Tanzania; 2.70 ct chromium grossular garnet from Wbi, Ethiopia; 4.21 ct ugrandite from Mali; and 2.86 Lindi garnet from Tanzania. Photo courtesy of Mary van der Aa.

and varieties of gems in my designs. This, I believe, is the reason our show was so successful this year."

Fuli Gemstones debuted their namesake cut in September 2023, making this the first year that the Fuli cut has sold. Pia Tonna, the company's executive director and chief marketing officer, divulged that the gemstones sold on day one of the GJX Show, thanks in part to press coverage of the new product. The cut and the material itself is, of course, also responsible for Fuli's success: "We aim to be innovative, and cutting is a speciality for our peridot. People seem to like what we are doing," Ms Tonna noted.

Glenn Lehrer of Lehrer Designs, Inc., who exhibited at the AGTA show, is known for his branded cuts. He stated, "We carried some of our newer-style cuts this year that up to this point was only available in finished jewellery manufactured for my TV show sales. They sold well as loose stones to designers." Mr Lehrer also found that

some of his vapour-coated topazes, also generally offered via his TV sales, were popular at this year's booth. He offered this material in a variety of colours, cuts and sizes to cater to the tastes of the Tucson traffic.

Natasha Braunwart, of Columbia Gem House, disclosed that their cuts were popular this year, including one new option unveiled in late 2023. "Since we have our own cutting workshop, we have a lot of flexibility and opportunity to be creative with our cutting. One newer proprietary example is the Woz Cut." This new style is inspired by an eight-sided

cushion cut once performed by gem cutter John Wozencraft, an old friend of founder Eric Braunwart. The company's Occult and Zodiac collections, newly launched carving assemblages, were also successful, though overall visitors were receptive the variety of cuts they found at the Columbia Gem House booths. Ms Braunwart stated, "In many cases, I think we actually introduced people to different varieties or styles for gem carvings that they didn't know were an option."

GETTING THOUGHTFUL ABOUT SUSTAINABILITY

This year's attendees showed a concerted interest in responsible sourcing and ethical practices while being mindful of marketing ploys. As consumers become increasingly conscious of the environmental and ethical implications of their purchases, designers are responding by incorporating recycled materials and ethically sourced gemstones into their creations. By repurposing metals and gems, artisans are not only reducing the industry's environmental footprint, but also ensuring that their pieces align with the values of modern consumers. By and large, vendors were ready and willing to have these conversations; as Dallas Prince explained, "All conversations that concern the impact on our environment were certainly welcome."

Of particular concern to many, as Ms Branstrator mentioned in her talk, was 'greenwashing', or an advertising ploy companies may use to make them seem more environmentally friendly than they actually are. Visitors to this



The Le Vian Ring, part of their unisex jewellery, comprises 0.87 tcw Chocolate Diamonds and 0.20 tcw. Nude Diamonds set in 14K gold. Photo courtesy of Le Vian.



Lehrer Designs offers vapour-coated topaz in a variety of sizes, cuts and colours. Photo courtesy of Lehrer Designs, Inc.

year's Showcase seemed to have a greater awareness of ethical practices and greenwashing, speaking to vendors about these actions to ensure the sincerity of the business. Sheahan Stephen, president of Sheahan Stephen Sapphires, had these conversations 'on a granular level', which he believed were affected by discussions on social media. Natasha Braunwart of Columbia Gem House, which had booths at both AGTA and the Ethical Gem Show, noticed that "People do seem to be questioning and discussing this more, but because we've been doing this so long — transparent responsible sourcing in particular — it didn't seem to come up much as a direct conversation at our booth."

OTHER TRENDS AT THE SHOWCASE

Tucson is, of course, known not only for helping to establish the year's trends, but for the unusual finds on display and for purchase.

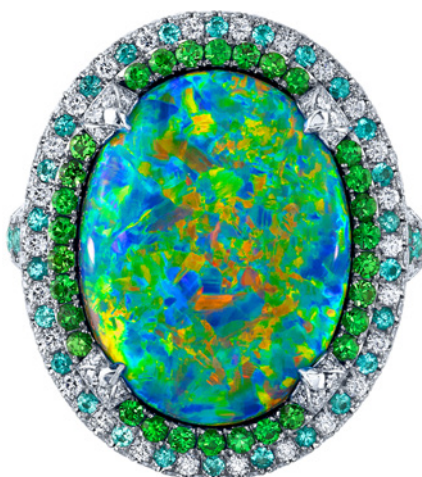
Lab-Grown Diamonds. As consumer interest in alternatively sourced material grows, lab-grown diamond continues to make a significant impact in the trade and, consequently, had a notable presence at the Tucson Showcase. Lab-grown diamonds offer

Omi Privé won Best in Show at the 2023 AGTA Spectrum Awards with this platinum ring featuring a 15.22 ct Australian black opal accented with 0.40 tcw tsavorite garnets, 0.72 tcw round Brazilian Paraiba tourmalines and 1.56 tcw round diamonds. Photo courtesy of Omi Privé.

some customers an alluring alternative to traditional mining, since they reduce some human rights concerns that are traditionally associated with diamond extraction. Their increasing popularity is a testament to the evolving attitudes towards sustainability in the luxury market, with consumers seeking beauty and affordability in their choices.

Jake Debs of Elite Fine Jewelers, which had booths at both JOGS and the Holidome, was pleasantly surprised by the popularity of their synthetic inventory. "We brought lab-grown diamond pieces this year, something we just recently started carrying and selling. We had a whole case designated for lab-grown diamonds, and they were a huge hit."

Artefacts. Inspired by ancient civilizations and imbued with a sense of mystery and heritage, artefact jewellery, such as that seen at the Armenta booth at the Centurion Show in Scottsdale, brings a touch of history to



contemporary fashion. From intricately carved pendants embedded with or resembling relics of lost civilisations to rings adorned with symbols of ancient wisdom, these pieces tell stories of bygone eras. Archaeological motifs such as hieroglyphics, Mayan glyphs and Greek-key patterns are prominent; fragments of the past, such as ancient coins and cameos, add an air of authenticity and intrigue to designs. Crafted with attention to details such as weathered finishes — an homage the passage of time — artefact jewellery invites wearers to connect with the past while making a bold statement in the present. Sustainability, so at the forefront of minds this show, is a



The Regalia earrings from Yael Designs comprise 3.26 tcw pear-shaped pink sapphires, 0.60 tcw diamonds and enamel set in 18K yellow and white gold. Photo by Randy Gonzalez, courtesy of Yael Designs.

key theme within this subsect as well. The fusion of ancient aesthetics with contemporary sustainability practices reflects a growing desire to honour the past while building a more responsible future within the world of design.

'Mob-Wife' Aesthetic. A perfect avenue for high-end jewellers, the so-called 'mob wife' trend glamorises the glitz and opulence of the lives of a mobster's beloved. It has hints of 1980s influences and is inspired by the recent revival in popularity of the TV show *The Sopranos*, as well as with the current obsession with vintage and retro influences. Fashionistas pair fur coats,



Brenda Smith's butterfly brooch necklace, inspired by her grandmother's crocheted doily pineapple pattern, is crafted in 18k white gold. The body has a 37.33 ct aquamarine briolette accented by 4.97 tcw green tourmaline, both from Idar-Oberstein, Germany. The piece also uses 1.94 tcw diamonds, 1.69 tcw yellow beryl, 0.85 tcw pink tourmaline, 1.31 tcw aquamarine, 1.96 tcw iolite, 0.96 ct aquamarine (as the head) and 2.39 tcw orange zircon. Photo courtesy of Brenda Smith.

animal prints and dark-toned clothing. The key to the look is big, chunky, statement yellow gold-and-diamond jewellery. Bold gold is a declaration of confidence and power. The trend is all over TikTok and Instagram and is a great way to appeal to younger generations.

Genderfluid Jewellery. Today it can seem puerile to define pieces as either 'masculine' or 'feminine' when it limits the potential audience, artistry and socio-political message behind your work. Genderfluid fashion is gaining ground, in an age where earrings, necklaces, bracelets, rings and brooches (see pp. 29–33) are being worn by all regardless of identity. Jewellery in this category is characterised by its adaptability and elegance, often featuring clean lines, minimalist or geometric designs, and focuses on functionality. (For more on unisex jewellery, see Summer 2022 *G&J*, pp. 21–23.)

Contrast. Another notable trend is the emphasis on contrast, particularly in

the use of contrasting metals in a jewel or contrasting colours within single stones. The trend brings an exciting dynamic to jewellery design, where the interplay of different hues, textures and cuts creates a visually striking effect. Jewellers are experimenting with bold combinations, such as pairing opaque stones with transparent ones, working with bicolour tourmalines or mixing metals. Celebrating the natural beauty and uniqueness of each gem, and its interplay within a piece, provides an opportunity for artistic designs.

Even with the feeling that foot traffic was slower, exhibitors and buyers found much to be excited about in

While foot traffic at the shows was generally reported to be down by vendors, official numbers proved otherwise.

Tucson. While buyers were cautious and conservative with their spending, most vendors did well, and some registered excellent sales. The trends that have been established at the Tucson Gem, Mineral & Fossil Showcase have exhibitors like John Bradshaw of Coast to Coast Rare Stones much to look forward to for 2024: "These were my best sales since my first in Tucson... I am forever an optimist!" ■



Artifact jewellery, such as that created by Armenta, incorporates historical motifs and sustainability within pieces. The bracelet here comprises 18k yellow gold with a teal patina and artifact crivelli stations with 1.8 tcw grey diamonds. Photo courtesy of Armenta.

WHAT EXHIBITORS WISH YOU KNEW

We asked several of our respondents what they wish Tucson attendees, and *G&J* readers, knew about them or their businesses. Here is what they told us; their answers might surprise you.

Dudley Blauwet (Dudley Blauwet Gems): I am a manufacturer with a huge variety of gems, well cut with many fancy shapes and price points from \$2 to over \$500,000.

Natasha Braunwart (Columbia Gem House): I wish they knew that we have just as many, if not more, large gemstones than we do melee. People really know us well for our melee, but we have an exceptional inventory of larger stones.

Jake Debs (Elite Fine Gems): We are willing to work with customers on price; nearly every price is negotiable.

Niveet Nagpal (Omi Privé): "It is okay to ask us about anything gemstone related!"

Dallas Prince (Dallas Prince Designs): "Oddly, many visitors to my booth have seen me at some point on television. It gives them a sense of already knowing something about me, so they are at ease to speak with me about my jewellery. There is a comfort level at our booth that welcomes everyone whether they are buying, collecting or learning. If there was one unknown detail to reveal about me, it is that I was a pharmaceutical/pre-med major in college (not kidding!)."

Sheahan Stephen (Sheahan Stephen Sapphires): "Why I chose to do this business versus working in microprocessor design, specifically inline yield engineering."

Mary van der Aa: That we (she and Todd Wacks of Tucson Todd's Gems) do it all ourselves — none of our work is duplicated or mass produced. That I do not do this just for the money; it is about connection and getting my pieces to good homes. That we are skilled, have all diplomas from GIA and want to teach and share our passions!



A natural diamond in its host kimberlite. While lab-grown specimens are cutting into demand for smaller natural diamonds, they are making fewer inroads into the luxury market. Photo by Bjoern Wylezich/iStock.

POTENTIAL BRIGHT SPOTS ARE AMONG VISIBLE CHALLENGES TO 2024 DIAMOND TRADE

Industry analyst Russell Shor looks at the factors that impacted the diamond industry's 2023 performance and discusses why the 2024 outlook might be rosier than expected.

While some volatility was expected in the 2023 diamond trade, the best that could be said about the diamond industry's overall performance in 2023 is that it was not disastrous. This outcome offers some hope, for those with an interest in the market, that 2024 will be better. Formidable challenges have carried over into this year, but there are some potential bright spots on which to build: a strengthening American economy, declining inflation and a robust demand for luxury goods.

As Avi Krawitz pointed out in a January 2023 article for *Rapaport*, the first half of last year was anticipated to be slow for the diamond trade, but there was hope for improvement in the second half of the year. However, Krawitz also pointed out that other, unpredictable factors might come into play, and in reality the year closed on a lower-than-projected note. Retail diamond jewellery sales were down an estimated 2% year-on-year in the U.S., according to preliminary estimates. The largest American retailer, Signet Group (which owns Kay Jewelers, Zale Corp. and Jared the Galleria of Jewelry) reported a 12.4% decline in sales during the first nine months of fiscal year 2024. While demand in mainland China and Hong Kong generally rose last year, this may reflect that much of the Chinese economy had remained locked down due to coronavirus policies until the very end of 2022.

De Beers, along with many other diamond mining companies, reported that prices and demand for rough

material had fallen last year. This was particularly true in the final two months of 2023, when Indian manufacturers agreed to a two-month moratorium of rough imports. De Beers' sales declined 19% by volume, and the company even reported a loss for the final quarter of 2023 — one of the very few times in its 135-year history the company has done so. Alrosa, Russia's diamond mining and marketing organisation, reported that U.S. and European sanctions have had a very limited impact on its operations, but weakening prices cut its profits by 7% through the first nine months of 2023. The U.S. and European Union enacted a much tougher round of sanctions on Russia in January of this year, including a tracking requirement, but their effectiveness remains unproven as of this writing.

India's moratorium on rough imports, which resulted in decline in production, was lifted on 15 December 2023. While it created spot shortages, the action has helped to stabilise prices for natural diamonds. In the United States, recovery from the pandemic slump and subsequent inflation cycle

has been strong. In an early February 2024 *New York Times* opinion piece, economist Paul Krugman noted that the inflation is now running at roughly 2%, which is in harmony with the Federal Reserve's target, while the gross domestic product of the United States was 3.3% in the fourth quarter of 2023. These, Krugman reported, along with reported job growth are indicative a good economy. However, as he also noted, deep political divisions within the country cause nearly half of all Americans to believe the economy is still in trouble.

These opposing forces will tug on consumer demand for much of the year, say economists, though consumer confidence surveys are finding an improved mood, which should help lift discretionary spending. Retailers are generally looking at a slight year-on-year increase in jewellery sales through the second half of 2024, which should help diamond manufacturers maintain prices and profits.

The wild card, of course, is competition from lab-grown diamonds which, by some estimates, accounted

Jewellery demand soars in Hong Kong following the lifting of full COVID-19 restrictions. However, the outlook this year is challenging in the midst of economic issues in the Mainland. Photo by EarnestTse/iStock.



for 25% to 30% of all diamond sales last year by volume. Some analysts believe this year may see synthetic specimens seizing a majority of the retail market. Lab-created material accounted for 39% of U.S. diamond engagement ring sales last year, according to analyst Edahn Golan. This percentage has the potential to grow; the influential bridal publication *The Knot* calls them a 'wallet-friendly' alternative for couples who may be under financial pressure from rising housing prices to make more affordable choices in wedding-related expenses.

On the surface, it sounds like the makings of a disaster for the natural diamond industry, but prices of synthetic diamonds are falling so low – 60% to 80% below comparable natural stones at wholesale, and still dropping – as to become an add-on market. That is appealing to consumers who would not be able to afford a natural diamond in the first place. In the meantime, the competition between producers of lab-grown diamonds has heated up in the past two years is only getting tougher, which means that prices will continue to fall though the year.

China-Hong Kong is the world's second-largest consumer diamond market. Their largest retailer, Chow Tai Fook, reported a sales increase of 46.1% during the final quarter of 2023, though gem-set jewellery sales were up only 7%. The vast majority of this increase came from fully reopening the Hong Kong border to mainlanders in early 2023, which brought a flood of tourists to the city.

However, Chow Tai Fook and rival chain Luk Fook have warned that their lofty increases posted last year after the end of COVID-19 lockdowns. These gains are not expected to repeat this year, as China's economy is encountering severe headwinds. Consumer demand will likely plunge through 2024 due to multiple factors. These include the plunge in the nation's real estate market, bringing the collapse of Evergrande, the nation's largest home builder; the diminishing job prospects of millions of new college graduates; and the outflows of capital from corporations and the wealthy. How much China's economy will be affected is anyone's guess. Chinese demand has



Lab-grown diamonds prices at retail remain well above wholesale levels making them attractive to retailers. Photo by Mark Johnson/iStock.

More than 80% of respondents reported wanting a mined diamond for an engagement ring.

been resilient through previous crises, but wholesale buyers there are being very cautious in their restocking and orders in the first quarter.

One bright spot for 2024, and particularly for natural diamond interests, is that lab-grown diamonds still command a much smaller market share in China than in the U.S. A 2023 report by Chow Tai Fook, which offers a limited line of synthetic diamond pieces, found that three-quarters of Chinese consumers are still opting for natural diamonds. More than 80% of respondents reported wanting a mined gemstone for an engagement ring.

Another area of promise is the global luxury diamond market. Richemont, parent company of Cartier and Van Cleef and Arpels and Buccallati, reported a 12% increase in worldwide sales from its jewellery division for the final quarter of 2023. The other luxury conglomerate, LVMH, which includes Tiffany & Co., Bulgari and Fred Jollier saw a 3% increase in sales in its watches and jewellery division, with Tiffany and Bulgari driving the yearly

growth. Swatch Group posted a 12.6% increase in watch and jewellery sales for 2023, and noted that growth at Harry Winston, its primary jewellery house, was 'in high double digits'.

All of these luxury houses acknowledge the complications confronting them in 2024, but their outlooks call for continued growth by heavily promoting their brand heritage and integrity. This, in turn, will continue to direct their (high-net-worth) clientele to their stores.

The luxury houses see what most top economists see for the year ahead: underlying economic strength in the U.S. and a potential diaspora of wealthy Chinese consumers, who will continue to spend on diamonds and jewellery in other parts of the world. They also take notice of stability in the economies of Asia, the Middle East and Western Europe. As Paul Krugman noted, there is a great deal of strength hiding behind the relentless tide of gloomy news, which may bode well for the trade as a whole and for the diamond sector in particular. ■

WOMEN OF IMPACT IN TODAY'S JEWELLERY INDUSTRY

Jennifer-Lynn Archuleta and Olga González FGA DGA speak to industry actors in different fields on the growing visibility of women and other issues in the gem trade.

The gem and jewellery industry has long been considered a male-dominated field; in fact, in a 2020 interview with Catawiki, jewellery designer and gemstone specialist Naomi Howard pointed out that 'The gemology world is very small, and it's still 90% men'. Yet it is also true that women are deeply embedded in the artisanal and small-scale mining (ASM) of gemstones, and that they play important roles all along the supply chain. It is also apparent that the number of women in front-facing public positions is growing. The following eleven women, who work in different aspects of the trade, discussed matters that affected their own development as industry actors.



Adrienne Sanogo

ADRIANNE SANOGO

Co-Founder and Education Chair, Black in Jewelry Coalition (blackinjewelry.org)

Can you share your journey into the jewellery industry?

My introduction to the gem and jewellery industry does not come from a background of legacy or heritage. It has been a journey spanning nearly five decades!

Since childhood, I have avidly collected rocks, minerals and jewellery. The spark that ignited my gemmology path was the unexpected find of an unmarked tennis bracelet in a charity shop, priced at \$89. It turned out to be an 18K yellow gold, ten-carat diamond piece valued at over \$20,000! This discovery motivated me to delve deeper into diamond knowledge through education. Simultaneously, I was battling cancer, which led me to celebrate my second chance at life with a Graduate Gemologist (GG) diploma from GIA. This pursuit played a significant role in my healing journey. I achieved a delicate balance of treatments, recovery, full-time work, raising two teenagers and recuperation from major surgery. At one point, my GIA instructor sensed something amiss, but I chose not to disclose my illness. After twenty-five months of unwavering effort, I proudly graduated with a hard-earned GG diploma.

Can you tell us about a project or achievement in your career of which you are particularly proud?

There is a list of projects and achievements I have been involved with, but in the interest of space, I will share these highlights. Being chosen

by Raquel Alonso-Perez, Melanie Grant and Susan Jacques to moderate a panel at the first State of the Art Jewelry Summit at Harvard University in 2023 marked a significant milestone in my career. It is an excellent example of women elevating and supporting other women. I am truly proud of the access, opportunities and scholarships that BIJC has created through partnerships with industry collaborators. In Spring 2024, BIJC's partnership with Jewelers Mutual (sole sponsor) holds special significance to me in my role as the education chair. This initiative aims to introduce high school students at Brooklyn Steam Center in New York City to the art of jewellery making, inspiring them to explore career paths in the industry from an early age.

How do you use your platform to contribute to positive changes within the trade?

As my mentor, Cheryl Wadlington, wisely said, "take up your full space." Without doing so, advocacy efforts will lack impact. I have been privileged to participate in influential settings where I advocate for those who are marginalised or may not have a voice in significant conversations. Having experienced exclusion and being overlooked, I recognise the significance

"I am truly proud of the access, opportunities and scholarships that Black in Jewelry Coalition has created through partnerships with industry collaborators."

of advocacy; without this support, progress becomes challenging. It is crucial to maximise this opportunity.

What advice would you give to young women seeking to enter this industry?

In addition to cultivating genuine relationships and connections throughout the supply chain, seek out a mentor whom you deeply admire. If you hold this person in high regard, chances are you already know a fair amount about them. If not, familiarise yourself with their background, accomplishments and significant roles. Actively network and propose exciting collaborations to expand your horizons. Be open to taking risks and forging your own path when necessary. While tradition and heritage are integral to the industry, there is always room for growth. Keep yourself engaged through reading and course enrolment. Never shy away from asking questions to enhance your understanding and cultivate a continuous learning mindset.

ASHRAFI CHALISA

Indian Diamond and Colorstone Association (idcany.org) and The Diamond Manufacturer & Importers Association of America (dmia.diamonds)

Can you share your journey into the jewellery industry?

I started in this industry quite by accident, and very reluctantly. It was supposed to be a short-term gig, but now it is a twenty-year journey that has been exciting and rewarding. I was truly fortunate to come into contact with and work alongside some very decent and respectable people right from the beginning. This is why I ended up where I am today.

How do you see the role of women evolving in the traditionally male-dominated C-Suite of the trade?

To be honest, even though I see a lot of women in the younger generation playing active roles in the business, on this side of the industry the majority of them are still functioning as family-oriented traditional entities where the son follows



Ashrafi Chalisa

the father into the family business. This kind of change is always slow and gradual. But I am happy that I had the opportunity to play a role in bringing in our first female board member who successfully runs her family business in coloured stones by herself and who also happens to be my close friend.

In your opinion, what qualities or skills are essential for success?

Patience to wait for change to happen, perseverance to keep working towards your goal, willingness to always learn and try new things and discipline to always keep this mindset.

BRECKEN BRANSTRATOR

Editor-in-Chief, GemGuide (www.gemguide.com)

Can you share your journey into the jewellery industry?

I wrote for a trade publication that covered the beverage industry, and while it was a great first job out of university, I did not see myself staying there long term. After two years, I knew I was ready for a new challenge. *National Jeweler* was looking for a coloured-stone writer a few months into my job search. It was not something I even knew existed — who ever thinks about being a coloured-stone journalist? — but as soon as I had my first interview, I knew I wanted the job.

I knew next-to-nothing about coloured gems, and the learning curve was immense, but I give my editor a lot

of credit for letting her team take their beat and make it their own. We had the freedom and resources to become the best in our areas, and I enjoyed making the coloured-stones niche my own.

What misconceptions have you had to overcome, and how did you do that?

People can the mistake of confusing a news or publishing platform for a press-release distributor. Just because something is pitched to me does not mean it will be published, and especially does not mean it will be published as is. News judgment is such a big part of true journalism, and though it is not easy to always sort through the voices to understand what the true story is and how to make it as balanced as can be, it is vital. I work hard to make sure I'm clear about the angle of the article I'm writing and communicate what will be covered to make it balanced, or make sure the articles that appear in *GemGuide* written by others follow the same guidelines and aren't just marketing opportunities for business.

Has the digital era impacted the way you do business?

Today, everyone is playing that game of print versus digital media, and writers have had to adapt to writing for digital platforms. Luckily for me, I have been at trade publications that still have print



Brecken Branstrator

components, but we have had to find ways to balance what both sides offer. At *GemGuide*, our wholesale pricing is in our print publication, but recognising how many people might want those prices in a digital format, we also have a *GemGuide* pricing app (which also works in an internet browser). *GemGuide* also launched a digital-only newsletter in early 2023; it is a bi-weekly article for our subscribers focused on various newsier topics important to the industry.

What qualities or skills do you think are essential for success, both in general and in the gem and jewellery industry?

I do not think you can get far in this industry without passion; it goes a long way in an industry that might be small but still has a decent amount of competition. That authenticity almost always shines through to those who you might hope to work with or to whom you want to get your messaging. And I think in this industry especially, honesty is also vital. A good reputation is as important as the goods or services you offer others.

“I do not think you can get far in this industry without passion.”

What advice would you give to young women seeking to enter this industry?

I cannot stress enough the importance of networking and stepping out of your comfort zone to build connections. So many of the amazing opportunities I have had in this industry have come about because I decided to go to an event, even if I did not know anybody. I can say this: I have certainly never regretted taking the time to attend a conference, evening event or any other opportunity to meet people.



Chie Murakami

CHIE MURAKAMI

Founder, Diamonds for Peace (eng.diamondsforpeace.org)

Can you share your journey into the jewellery industry?

I got interested in diamonds after receiving a ring upon my engagement to be married. I was shocked to learn there were many issues associated with diamond mining. I started thinking what I could do as a person in the field of international development.

I visited Sierra Leone in 2014, but I didn't see much room for a new, small group to start a programme. A friend who had worked in Liberia introduced me to a trusted ex-colleague from that country; this person arranged my 2015 trip to mining communities. I also met the then-deputy minister of the Ministry of Mines and Energy, who was leading the ministry into developing a policy to organise all the miners into cooperatives. I felt that the Liberian government and I were working in the

same direction. I founded Diamonds for Peace (DFP), a nongovernmental organisation that provides artisanal miners and diggers with technical support so that they can be empowered and become self-reliant.

Have you faced any challenges unique to women in the gem trade? How did you overcome them?

The Liberian government allows both men and women to have mining licenses as long as they are Liberian nationals. Yet there are some Liberian mining communities, especially along the border with Sierra Leone, that do not allow women to enter a diamond mine, as they do not know the science of diamond formation. Instead, many locals believe that a female devil who puts diamonds underground gets angry when she



Christina Malle

sees another woman in a mine and won't leave more diamonds. Thus, in such a community a woman who has a mining license will be denied access to enter her own mine. While DFP does not currently work in such a community, we know that when we expand our projects, we will need to educate and convince tribal chiefs, leaders and women so and women can work at the mines.

What role do sustainability and ethical practices play in your approach to business?

While we always think about sustainability when planning a project and its implementation, we need to accept that there is no such thing as 'sustainable mining', as minerals will be exhausted someday. Our projects aim for miners/diggers living in these communities to be self-reliant even after the diamonds are exhausted. That's one of the reasons we have introduced beekeeping and other projects to the community — to provide an income after the minerals are gone.

What advice would you give to young women seeking to enter this industry?

My advice would be to have various experiences, whether or not they are related to the trade. Seeing different countries, talking with different people and trying to do a variety of things will give you more perspectives, which will be helpful in forming your career.

CHRISTINA MALLE

Christina Malle Jewelry
(christinamalle.com)
President of the Board of Directors, Ethical Metalsmiths
(ethicalmetalsmiths.com)

Can you share your journey into the jewellery industry?

It has been quite a winding road on my path from human-rights lawyer to gemmologist and goldsmith! I'd been practicing law, representing people seeking asylum in the United States.

I had successfully represented an asylum client from Sierra Leone. She was in her early twenties and had worked seasonally as an artisanal gold miner. The entire family was persecuted

based on their ethnic group, and the woman's hands and arms bore the permanent brunt of physical torture. I had never met a miner before, nor had I thought about where gold was from. Meeting this client, who subsequently won her legal case, created a connection from jewellery to individual people to mining conditions.

One day, I spotted a sign announcing a class called 'Goldsmithing for Absolute Beginners'. I enrolled, had the great fortune of meeting master goldsmith Donna Distefano and subsequently changed my life. I now see the jewellery industry engaging with human rights and environmental issues. It's heartening to see our industry waking up and taking responsibility for the impact we've had on people and planet.

Can you tell us about a project or achievement in your career of which you are particularly proud?

Pure Earth, a nonprofit mitigating pollution worldwide, honoured me in 2022 with its Force of Nature award, which is bestowed upon women who work on lead or mercury abatement. Many industry actors are appalled at how mercury is used in our gold supply chain, while not wishing to punish the impoverished and marginalised people who are using it. Pure Earth is working to solve this problem.

What role do sustainability and ethical practices play in your approach to business?

Let's take a minute to consider the word 'sustainability' when we see it, especially in the context of jewellery. We work with extractives, which are finite materials.. That said, the 'S' word poses problems for our industry, as it can lean close to greenwashing. The Jewelry Glossary Project provides helpful definitions of several words, including this one. Overall, I suggest that if we use 'sustainability' in the context of jewellery, we also provide a definition. If you mean sustainable in terms of development goals, let your reader or listener know that, too! The same challenges apply to the word 'recycled'. If it is technically correct, but not what most people understand the term to mean, we undermine our own credibility.

What advice would you give to young women aspiring to enter the gem and jewellery industry?

Join groups or associations, such as Fair Luxury and Ethical Metalsmiths. If you do not see one you like, create it! Meet as many people as you can and ask them how they entered the field. Stay in touch with colleagues and fellow graduates from Gem-A, GIA, or other programmes you have attended. If you are lucky enough to meet someone who has your dream job, ask which skills and characteristics are most helpful for that position. Then set about acquiring those skills and nurturing those characteristics.

CRISTINA M. VILLEGAS

Director of Sustainable Jewelry, Pact
(pactworld.org)

What inspired you to pursue a career in the trade?

I work within jewellery companies and organisations to maximise their social impacts worldwide. This usually means I work hand-in-hand with gem-mining communities in far-flung areas. I have always been interested in the nexus of mining, rural development, human rights and global supply chains. Following early work in the international human rights world, I pursued some unique opportunities and eventually found myself working with artisanal and small-scale miners (ASM). Currently, I specialise in jewellery supply chains such as gemstones, diamonds and gold. →



I am motivated by what is possible when you work together with the right allies.

When I first entered the mining sector, the world's newest gold rush was underway, spurred by the 2008 global financial collapse and the corresponding dramatic rise of gold prices.

My early clients were conservation organisations struggling to cope with the influx of ASM gold miners into conservation zones. One of these same clients was dealing with both gold and diamond miners entering a protected area that it managed, which is how I visited my first diamond and gold mines in West Africa. I've been in this space ever since.

Have you faced any challenges unique to women in the gem trade? How did you overcome them?

Even now, with my name relatively well known in the mining and jewellery sectors, I still face a lot of 'mansplaining', particularly within the trading community. I still have people talk 'at' me with their opinion, which is usually thinly considered. Luckily, there are also many allies.

Pivoting to women writ large, and especially the miners that I work with: Study after study demonstrates that women miners – whether in gold or gems – face tremendous challenges. They are often considered bad luck on mine sites, or they are seen as not serious miners and are routinely pushed to marginal locations. Well-meaning but inexperienced researchers or other observers can overlook women in the gem trade because of their own biases. From an employment perspective, about ninety percent of all mining worldwide is ASM, and one-third of these miners are women. The World Bank created a tool back in 2012 to overcome the invisibility crisis of women miners[†], and it remains one of my favourite research tools.



For many reasons, women in the trade rarely receive business investments or business mentoring for their mines or other businesses. This can create a vicious cycle, where women's participation in the trade remains small. What nearly every study agrees upon is that targeted supports for women producers are desperately needed. That is why I so often start with women: if you do not start with them specifically, they will always be an afterthought. This is the only way to get to gender parity in this sector.

What role do sustainability and ethical practices play in your approach to business?

I would like to flip that question around. I like to ask "how can sustainability methods serve as a winning business strategy?" The answers used to be that reform will help you from a marketing/product differentiation and reputational risk perspective. These days, with increasing regulation in Europe and other markets, good sustainability

practice is also a legal compliance strategy. Based on your approach, it can provide the elements of, or solution to, due-diligence questions that the European Union (EU) and others are now requiring. These include that you prove that you investigate and stop modern slavery in your supply chain and that you understand your own environmental impacts. All this means is that sustainability is no longer simply a 'nice-to-have' and a 'feel-good' endeavour. It is an essential part of your ability to be in business.

Can you highlight any collaborations or partnerships that have been significant in your career?

I was humbled early in my career by representatives from the Tanzanian Women Miners' Association (TAWOMA). I was in Tanzania and asked their opinion about my project. They told me that I had designed it backwards, and that it would not give me the results that I wanted. Of course, they were right. I was so impressed by them and their commitment to their members that I knew that I wanted to work with them directly. A few years later, I found an opportunity to do just that through a collaboration on gemstones with GIA. I continue to be humbled by that group.

ISABELLA YAN

*Gems and Jewellery Journalist
Founder, Art Meets Jewellery
(artmeetsjewellery.com)*

Can you share your journey into the jewellery industry?

My background is in art history, and I began my career in the world of fine-art auctions. To me, jewellery has always represented a miniature art form, fostering a more intimate and personal interaction compared to painting or artefacts. My fascination with diverse materials extended to snuff bottles. I was captivated by the array of materials used – ranging from tourmaline and jadeite to porcelain, glass and cinnabar lacquer – especially during the Qing dynasty, when guilds and craftsmen were commissioned to source materials.

I used to juggle a Saturday job at an antique jewellers in Central London

"Our projects aim for miners/diggers living in these communities to be self-reliant even after the diamonds are exhausted."

[†] <https://commdev.org/publications/gender-dimensions-of-artisanal-and-small-scale-mining-a-rapid-assessment-toolkit/>

alongside a full-time job while studying gemmology in the evenings. When I moved to Bangkok, I immersed myself in various aspects of the industry; I worked at a gemstone lab and school before transitioning to a jewellery manufacturer and brand. At the same time, I was always writing and creating content. Eventually, I made the decision to focus on gems and jewellery journalism, covering the entire supply chain. This decision allowed me to live on a tropical island with frequent travel to the main Asian hubs. I feel fortunate that I have the flexibility to work from anywhere.

What misconceptions have you had to overcome, and how did you do that?

People from the industry and media sometimes mistake me for working in public relations because of my 'attire', although I am uncertain of the specific reason behind this assumption.

In journalism, it can be challenging to form authentic relationships because people often engage with you for opportunistic reasons, seeking to leverage the relationship for their benefit of gaining coverage or exposure. I make sure to effectively communicate boundaries and set the right expectations from the beginning.

Can you tell us about a project or achievement in your career of which you are particularly proud?

As a naturally reserved individual who takes time to open up, I have discovered a newfound sense of empowerment in making my voice heard. Whether through delivering lectures, giving talks and speeches or expressing myself through writing, I find it increasingly important to share my perspective. I enjoy collaborating on various projects, as it allows me to engage with diverse individuals across the industry.

How do you use your platform to contribute to positive changes within the trade?

I hope that through my articles and work, I can shed more light on the design talent across Asia. Art Meets Jewellery is named after my personal journey of discovering jewellery through art. I have a deep appreciation for unique, one-of-a-kind pieces and believe that design reigns supreme in the industry. Additionally, I hope my platform offers a fresh and unique perspective on the industry, providing insights that may be unfamiliar to those new to the field.

What advice would you give to young women seeking to enter this industry?

Take the time to understand yourself, identify your strengths and clarify your goals. This process unfolds over time, shaped by the rich experiences of life, including various jobs and opportunities, as well as the exploration of different cultures through travel. The gem and jewellery industry is incredibly international and diverse, so be open to exploring career opportunities beyond your current location.

MARY ENRIGHT,

Mary Enright (ME) Jewellery
(maryenright.com)

President-Elect at Women's Jewellery Association NY Metro Chapter

Can you share your journey into the jewellery industry?

Growing up in the west of Ireland, I had little exposure to the jewellery industry. After a very traditional route through college, I became a teacher, but I felt there was something else I was destined to do. One day I saw an advertisement for a jewellery and art metalcraft programme; somehow I knew that this was what I had been searching for. Two weeks and one big leap of faith later, I moved cities and started a new career. From the first moment I sat at a jewellers bench I felt like I had found home.

As a woman in jewellery, have you faced any unique challenges, and how did you overcome them?

My career has almost exclusively been as a goldsmith in male-dominated workshops. There have been occasions where I have faced stereotypes or biases based on gender. I learned early in my career to approach these challenging situations with determination and grace, proving myself based on my skills, expertise and passion for my craft.

How do you see the role of women evolving in the traditionally male-dominated C-Suite of the trade?

I have seen the role of women evolving in real time. More women are breaking

Mary Enright



barriers and assuming leadership positions within the trade. due to many factors, including increased access to opportunities, changing cultural attitudes and the recognition of the value that diverse perspectives bring to business and industry. By embracing and empowering female leaders, the trade can tap into a wealth of talent, creativity and expertise that will drive positive change and shape a more vibrant and resilient industry.

Can you tell us about a project or achievement in your career of which you are particularly proud?

Designing and making jewellery comes very naturally to me, I had to work incredibly hard to learn, grow and develop as an entrepreneur. There have been many proud moments over the past twenty years, opening my ME Jewellery store and workshop is joint-first prize with securing investment after pitching a branded jewellery business to venture capitalists on *Dragon's Den Ireland*.

What role do sustainability and ethical practices play in your approach to business?

I recently completed the NYU Stern School of Business Corporate Sustainability Program and applied some new learning to my business to ensure that day-to-day operations and decision-making processes have, at their cores, sustainable and ethical practices. This commitment reflects my personal values and vision for a better and more responsible industry. By leading with integrity and accountability, I believe we can create beautiful, meaningful jewellery that enriches lives while minimising our environmental footprint and promoting social justice.



Patricia Inonge Zita Mweene

What advice would you give to young women seeking to enter this industry?

One of my favourite aspects of this industry is that there is always something new to learn and someone new with whom to create a connection. If I could give just one piece of advice, it would be to embrace learning and educate yourself. Invest time in learning about the industry and the people in it, whether that is through online and print resources, through educational programmes, on-the-job training or through networking and mentorships.

PATRICIA INONGE ZITA MWEENE
Founder and Executive Director, Design Thinking Africa (designthinkingafrica.org)
Founder and Creative Director, INONGE ZITA (inongezita.com)

Can you share your journey into the jewellery industry?

I grew up in Ndola, Zambia, and developed a love for gemstones in secondary school. I would spend my lunch money on beautiful earring studs in the government parastatal department store Zambia Consumer Buying Corporation (ZCBC) This sparked my fascination with jewellery. Little did I know at the time that there was actually an emerald-cutting factory in Ndola called Zambia Emerald Industries Limited (ZEIL), which was a joint venture between the Zambian government and renowned American gem dealer Eric Engel.

I started making jewellery as a hobby in 2008. While pursuing my master's in project management, I explored sustainable jewellery value chains in Africa as a thesis project. It was difficult to get accurate data. Along the way I learned that despite Africa having an abundance of raw materials used in jewellery manufacturing and skilled labour, those resources were exported, leaving African gem cutters and goldsmiths without materials to work with. This inspired my entry into the industry.

Design Thinking Africa is a Danish NGO that uses design to support development in African extractive communities, while INONGE ZITA is a Copenhagen-based sustainable

“From an employment perspective, about 90% of all mining worldwide is ASM, and one-third of these miners are women.”

fine-jewellery brand, designed in Denmark and set with gemstones cut and polished by women gem cutters from Zambia. Ten percent of sales are donated to Design Thinking Africa for design-training programmes.

Do you think you have faced any challenges unique to women in the gem trade, and how did you overcome them? What misconceptions have you had to overcome, and how did you do that?

The gem trade can be capital-intensive, making funding a challenge. Instead of aiming for immediate scale, I focused on creating impact one gemstone at a time while working full time in project management.

We also had to overcome the idea that African-cut gemstones are of inferior quality. Gemstones cut in the country can be good when people are given access to raw materials and machinery. The Design Thinking for Extractive Communities training programme, launched in partnership with Mejuri to train unemployed female gem cutters in creative skills for the lapidary sector, addresses this issue. My philosophy is that the design process must start in extractive communities in order to have an inclusive value chain. We are investing in training the community to cut and polish gemstones to the highest standards. The second cohort will train

“My philosophy is that the design process must start in extractive communities in order to have an inclusive value chain.”

undergraduates of the first cohort, creating a sustainable model for female empowerment in the industry.

What role do sustainability and ethical practices play in your approach to business?

Sustainability and ethics are at the core of both INONGE ZITA and Design Thinking Africa. We prioritise responsible sourcing, avoiding environmentally harmful mining and human rights abuses. Our partnership with the LAJESO Multi-purpose Cooperative Society in Ndola empowers female gem cutters by teaching them the advanced gem cutting and digital skills essential for running businesses.

How do you use your platform to contribute to positive changes within the trade?

By sourcing from female gem cutters and supporting the LAJESO Cooperative, I actively promote economic empowerment and gender equality within the trade. I also advocate for inclusiveness and supply chain transparency to create a more ethical and sustainable industry.

PIA TONNA

Executive Director and Chief Merchandising Officer, Fuli Gemstones (fuligemstones.org)

What inspired you to pursue a career in the trade?

I had been in the luxury-goods industry for many years before being approached by another coloured-gemstone mining company for a role on their marketing team. I fell in love with coloured gemstones and have never looked back.

What misconceptions have you had to overcome, and how did you do that?

From personal experiences, there are times when it still feels like a male-dominated trade, but there are strong women who are helping to shape our industry and make changes for the better, from women in mining, superb designers, historians and lapidarists to geologists and gemmologists.

Our vision at Fuli has always been to build one of the most innovative, creative and environmentally responsible gemstone-mining companies in the world. We have had to start from scratch to educate the industry and end-consumers on peridot, from its history to its gemmological characteristics and properties, and help explain the differences of each locality.

Can you share a memorable experience or encounter that has shaped your perspective within the trade?

I love the way the industry supports each other. We collaborate where we can; that includes supporting various initiatives, working with labs, sharing our knowledge and research and supporting

Pia Tonna

designers. Taking professors, scientists and gemmologists to our mine in July 2023 was very memorable; getting their reactions as they stepped foot inside was amazing.

What do you believe is the future of the trade, and how do you envision your role in it?

As the world gets smaller via digital communications, I hope that our industry can go from strength to strength, through sharing knowledge and educating the next generation, I hope we can attract more people into the world of gems.



Susan Chandler

SUSAN CHANDLER

*Chief Merchandising Officer, Citizen Watch America (citizenwatch.com)
President, Women’s Jewelry Association*

Can you share your journey into the jewellery industry?

My mother was an artist, and she gave me many hands-on experiences making things as a child. I was always attracted to bright and shiny vintage jewellery and stones as a little girl. Working with jewellery came naturally.

Right out of college I went into a buyer-training programme at Mercantile Stores Company Inc., a department-store chain with 110 locations. Within two years, I was their corporate jewellery buyer. I did not think about being in the trade until that point in my life. After buying for about six years, I went to work for a manufacturer in Providence, Rhode Island, who used sterling silver, gemstones, alloy manufacturing and lost-wax casting. Once I was buying and

learned the manufacturing side, I knew I wanted to continue in the jewellery industry. I went to work for Avon as the director of jewellery and watches in early 2000, then switched over to the fine-jewellery world.

As a leader, what initiatives do you take to mentor or support aspiring women in jewellery?

I enjoy mentoring within the companies where I work, as well as within the Women’s Jewelry Association. It is important to give the women around me confidence to think creatively. We each need to find our people – a group where we can be comfortable sharing and open to taking recommendations as well as criticism. WJA has been my platform for positive change. Over the last two years the board and I have re-imagined the structure so we can continue to build programmes, give bigger grants and scholarships and celebrate women in the jewellery and watch industry.

How has the digital era impacted the way you do business?

Strong brands tell their story on digital platforms and this story telling will continue to be important. You must give customers confidence, especially when they are not able to touch or try on a product before buying. The digital platform can enrich the experience for online purchasing while bringing clientele into the store. I am so inspired by women who are taking risks and building their jewellery businesses online. It is phenomenal to see so many new women-owned jewellery businesses on social media.

Can you highlight any collaborations or partnerships that have been significant in your career?

Bulova has been collaborating in the music industry for many years. I love when heritage is the basis for collaboration, but it must be authentic. When done well it becomes something bigger, allowing for connection with consumers on another level.

What advice would you give to young women aspiring to enter the gem and jewellery industry?

Young women need to feel comfortable in their decisions and go after their dreams. The industry is a wonderful place to learn and spread your wings. Jewellery makes people happy. Believe in yourself. Try different areas. Give yourself a chance to fail and enjoy the experience. ■

I am so inspired by women who are taking risks and building their jewellery businesses online. It is phenomenal to see so many new women-owned jewellery businesses on social media.

THE RE-EMERGENCE AND REIMAGINING OF THE BROOCH

Smitha Sadanandan explores how brooches and pins have experienced a revival, appearing on red carpets, at galas and as an accessory option for men.



Gaëlle Khouri's *Le Millepatte* brooch uses blackened sterling silver, yellow gold, 0.9 tcw brown diamond and 0.2 tcw rubies in its composition.



Austy Lee used 18K yellow gold, along with unheated Mozambican rubies, fancy-colour diamonds and red enamel.

Over the years, the design, execution and popularity of brooches and clips has changed course. Some ingenious minds have created these beloved ornaments into beguiling jewels in forms including ballerinas, monkeys, koalas, parrots, seahorses and bugs. Veering away from the traditional style, form and even the way the jewel is worn, today's designers are feeding the

collector's insatiable appetite for quirky, whimsical designs, offering brooches and pins with a fashion-forward approach.

"Brooches are the boomerang jewel," stated Josephine Odet, a fine jewellery, diamond and gemstone specialist who is currently working with Bonhams Paris on their auctions. "They keep going out and coming back into style! In the auction market, there always has been a steady demand for brooches from

collectors but recently, there has been a notable peak in interest from a new generation of buyers. In March 2023, a Bonhams social media post featuring a Cartier Tutti Frutti brooch was a top performer in terms of engagement."

At the December 2023 jewellery sale at Bonhams' London location, brooches performed particularly well. The sought-after pieces included the Cartier art-deco Giardenetto Brooch (circa 1925) in sapphire, emerald, diamond and onyx; and a René Lalique enamel, pâte de verre, sapphire and diamond brooch/pendant combination (circa 1900).

A BRIEF HISTORY OF BROOCHES

Elaborating on the history of the jewel, Ms Odet explained that "As a style of jewellery, brooches have an incredibly long, rich and symbolic history. The first recorded brooches were practical and fashioned out of flint, wood and thorns. From the Bronze Age there are surviving examples in copper alloy, with the more decorative featuring deceptively modern geometric and coil motifs. Roman men and women used a *fibula* (Latin, meaning 'brooch'), made from silver, gold, copper alloy, bronze or iron, to secure their robes in place." Although the majority of the creations were utilitarian in design, the late second-century brooches feature bird and animal designs.

Ms Odet believes that the versatility of brooches and their adaptability to personal style is at the heart of their renewed popularity. "They can be pinned onto clothes, into the hair, on hats, sleeves, shoulders, scarves, bags, above pockets on trousers, on the waistline, on lapels, pinned onto grosgrain ribbons



Shown here are diamond-and-platinum brooches from Harwell Godfrey. Clockwise from top left: The petunia brooch is composed of a 1.34 ct diamond surrounded by 0.78 tcw diamonds; the sunflower brooch uses 0.27 tcw diamonds and the honeybee brooch has a hexagonal diamond as its centrepiece, along with 1.02 tcw diamonds.

or velvet and tied in the hair, wrapped around the wrist or worn as a choker," she elucidated, adding that her own last jewellery purchase at auction was a diamond-and-emerald bar brooch.

Brooches are also appealing to many people because they are incredibly collectible. Symbolic icons of their eras, bejewelled insects as ladybirds (considered lucky), butterflies (related to transcendence), dragonflies (indicated courage) and scarabs (symbolised eternity) were a thriving style in the Victorian era. The nineteenth century also saw the introduction of cameo and portrait-engraved brooches. "In fact, brooches have been at the centre of innovative, period-defining trends," pointed out Ms Odet. "For example, Cartier's geometric clips with high-contrast colours were first introduced at the Exposition Internationale des Arts Décoratifs et Industriels Modernes in 1925. In 1954, Van Cleef & Arpels launched La Boutique, a collection of jewels with accessible price points that included brooches with naturalistic and whimsical themes. In the 1960s, Boucheron also embraced adorable animal designs. And we can't really talk about collectible brooches without acknowledging VC&A's ballerina, fairy, bird and floral spray collections."

The brooch is definitely a favourite with royals, nobles, the rich and the powerful. It would be challenging to find a royal portrait from the seventeenth to nineteenth centuries without a brooch prominently featured, an appreciation that continues into the present day.

"Queen Elizabeth II had a penchant for a great brooch, from her impressive brooch set with the 94.4 ct Cullinan III

and the 63.6 ct Cullinan IV to her GRIMA yellow gold, diamond and carved ruby brooch. In 2022, she chose a diamond-and-platinum brooch designed by David Marshall and commissioned by the Goldsmiths' Company, to celebrate her Jubilee," remarked Ms Odet. And the British royal family is not alone.

"Brooches have often been used as statement jewels – bejewelled messengers." For example, Madeleine Albright, first woman to serve as U.S. Secretary of State, used brooches as part of her 'personal diplomatic arsenal'.

Harriet Hedges, gemmologist and founder of London-based jewellery specialist Harriet & Hera, indicated that "over the last few years, we've seen men experiment more and more with jewellery pieces in general, in support of shifting gender norms and self-expression. This growing demand means that brands have expanded their jewellery offerings to cater to

"This growing demand means that brands have expanded their jewellery offerings to cater to the male client and target them with popular genderfluid designs."



Boucheron's Like A Queen collection was inspired by Her Majesty Queen Elizabeth II's aquamarine-and-diamond double-clip brooch, which she received for her eighteenth birthday in 1944. The brooch from that collection is shown here with pink tourmaline.



When *Midnight Blooms* by NVW Jewels incorporates Whitby jet (raven's body), vintage enamel (rose), 18K yellow gold, 1.29 tcw black diamond beads, 0.69 tcw black diamonds and one 0.20 ct diamond in its design. The brooch has a platinum frame and is shown here on a handmade platinum chain.

the male client and target them with popular genderfluid designs." Men have noticeably been the trendsetters on the red carpet this year, she added. Aside from normalising the men's jewellery trend, brooches have offered brands a great way to showcase their men's jewellery and bejewelled unisex offerings. Her favourite brooch sightings on the red carpet included Simu Liu's pearl-and-diamond jabot pin at the 81st Annual Golden Globe Awards. "A great way of Assael giving us a cool and contemporary way to wear pearls," she noted. At the 75th Emmy Awards, host Anthony Anderson had no less than four pin changes; Hedges's favourite was "the colourful Haute Joaillerie collection brooch by Chopard, set in gold and titanium with 20.78 tcw of yellow diamonds and the cutest little ladybug."

CURRENT APPROACHES TO BROOCHES

Boucheron

When then-Princess Elizabeth turned eighteen in 1944, she received a Boucheron aquamarine-and-diamond double-clip brooch. She would continue to wear this sentimental design throughout her reign. In 2020, Claire Choisne, creative director of Boucheron, decided to take inspiration from this unique piece to create a high-jewellery collection reinterpreting

the famous design of the brooch through eighteen contemporary new designs titled *Histoire de Style, Like a Queen*. According to Ms Choisne, "being able to wear a piece in a number of ways, as well as the use of colour, were central to our work on this collection, so that both men and women may wear these pieces."

When Ms Choisne started looking for inspirations for this collection in the Boucheron archives, she recalls how she 'couldn't get my mind off that art-deco double clip brooch'. The severity and geometry of the design, tempered by the softness and light-blue hue of the aquamarines had fascinated her. "I was also touched by the sentimental value of this double clip, which The Queen wore at pivotal moments in her reign," added Ms Choisne. In early 2024, Boucheron decided to rethink ornamentation and brought out *The Power of Couture*, a twenty-four-piece collection, referencing ceremonial attire. "Bows, knits, grosgrain, pompoms and lace abound in our archives", explained Ms Choisne. "For this fourth edition of *Histoire de Style*, I decided to explore the theme of couture, without the fuss," she explained. The array of high jewellery, thus, revels in a stylistic interpretation that is both bold and unprecedented. "This collection is designed like a precious kit that may be worn in a multitude of ways, choosing among various elements to create an individual style."

NVW Jewels

Natasha Wightman is committed to keeping traditional crafts alive. She therefore works with ancient English materials such as Whitby jet and moorland boxwood, along with precious metals and gemstones. Enchanted by ravens in the skies above her Sussex home, Ms Wightman began sketching their movement and form. "I embarked on an unexpected journey when two wild ravens became part of her everyday life and through this experience, I gained a deep understanding of their characters and abilities." Coupled with a lifelong fascination with the design of rare-craft objects, the notion of a jewellery collection formed. She works with some of the most revered master craftsmen in Britain. "I wanted to work with British heritage experts because their skills and particular methods are rare," she confirmed.

Ms Wightman translates the 'power and other worldliness' of ravens into one-of-a-kind pieces. *When Midnight Blooms* is an artful brooch realised in hand-carved Whitby jet. "The raven's powerful black wings are outstretched to reveal their full glory, and in doing so, they encircle an antique, enamelled gold rose which holds a white diamond, glistening among its petals." The bold piece is finished with a detachable handmade platinum chain.



The *Artist Palette* brooch by Theo Fennell is made with 18K yellow and white gold, with 2.67 tcw multicolour sapphire and 0.45 ct tsavorite encircling the piece. In the center, the multiple gem cabochons: ruby (0.42 ct), green tourmaline (0.35 ct), onyx (0.16 ct), aquamarine (0.25 ct), citrine (0.26 ct) and sapphire (0.34 ct).



These jabot pins come from Katey Brunini's AeZeus Baldwin men's collection, although the pieces themselves are unisex. The top pin is a calla lily carved from opal, while the bottom pin uses a Brazilian emerald briolette frond.

Fei Liu

Birmingham-based jewellery designer Fei Liu (featured in Autumn 2022 *G&J*, pp. 12–19) finds brooches to be incredibly versatile, and his pieces often incorporate ways to wear them beyond the traditional style such as pendant-brooch combinations. His interest in these jewels is not only professional, but personal. "I tend to wear brooches more often than any other type of jewellery. I find them effortlessly stylish and a means for me to showcase my latest creations. However, I reserve them exclusively for formal and special occasions."

Liu acknowledged the increasingly frequent presence of brooches on the red carpet — especially in men's fashion — to be particularly fascinating. "One individual who stands out in this trend is Eddie Redmayne. His red-carpet ensembles have featured a diverse range

of brooches, ranging from intricately ornate pieces to strikingly dramatic ones," remarked the designer, who seeks inspiration from everyday life. "When I see something fascinating, I create a visual record and, later, use it as a reference for my designs. I also love finding special gemstones. This was the case with the Butterfly Brooch and the Bird Brooch, where the finding of unique and striking tourmalines and opals sparked the vision for the butterfly and bird — giving the pieces more life." All pieces of jewellery that he designs show dimensions not only in their three-dimensional form but also in the array of gemstones that are incorporated to add depth.

Theo Fennell

British jeweller Theo Fennell is famous for his brooches. About his Artist Palette Brooch, he explained that "in a calmer

and altogether less-combative mood, I designed this brush-and-palette brooch as a keepsake for an artist to wear, whether they be a professional or merely a hobbyist. In my experience, people who paint are amongst the most agreeable in the world. I like to think that whoever comes to own this piece, will wear it while they go to that wonderful place to which doing something creative transports you." He has a handful for bejewelled bees — in 18K yellow and white gold, and encrusted with white diamonds, sapphires, natural fancy intense yellow diamonds, emeralds and rubies.

Austy Lee

Like many other creatives featured here, Hong Kong's Austy Lee has a personal love for brooches and pins. "I always put buckle pins on cotton-padded clothes and summer T-shirts. I like to put more than one brooch at the same time." His latest, most exciting piece is The Apple of Singularity brooch, the first release from The Fruit du Désir collection. A recent exhibition about the art of cutting fruits inspired the designer to explore the concept in jewellery. "The little-known plasticity of fruit is a combination of nature and art. The art of cutting fruits has a long history in Chinese culture," he observed. Known for his psychedelic approach to jewellery design, Mr Lee is keen to translate this work into a 3D design. "The surface of the sliced apple brooch is specially treated with a lot of burning and metal polishing to show a unique metallic lustre other than regular 18K gold."

A. Win Siu

A. Win Siu found her calling as a jeweller during the recent pandemic. Her whimsical debut collection, aptly named *Something Sweet*, features a series of candy-inspired brooches. To ensure her pieces resembled real candy wrappers, Siu deployed a two-pronged creative technique that incorporated enamel firing and anodising and colouring titanium. She then added in enamel embellishments. The Guangzhou,



This 18K rose-gold butterfly brooch by Fei Liu features a bodice of black pearl, wings hand-cut from pink tourmaline with intricate inner-engraved veins and decorated with diamonds and pink sapphires.



Saboo Fine Jewels uses conch pearls and titanium in many of its innovative pieces, such as this convertible pendant/brooch combination.

China-based designer continues to update the line. A white ceramic-and-titanium lollipop brooch with enamel, diamond, coloured sapphire and garnet, and a toy-gun brooch in titanium, set with chalcedony, diamond, tsavorite, sapphire and accented with enamel, are her latest brooches.

Gaelle Khouri

Dubai-based Gaelle Khouri’s Le Millepatte brooch challenges traditional interpretations of nature with a focus on the deep-rooted connection between woman and nature. “It captures the romance, delicacy, as well as the brutal beauty of a centipede. It poses questions about perceptions of beauty and embodies my signature three-dimensional, sculptural quality,” added the Lebanese jewellery designer. The unexpected blend of metals, of blackened sterling silver with shiny yellow gold, paired with brown diamonds and rubies, demonstrates the ‘mixology’ that defines her aesthetic.

Harwell Godfrey

Californian jeweller Lauren Harwell Godfrey loves to layer her accessories, and brooches create an opportunity for extra jewellery in addition to what is being worn on the body – so what’s not to love? The resurgence

of brooches and red-carpet styling has the designer excited. “I love it! I think men’s fashion is in an incredibly exciting place right now thanks to the adornment that is so front and centre. Brooches really add extra visual interest and glamour to men’s suiting.”

Ms Godfrey channels geometric shapes, gem-set patterns and bold scale across her creations. “In my latest collection, We Are Seeds, I feature flowers and bees and really liked the idea of curating a little world that included two flowers and a bee that could be worn all together on a lapel.” Her collaboration with Platinum Guild International (PGI) saw her design a capsule line, including brooches, in platinum. “I’ve really enjoyed the opportunity to highlight platinum in my work rather than my usual 18K yellow gold.” Ms Godfrey named the collection We Are Seeds inspired by the quote ‘They tried to bury us. They didn’t know we were seeds.’

Saboo Fine Jewels

Third-generation jeweller Pranay Saboo, of the Hong Kong-based family-run brand Saboo, has a penchant for infusing glamour into his work through his intriguing use of precious metal and gemstones. He sources conch pearls and stunning gems to design lightweight statement pieces in titanium. “Our family has travelled the world in search of the finest gemstones and craft smith techniques. Through our close association with prominent mines from across the globe, we are provided with the first option to some of the most exceptional gemstones in our industry.



This piece from A. Win Siu’s Something Sweet collection uses peridot from Fuli Gemstones in its design.

“The first recorded brooches were practical and fashioned out of flint, wood and thorns.”

These stones are often cut into exquisite and unique cuts by our in-house lapidary,” said Mr Saboo. Metallic hues and transformable elements, including brooches that can be converted into pendants ensure versatility.

K. Brunini Jewels

Katey Brunini of K. Brunini Jewels has launched a series of jabot pins for her new men’s collection – AeZeus Baldwin. The California-based designer has been making pins since 1997 and has included brooches in the brand’s annual collections. The designs are often inspired by flowers, animals and nature. “These are the first jabot pins, and these are unisex. I see them as tiny haiku. There are fifteen such pieces in the collection; it will continue to unfold over time,” she said. Carved stones, forming whorls of flowers, are the hero elements in her design. “One is a calla lily executed in carved opal and 18K gold; the other is a Brazilian emerald briolette frond.

Worn together, they create the effect of *ikebana* – the secret language of the lily paired with the leaf express the centuries-old Japanese art of flower arrangement.” Pairing these two pins on an ascot or lapel is a nod to nature, refinement of style and grace, she added. “The lines are elegant yet strong and dignified. Masculine and feminine. Detailed yet simplistic.”

Thanks to their appearances in high-profile events such as award ceremonies, brooches have experienced a renaissance over the past few years. If the enthusiasm of our jewellers is any indication, we can expect to see them for some time to come. ■

All photos courtesy of the designers unless otherwise indicated.

EXCEPTIONS TO THE USUAL PROVISIONS OF CITES

Wildlife and conservation consultant Jonathan Barzdo explains the seven exceptions to the Convention on International Trade in Endangered Species, and how they might apply to the gem and jewellery trade.



Hornbills are on Appendix II of CITES, and thus trade in their ivory is strictly regulated. This crab of hornbill ivory, by a nineteenth-century Japanese/Korean artist, was acquired by the Museum of Baltimore, Maryland, in 1931. Photo courtesy of the Walters Art Museum.

In the Spring 2023 edition of *Gems and Jewellery* (pp. 22–25), I provided a short introduction to CITES — the Convention on International Trade in Endangered Species of Wild Fauna and Flora. The introduction explained the legislative framework for the national laws and policies that Parties to the Convention must put in place to regulate the international trade in specimens of threatened species of wild animals and plants that are covered by CITES. It set out the role of the CITES Management Authority and Scientific Authority of each country. It also establishes the

basic requirements for permits to authorise international movement of any kind of specimen of species included in the CITES Appendices. In summary:

- Appendix I includes species that are endangered (threatened with extinction), and both an import permit and export permit are required;
- Appendix II includes other threatened species, and an export permit is required; and
- Appendix III includes species threatened in one country that protects the species and that

requires an export permit. Export from other countries requires a certificate of origin. For re-export of something previously imported, a 'certificate of re-export' is used.

Those, at least, are the basic provisions for trade specified in the text of the Convention. Certain criteria must be met before permits can be issued. Most importantly for Appendix I species, an import permit may only be issued if the import is not for primarily commercial purposes. For Appendices I and II, an export permit may only be issued if a.) the specimen to be exported was legally acquired and b.) if it will not be detrimental to the wild population. Making these determinations can slow down the process of issuing permits, especially as many countries deal with numerous permit applications.

However, CITES also makes provision for exceptions from the usual rules in special circumstances. This is done to reduce the administrative burden for the National CITES Authorities as

This ornament showing the carving of a dragon, dating from China's Qin dynasty, is made from carved tortoiseshell. Trade of tortoiseshell has generally been banned due to inclusion of hawksbill turtle in Appendix I of CITES in 1977, followed by the addition to all species of marine turtles to Appendix I in 1981. However, this ornament falls under several exceptions listed in this article. Photo courtesy of the Los Angeles County Museum of Art.





Conch pearls from the queen conch (*Strombus gigas*) are listed on Appendix II of CITES. This 3.64-gram specimen is part of an early-twentieth-century platinum-and-diamond sautoir from Tiffany & Co. It was gifted to the Walters Art Museum by Laura Delano in 1977, prior to the admission of *S. gigas* onto Appendix II. Photo courtesy of the Walters Art Museum.

well as for exporters and importers; to eliminate the need for permits where possible; and to simplify the process of authorising trade where the risk of damage to wild populations is minimal. The Convention provides for seven types of exceptions, which are explained below.

Pre-Convention Specimens

This exception is especially relevant when dealing with older items such as antiques. If an item from a CITES-listed species was removed from the wild — or produced in captivity or propagated — before the species was included in the CITES Appendices, only a 'pre-Convention certificate' from the CITES Management Authority is needed to authorise the export. For example, the hawksbill turtle (*Eretmochelys imbricata*), which is the main source

of 'tortoiseshell', was included in CITES Appendix II at the time that the Convention came into force on 1 July 1975 (it's now in Appendix I). Thus, tortoiseshell jewellery made from shell obtained from the wild before that date is considered as pre-Convention. In principle, the pre-Convention certificate should be easy to obtain, as it only requires a proof of acquisition before the date of the CITES listing. Those dates can be found easily online in the 'Species+' database (speciesplus.net/species).

Personal and Household Effects

As a general rule, CITES does not require any documentation to authorise the international movement of items that are personal effects carried by the owner or forming part of a household move. This is the only complete

exemption provided under the Convention. Unfortunately, to complicate matters, there are a couple of exceptions to this exemption. For Appendix I species, someone who wants to import into their home country an item that was acquired outside that country must still obtain the usual permits or certificates. For Appendix II species, the permits and certificates are needed under the same circumstances, but only if the country of export requires the prior grant of an export permit under its own national laws.

Appendix I Species Captive-Bred or Artificially Propagated for Commercial Purposes

The text of the Convention says that specimens from Appendix I species that are bred in captivity or artificially propagated for commercial purposes



can be treated as Appendix II species. National CITES Management Authorities can request that breeding operations for animals listed in Appendix I be included in a register that is maintained by the CITES Secretariat; there is a similar register for plant nurseries. There are not currently any species on either register that are likely to be used in jewellery.

Other Specimens That Are Captive-Bred or Artificially Propagated

Of those species of flora and fauna that are used in jewellery, few are from animals bred in captivity or from plants that are artificially propagated. Examples of the former include the hawksbill turtle (*Eretmochelys imbricata*), which provides tortoiseshell, and several species of pearl-producing giant clam (of the family Tridacnidae). In cases where the breeding operation meets the criteria – for example, a closed operation that is not replenishing stock with wild-taken animals – the export requires only a certificate of captive-breeding rather than an export permit, and the National CITES Scientific Authority does not need to advise on the effect on the wild population.

Non-Commercial Loan, Donation or Exchange Between Registered Scientific Institutions

An important exception from the usual procedure for authorising international movement exists for registered scientific institutions, including museums. CITES provides that, if a specimen listed in the Appendices is moving between registered scientific institutions for non-commercial purposes, no permit or certificate is needed *so long as the specimen is accompanied by a label denoting approval by the National CITES Management Authority*. Currently seventy-five countries and territories have included institutions in the register, which is accessible on the CITES website (see [cites.org/eng/common/reg/e_si.html](https://www.cites.org/eng/common/reg/e_si.html)).

Travelling Exhibitions

The text of the Convention allows National CITES Authorities to waive the requirements for permits and certificates entirely for pre-Convention specimens or specimens produced by captive breeding



Certain rosewoods appear on Appendix II of CITES. This rosewood stand, part of the Decorative Arts and Design Collection of the Los Angeles County Museum of Art in California, also uses mother-of-pearl, ivory, ebony, holly wood and other exotic woods in its construction. The stand was created by Pietro Piffetti in Turin, Italy ca. 1740. Photo courtesy of the Los Angeles County Museum of Art.

or artificial propagation if the items are a.) part of a travelling exhibition and b.) registered with the CITES Management Authority. This might be of special interest to those who have collections of jewellery to be exhibited in different countries. The Parties to CITES have adopted the use of a 'travelling exhibition certificate', with an inventory attached, to be used at multiple border crossings.

Transit

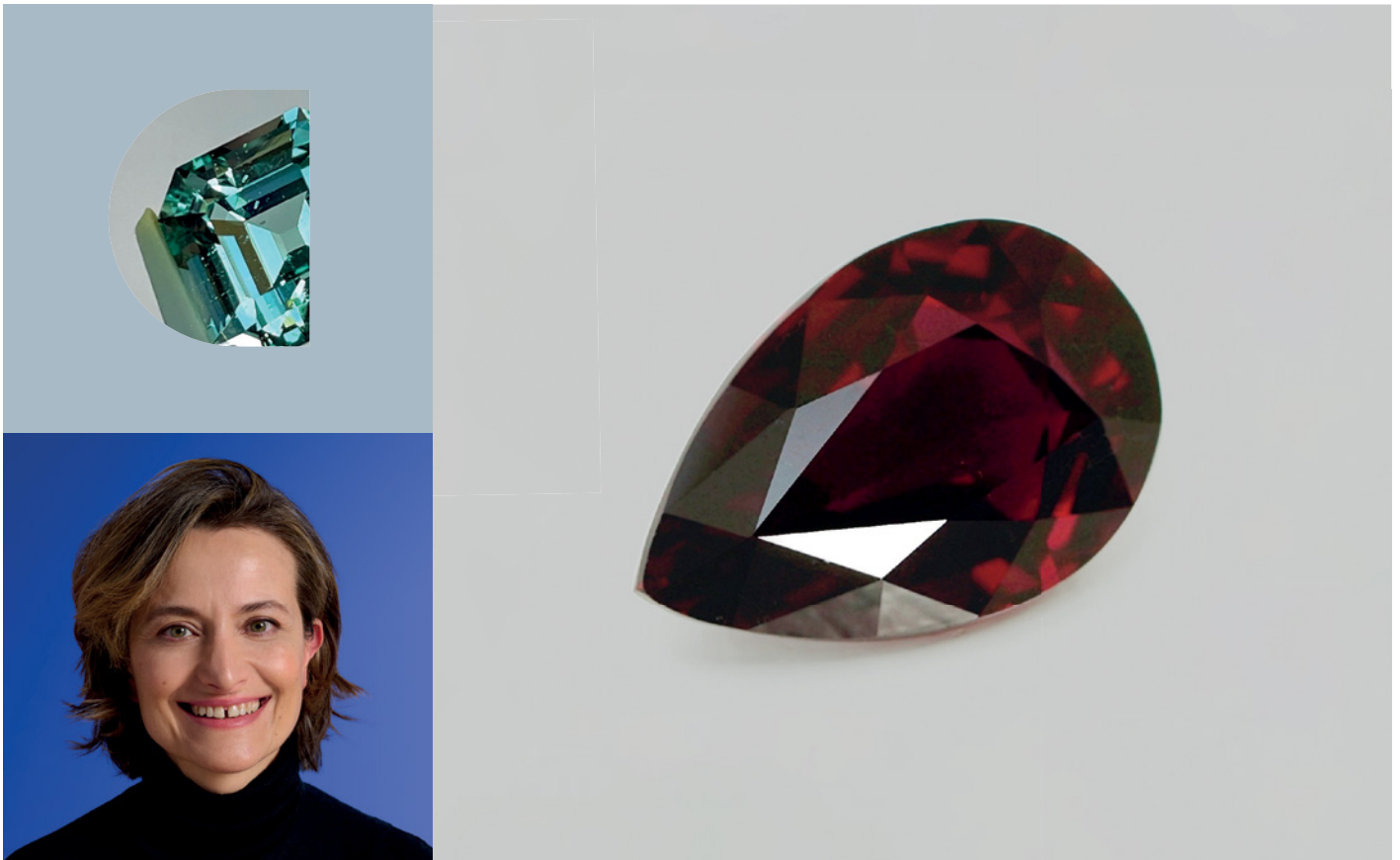
CITES does not require permits to be issued specifically for items that are passing through a country in transit to another specified location. It is expected that they will already have the required documents from the country of export (and import where applicable). Port authorities are permitted to ask for those documents to be presented while the item is in transit.

It is important to recall that many countries have adopted legislation that goes much further than CITES and that is stricter than the Convention requires.

These are the exceptions to the basic provisions for trade in CITES species, agreed to at the international level. But not all countries apply these exceptions, or they may apply them in their own way. It is important to recall, of course, that many countries have adopted legislation that goes much further than CITES and that is stricter than the Convention requires. Most notably, many require import permits for Appendix II species, or even for Appendix III species. Some require permits for the import of species that are not covered by CITES. It is, therefore, always prudent to check the national requirements before exporting any items that are derived from wild animals or plants (including wood). ■

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VICTOR TUZLUKOV'S FABERGÉ COLLECTION

Since 2020, gem cutter Victor Tuzlukov has created faceted gemstone eggs reminiscent of, and in homage to, the work of Russian jeweller Carl Fabergé. Here, he recounts the history of and motivation behind these works of art.

See the idea for the Fabergé collection as a manifestation of Higher Will. During the COVID-19 pandemic, when there was more time for creativity, the thought came to me to create the most faceted gemstone in the world. Of the diagrams that I came across, the one with the largest number of facets was about 1,000 — although I do not know if anyone actually made a gem according to this diagram. I decided to make a large reserve, just in case.

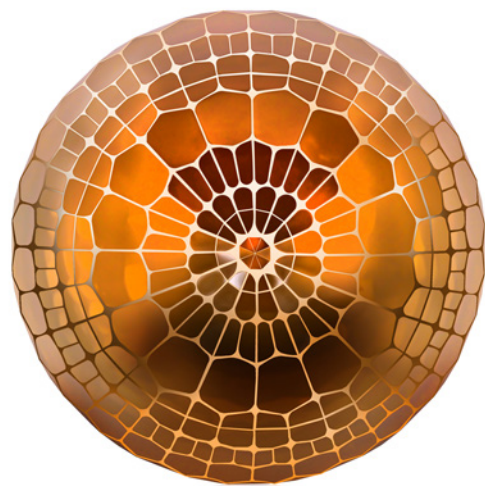
In a classic design — with a pavilion and a crown — the number of facets cannot be as large as in a sphere or an egg. The sphere design was not that interesting to me, so I chose the egg shape, especially since it was related to my concept of the finished stone. Having started the diagram, I got carried away and did not notice that the design



The completed scapolite, now known as Hiranya Garbha ('Golden Egg' in Sanskrit), holds the Guinness World Record for 'The Most Faceted Scapolite'. The final egg has 3,600 facets and weighs 216 carats. Photo by Dmitry Stolyarevich.



Gothic Rhapsody, an 817 ct citrine with more than 3,000 facets, replicates the stained-glass rose design of Paris' Notre Dame Cathedral. Photo by Sergey No.



for one 'hemisphere' of the gemstone exceeded 1,500 facets. Then (rather intuitively, and advantageously, as it turned out later) the idea arose to increase the number of faces on each hemisphere to 1,800, resulting in 3,600 facets for the entire stone. This was three-and-a-half times more than the maximum number of facets on one stone, at least as known to me at that time.

I chose natural scapolite from Tanzania to create this masterpiece, courtesy of my friend Steve Ulatowski from New Era Gems. But the diagram was so complex that the mission seemed utterly impossible. It was decided, before using natural rough, to make a testing stone, or 'touchstone', according to the same diagram from synthetic material. I used deep-pink cubic zirconia, which, as far as I know, gives the most beautiful dispersion effect. Work on the touchstone took two

months and was completed in October 2020. The final, cut gemstone turned out to be incredible. Such a small difference in the angles between neighbouring facets caused the highlights from the internal reflections to flow from facet to facet without interruption, like trickles of light shimmering in different colours. It became clear that the mission was possible. The limits of the possible in gem cutting had expanded again. Interestingly, the weight of this egg turned out to be 777 carats — a remarkably interesting and mystical number, which I considered a good sign.

Then it was time to work with natural material. The scapolite egg turned out to be better in shape than the cubic zirconia (which was more like a melon). The work took a lot of effort, over the course of about two months, as of these 3,600 facets had to be carried out through at least three stages: cut,



The Legend of the Stars-Wanderers was created from a Brazilian amethyst. The finished egg is 225 carats, with 1,491 facets. Photo by Laszlo Kupa.

I got carried away and did not notice that the design for one 'hemisphere' of the gemstone exceeded 1,500 facets.

pre-polish and polish. In January 2021, the natural scapolite egg was completed, weighing 216 ct. It turned out to be quite small for such a number of facets.

By that time, I already had experience with the Guinness World Records team. I had created the world's largest cut spodumene weighing 3,051 carats in May 2020 and received a world-record certificate, which for the first time in history included the name of the cutter. While the Guinness team categorically does not accept submissions of synthetic materials, the scapolite egg

was quite worthy of taking a place in the list of world records.

I first applied for 'The World's Most Faceted Gemstone'. But the Guinness team explained that different materials have different properties, and one cannot lump together, for example, diamond and quartz in the same category. The gem varieties require different technologies, different equipment and different skill levels. I was advised to be more specific when submitting for the record, calling my egg 'The Most Faceted Scapolite',

which is what I did. But, as far as I know, there are no other gems in the world with so many facets.

The faceted scapolite received its own name, *Hiranya Garbha*, or 'Golden Egg' in Sanskrit. In Hinduism, this term denoted the cradle of the worlds, the area from which Brahma emanates before the creation of the Universe. This name was due to the golden colour and a scattering of small crystal inclusions that flashed under a ray of light, like the embryos of future stellar systems. The synthetic egg was also named; the cubic zirconia touchstone is called Hour-Drop of Eternity, because the 3,600 facets are like the 3,600 seconds in an hour. Looking at the stone, we think that this is a lot, but an hour is just an insignificant drop in the vast ocean of eternity.

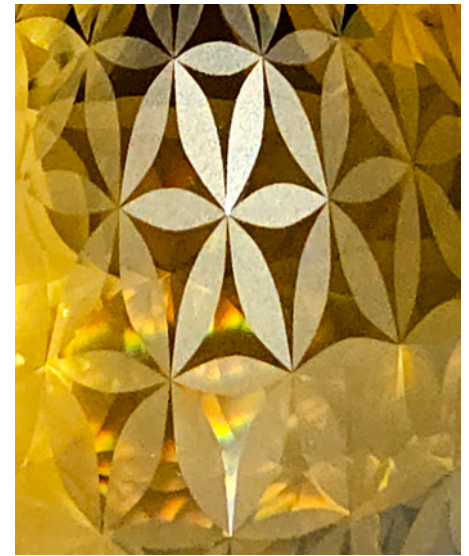
When I received the Guinness World Records certificate and looked at the date it was issued – January 2021, this year seemed connected to something... Of course! Exactly 175 years before, in 1846, the great Russian jeweller Peter Carl Fabergé was born. His most significant works are Easter eggs made from precious materials, which are true masterpieces of jewellery art. Curious, I took a closer look at the history of Fabergé and saw that he died in 1920 – and my first egg appeared exactly one hundred years later!

This was a sign favouring the continuity of tradition. On the one-hundredth anniversary of the great master's passing, the first egg of the future collection is created! In addition, this beginning was hugely impressive – Hour-Drop of Eternity won a jewellery contest held by the Gokhran (the Russian State Treasury, a department of the Ministry of Finance). It was exhibited at the State Historical Museum on the Red Square – in the country where Fabergé lived and worked and where his amazing works were released. This fact also seemed symbolic to me.

Over time, this collection of eggs began to grow, embodying the most diverse and daring ideas. The egg that followed *Hiranya Garbha* was made of golden citrine, had more than 2,500 facets and weighed about 426 ct. This piece is called Eiffel Tower, because the mesh of frosted edges surrounding the polished facets resembles the structure of the world-famous building →



In creating the Eiffel Tower egg, Victor Tuzlukov carved more than 2,500 facets into this citrine. The final piece weighs ~426 ct. Photo by Laszlo Kupa.



Victor Tuzlukov's newest addition to the Fabergé Collection, Triumph of Life, (left) is a 650 ct citrine, with 1,951 facets cut to create the geometric symbol known as the Flower of Life (detail on right). Photos by Victor Tuzlukov.

in Paris. This work is also interesting because the meet-points of these edges are also highlighted with matted facets, giving a rounding effect. In fact, this is an illusion. Each such 'rounding' contains several flat triangular facets, so small and so closely spaced that they merge into a rounded line.

The next egg from smoky quartz, called Gothic Rhapsody, has over 3,000 facets. It reproduces the stained glass rose design of Notre Dame Cathedral in Paris — when looking at the egg from above. But when viewed from the side, we see that this stained-glass window stretches out into a long pattern in the Gothic style, reminiscent of the columns and arches of the famous cathedral. The roundings of these arches was made using the same technique of trimming meeting points with small triangles, along with frosted edges.

Standing somewhat apart in this series is a carving made of dark amethyst. This egg, with 1,491 facets and weighing 225 ct, is called The Legend of the Stars–Wanderers. Its peculiarity is that for the first time, the technique of frosting not the edges between the facets, but only the ends, was used. Thus, at the meet-points of facets and due to the number of joining edges, six-pointed stars are formed, similar to those made by Carl Fabergé with enamel on gold. Even

rows of these stars cover the polished surface of the egg, forming circles reminiscent of dancing. This, to me, is a visual representation of the journey of the soul on its earthly path, which it passes from incarnation to incarnation, according to Indian legend.

My latest egg from the Fabergé collection, released in March 2024, is called Triumph of Life. I have covered

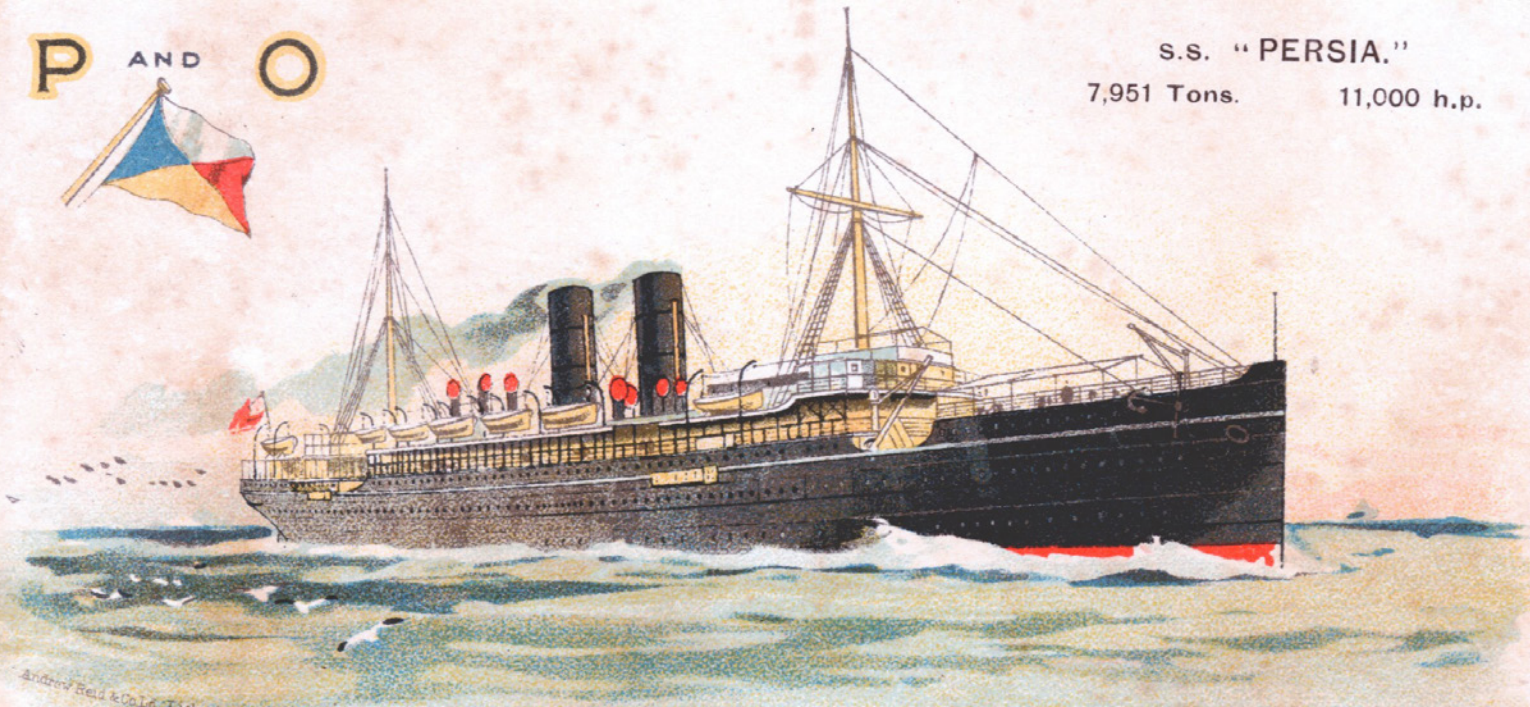


Hour-Drop of Eternity, the touchstone that started Victor Tuzlukov's Fabergé Collection, is a deep-pink cubic zirconia with 3,600 facets. It was previously featured in G&J under a different name (Fall 2021, pp. 8–9). Photo by Dmitry Stolyarevich.

the surface of this citrine with a horizontal pattern of frosted facets representing the Flower of Life — a symbol of sacred geometry that uses a pattern of overlapping and repeating circles of an equal radius in 2D space — with polished areas between them. Because of the pattern, the curved surface and frosted 'petals' have rounded borders. When looking at the vertical design of the egg, one sees rows of polished facets with frosted areas between them. These areas are each formed by seven small, frosted triangles, and the polished facets also look rounded. This is the first time I combined these two techniques in one stone.

Triumph of Life, which weighs 650 ct, has 1,951 facets. Each curved polished area in each Flower of Life was calculated as just one facet, although initially I cut seven facets for each, and then joined them together during the polishing stage. This makes this stone the most faceted quartz in the world, with over two times the facets of the current record holder (which has 978 facets).

Of course, this tradition will continue. I have created other designs that are simply waiting to be cut. I do not know yet how many will be included in this collection; as of now, it depends on my imagination and the time allotted to me. Stay tuned for new works! ■



Snapshot of Natural and Synthetic Rubies Salvaged From a 1915 Shipwreck

Stephen Kennedy FGA DGA BSc, alongside Mary Montagu-Scott and Susan Tomkins, provides a history and examination of natural and lab-grown rubies reclaimed from the SS *Persia* nine decades after it was torpedoed during WWI.

In 2008 the Hon. Mary Montagu Scott oversaw the opening of a permanent exhibition at Buckler's Hard Maritime Museum on the Beaulieu Estate in Hampshire. The exhibition is about the SS *Persia*, a passenger steamship owned by Peninsular & Oriental (P&O) Steam Navigation Company, which left London for India on 18 December 1915 (Wren, 2020). In addition to the 500+ people on the ship, within the strong room the *Persia* supposedly carried gold, silver, gemstones and other precious goods of the Maharajah Sir Jagatjit Singh of Kapurthala State. On

30 December, the ship was torpedoed by a German U-boat southeast of Crete, causing an explosion in the steam boiler that led the *Persia* to sink quickly. Only four lifeboats launched, and of the more than 500 people on board, 156 were rescued by the HMS *Mallow*; another eleven were found by the SS *Ning Chow* (Wren, 2020). Altogether, of the 519 people onboard (passengers and crew), there were 343 casualties due to the torpedoing and subsequent sinking of the SS *Persia*.

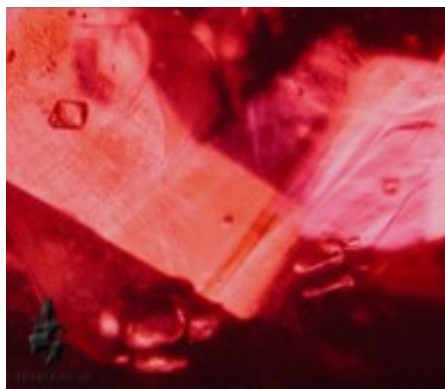
The Fife-based Deep Tek Ltd, run by Alec and Moya Crawford, located

the wreck off the coast of Crete in 2001, at a depth of 2800 metres. They began salvaging the contents of the strong room in 2003. They designed equipment, including a fibre-hoist rope with their patented winding drum and a heavily engineered grab that doubled as a cutting tool. News of the salvage exercise enhanced Deep Tek's commercial reputation, but an added motivation was the rumour that the strong room contained the goods belonging to the Maharajah of Kapurthala. While the Maharajah, his wife and most of his entourage did not



Top: An illustration of the SS *Persia*. The passenger ship, which was rumoured to be carrying the gold, silver, gemstones and other precious items of the Maharajah of Kapurthala — who ultimately did not sail as planned — was torpedoed by a German U-boat and sunk on 30 December 1915. © Buckler's Hard — Beaulieu Enterprises Ltd.

Left: The village of Buckler's Hard is part of the Beaulieu Estate, which has ties to the sinking of the SS *Persia*. The Maritime Museum now houses the gemstones retrieved from the wreck of the *Persia* in 2003 by Deep Tek Ltd. © Buckler's Hard — Beaulieu Enterprises Ltd.



Examination of the natural rubies with short-wave ultraviolet (SWUV) light indicated inert to weak fluorescence in some material, along with laths, feathers and poached eggs. These indicate that the rubies were produced from Thailand (then Siam). Some of the specimens that showed brighter fluorescence under SWUV hosted short needles, silk clouds, crystals and roiling typical for material of Burmese origin (centre), while pinker stones may be of Sri Lankan origin, based on their colour and the length and the more dispersed nature of the needle silk (right). Photomicrographs by Alan Hodgkinson and Brian Jackson.

join the ship at Marseille as planned, some members of his staff did travel on the *SS Persia*. This helped to perpetuate rumours that the items might have been onboard at the time of the sinking.

The strong room was situated five decks down, through 11 mm steel plate and 60 mm concrete. Many personal artefacts were recovered; on the last grab of their charter period the Crawfords discovered gemstones found within the black silt, which was initially sorted on deck. Over 300 natural and synthetic rubies, as well as forty-four moonstones, five amethysts and one

After a while Deep Tek Ltd wished to find a home for all the artefacts they had recovered, and the museum in Buckler's Hard held a personal connection to the *SS Persia*. John Douglas-Scott-Montagu, 2nd Baron Montagu of Beaulieu, had boarded the ship in Marseille with his private secretary, Eleanor Velasco Thornton (believed to be the inspiration for Sykes' Spirit of Ecstasy bonnet ornament for Rolls-Royce). Baron Montagu was returning to India after lobbying Parliament and the House of Lords to provide vehicles and airplanes for the Indian Army. Though Baron

From 1744 until 1814, the carcasses of wooden naval ships were built in Buckler's Hard, on launch-ways that sloped down into the Beaulieu River. They were then towed to Portsmouth to be fully fitted out. While these facilities were used in WWII, it was the tourism and recreational sailing of the nineteenth and twentieth centuries that revitalised the village. The personal connections of the Montagu family and the existing Museum of Maritime History, which opened in 1963, provided a logical destination for the artefacts and gemstones, and for the telling of the *SS Persia's* story.

Mr Kennedy visited the Museum on several occasions. His interest was particularly piqued by the synthetic rubies, but he was also curious about the origins of the natural rubies recovered. Mr Kennedy decided the story of the gemstones and their recovery would provide the basis for a presentation at the 37th International Gemmological Conference, held in October 2023 in Tokyo. It was then that Mary Montagu-Scott generously offered Mr Kennedy the chance to further examine the rubies recovered from the *SS Persia*. The aim of the examination had two aims: 1) to confirm the origin of the natural rubies, as there were a limited number of countries from which natural rubies were sourced at the time that the ship sailed, and 2) to see any information about the historical production of synthetic rubies could be ascertained.

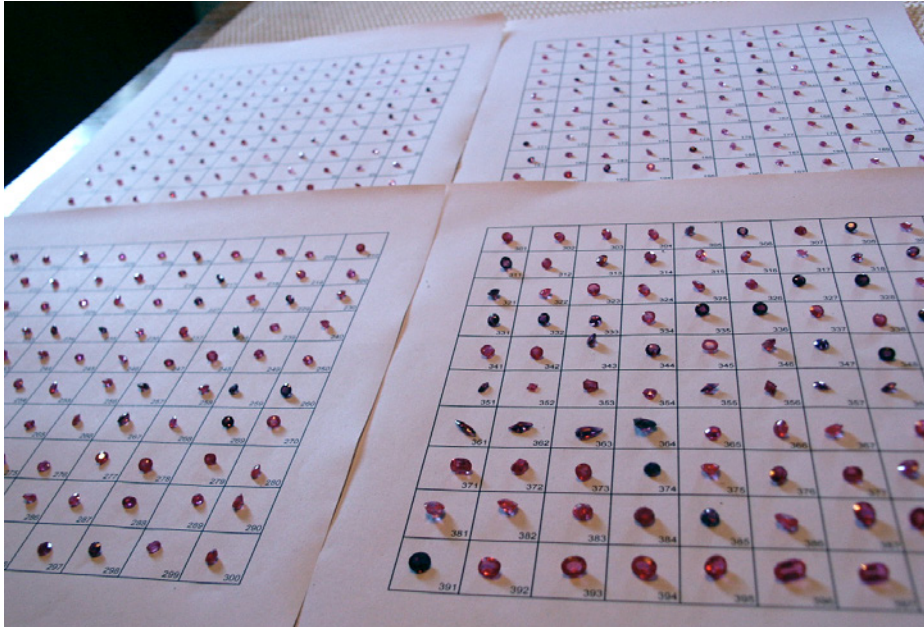
The specimens were tested by handheld spectroscopy, ultra-violet light and microscope. The screening

On 30 December 1915, the *SS Persia* was torpedoed by a German U-boat southeast of Crete, causing an explosion in the steam boiler... Of the 519 people onboard, there were 343 casualties due to the torpedoing and subsequent sinking of the *SS Persia*.

garnet were retrieved. No other sign of the Maharajah's 'treasure' was found. All the gemstones were tested by Alan Hodgkinson FGA DGA and Brian Jackson FGA DGA, then valued by Adrian Smith for Deep Tek to facilitate their submissions to the Receiver of Wreck, an official within the Maritime and Coastguard Agency who administers law dealing with wreck and salvage.

Montagu survived the sinking, in part due to wearing a Gieve inflatable waistcoat, Eleanor Thornton did not survive.

The Beaulieu Estate, centred around the village of Beaulieu, is situated to the west of Southampton on the south coast of England. On the estate is Palace House — home of the Montagu family — a Motor Museum and Buckler's Hard, a historical shipbuilding village.



The natural and synthetic rubies (set out for grading) were tested and graded by gemmologists Alan Hodgkinson FGA DGA and Brian Jackson FGA DGA, and then valued by Adrian Smith for the Receiver of Wrecks, Photo by Alan Hodgkinson and Brian Jackson.

under short-wave ultraviolet (SWUV) light allowed a quick separation of iron-rich rubies from iron-poor and chromium-rich natural and synthetic material. The rubies inert to SWUV were checked with a handheld spectroscope.

All the natural rubies were small in size (see table this page). Those inert under SWUV were likely to be of a magmatic origin. Some were quite clean, but many showed inclusions of laths (boehmite crystallisation along overlapping twin planes), feathers and poached eggs (feather/fingerprint surrounding crystals/negative crystals). These features align

with those expected in rubies from what was then Siam (modern-day Thailand), which at the time was the main source for these types of rubies. The natural rubies with brighter short-wave and long-wave UV fluorescence displayed needle silk clusters, crystals and roiling, typical of material with a Burmese origin. Some of the pinker stones could be interpreted as being of Sri Lankan origin, based on the pink colour and the more dispersed nature of the needle silk, and the longer length of the needles, in contrast to comparable Burmese inclusions. This superficial study seems

to confirm Thailand, Myanmar (Burma) and Sri Lanka as the origins of these gemstones, which correlates with those localities as known deposits for ruby and pink sapphire at that time.

In turning to the synthetic rubies, a consideration of the early history of ruby synthesis is needed. At the end of the nineteenth century, French chemist Auguste Victor Louis Verneuil worked at the Paris Natural History Museum under the directorship of Edmond Frémy (Evans, 2020). In 1877, Frémy and Charles Feil successfully created transparent synthetic corundum of appreciable size. Nine years after this breakthrough, lab-grown material usually referred to as 'Geneva rubies' appeared on the market. The Geneva rubies and Frémy's experiments were

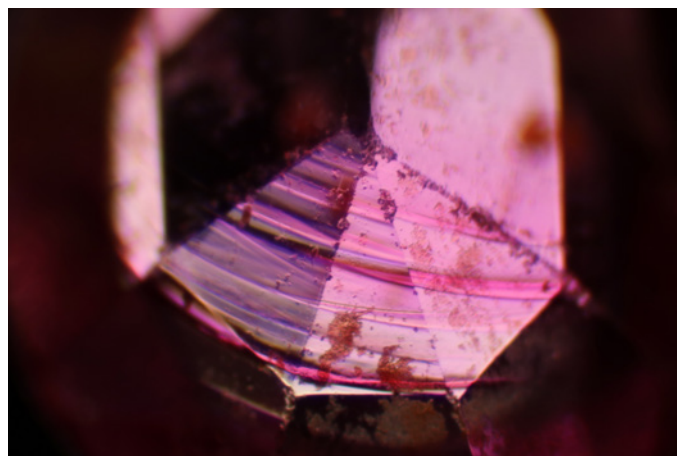
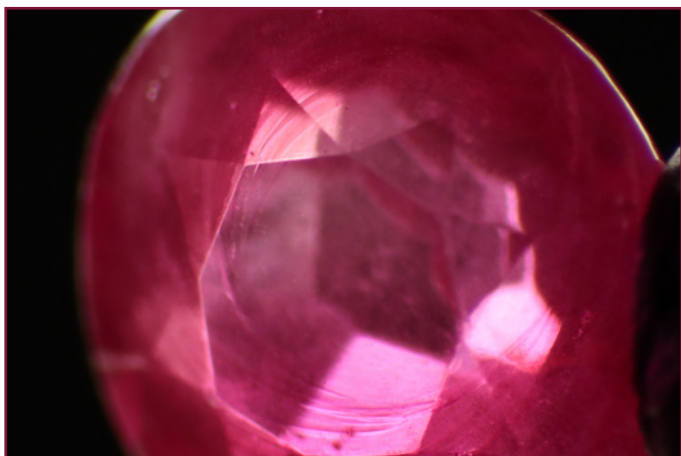
The recovery of the natural and synthetic rubies from the SS *Persia* provides their provenance, but only as the remains of a tragic episode of war.

WEIGHT RANGES OF NATURAL AND LAB-GROWN RUBIES RETRIEVED FROM THE SS PERSIA.

NATURAL RUBIES		LAB-GROWN RUBIES	
Weight Ranges (ct)	Number of Specimens (166 total)	Weight Ranges (ct)	Number of Specimens (162 total)
0.04–0.10	43	0.02–0.30	68
0.1–0.2	63	0.3–0.5	41
0.2–0.3	30	0.5–1.0	30
0.3–0.5	23	1–2	18
0.5–1.0	7	2–3	5

superseded in 1891 by Verneuil's approach of dropping powdered feed down the central tube of the blow pipe. It is stated that Verneuil could produce a boule with a 6-mm diameter in a period of two hours (Evans, 2020).

By 1910, Verneuil had turned his lab into a synthetic ruby production facility that operated thirty furnaces. By 1914, Armenian gemstone cutter and trader Hrand Djevahirdjian had started his own factory for 'Djeva rubies' in Monthey, Switzerland, having experimented with the synthesis process himself after watching the activity in Paris. With regard to these lab-grown specimens, it is likely that Djeva synthetic rubies would have needed more time for commercial quantities to enter the



The Verneuil lab-grown rubies showed circular growth patterns (left), indicating that they had been cut across the centre of their boules, as well as broad swathes of colour against the less-discernible tight curved lines (right). Photomicrographs by Stephen Kennedy.

trade, and hence Verneuil is the likeliest commercial manufacturer of the material salvaged from the *Persia*. Verneuil noted that there were fewer bubbles produced when the growth process was slower; more curved striations occurred when the growth was ramped up.

Mr Kennedy noticed that larger five synthetic rubies all showed bubble inclusions. Few of the smaller samples (0.02 – 0.50 ct) were inclusion free, but most showed the expected curved growth bands and bubbles. What was unusual in some of the smaller samples were the circular growth patterns contained within the stones, indicating that they had been cut across the centre of the flame-fusion boule. Early on, Verneuil discovered that splitting a boule lengthways released the tension that built up within its structure and forestalled random fracturing. It seems a reasonable assumption that the circular growth lines are an indication of smaller early boules, where splitting was not carried out.

The presence of cracks in some of the synthetics reflects that the issue of random fracturing was still being addressed at the time of production. The fact that the majority of the synthetics are small in size may indicate a prevailing need to recover as much material as possible from the limited production. Many of the synthetic rubies show curved swathes of growth structure rather than the more common, but less discernible, tightly formed growth lines resembling the grooves on a vinyl record that are commonly seen today. In the

absence of historical records, these synthetics seem to indicate early production is reflected in coarser growth and smaller sizes. Earlier finds, and in similar large numbers, would be of interest towards building a better picture.

We conclude on the question of ownership of the gemstones. It is not known to whom they belonged. The recovery of the natural and synthetic rubies from the SS *Persia* provides their provenance only as the remains of a tragic episode of war. Understandably, the rumours associated with the Maharajah of Kapurthala means he is a strong candidate for being the owner. Is it more likely that he would have had items of mounted jewellery amongst his belongings as well as loose gemstones? Any number of people may have been taking the gemstones for mounting to India. Of course, the gemstones may have simply been contained in an item of mail bound for India. While we may never answer the question of the

gemstones' ownership, the story of their retrieval and the information they reveal about rubies from the early twentieth century are well worth retelling.

The recovery of the natural and synthetic rubies from the SS *Persia* provides their provenance, but only as the remains of a tragic episode of war. The loss of life has been remembered firstly by a memorial at sea in 1966 and then another remembrance in 2016 at Buckler's Hard, which was commemorated with a sundial, wall mounted at the Maritime Museum. Another initiative was the manufacture of jewellery containing recovered synthetic rubies, creating lovely mementos for interested descendants of the travellers who survived or lost their lives on the SS *Persia*. The proceeds of these sales were to go to charities agreed upon by the Museum and Deep Tek. ■

A list of references is available upon written request to the Editor.



*The Buckler's Hard Museum carries a collection of jewellery inspired by the SS *Persia* using lab-grown rubies salvaged from the wreck. Shown here are examples of bespoke rings, in solid silver and 18K gold, set with synthetic rubies grown via the Verneuil method. © Buckler's Hard – Beaulieu Enterprises Ltd.*

Considering Peach Fuzz, Pantone's (Comforting, Cozy) Color of the Year

Nicole Ahline FGA reviews gem materials that can be found in the colour scheme of Peach Fuzz, Pantone's 2024 Color of the Year.

Welcome to 2024, a year with much to anticipate on a global scale. The Chinese calendar indicates that this is the Year of the Dragon; in this form of astrology, the year takes on the characteristics of the animal for which it is named, and dragons represent charisma, strength and good luck. Parts of North and South America will witness a solar eclipse in April. The 2024 Summer Olympics will be held in Paris, France. *Time Magazine* reported that over sixty countries will hold national elections, representing approximately 49% of Earth's population. On a smaller scale, the world will be bustling with local festivals, independence days, holidays and traditions. People will come together with their communities to celebrate, vote, explore and grow. In announcing their 2024 Color of the Year, the Pantone Color Institute (PCI) explained that Peach Fuzz is a visual representation of that sense of camaraderie. "Peach Fuzz is a



The Rose, a 52-ct sunstone carving by Darryl Alexander, displays three distinct areas of color: reddish orange, yellow and green. Carved from rough uncovered in the Sunstone Butte mine in Harney County, Oregon, the piece exhibits the schiller effect (also known as aventurescence), caused by reflective copper platelets. Carving courtesy of Darryl Alexander.



A padparadscha sapphire crystal (left) alongside a 9.050 ct faceted specimen, both from Sri Lanka. Photo by Robert Weldon/GIA.

heartfelt peach hue bringing a feeling of tenderness and communicating a message of caring and sharing, community and collaboration."

Colour psychology is the study of hues and their association to human behaviour, as the global team at PCI can attest. They have worked every year since 1999 to bring forth a colour (in some years, two colours) that they believe best embodies the needs and the expressions our ever-changing world. "We reflect back on the last twenty-five years of the Pantone Color of the Year programme grateful to provide an avenue where designers and colour enthusiasts all over the world can engage in a conversation



about colour, be inspired by colour and showcase their creativity within their communities," noted Laurie Pressman, vice president of the Pantone Color Institute. In turn, many industries use the Color of the Year to make decisions, with companies such as Motorola, Shades by Shane and Ruggable collaborating with Pantone on an annual basis to create products. This year is no exception. "With this year's Pantone Color of the Year, we see an increased focus on community and people across the world reframing how they want to live and evaluating what is important – that being the comfort of being close to those we love," Ms Pressman explained. In selecting this effervescent hue, PCI has chosen a colour "whose warm and welcoming embrace conveys a message of compassion and whose cozy sensibility brings people together and enriches the soul."

One community that not only welcomes, but flourishes, in the domain of colour is the gem and jewellery trade. With over 140 gemstone species currently used in jewellery, there are many options for anyone who seeks out the peaceful hue of Peach Fuzz. It was apparent, while walking the floors of the many shows of the 2024 Tucson

Gem and Mineral Showcase, that sellers and buyers alike were well informed of the Pantone Color of the Year. Two gemstones

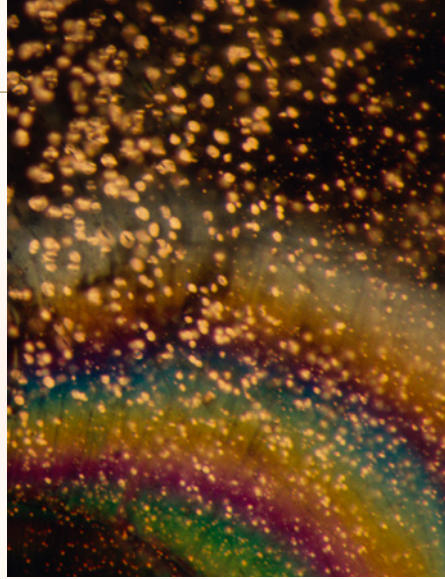


A banded agate from Chihuahua, Mexico, measuring 4.51 x 1.80 mm. Photo by Orasa Weldon.

that fall into this colour scheme, padparadscha sapphire and sunstone, had a particularly noteworthy presence.

Sapphire is a variety of the gemstone species corundum, occurring in all colours but red (which, when due to the presence of chromium, is categorised as ruby). One of the most-sought-after stones in this species is the padparadscha sapphire. Padparadscha sapphires, which derive their name from the Sinhalese word for the lotus flower, are pinkish orange to orangy-pink stones. According to the Laboratory Manual Harmonisation Committee (LHMC) – composed of seven international gemmological laboratories to ‘work towards the harmonisation of gemmological report language’ – padparadscha sapphire is defined as a variety of corundum from any geographical origin whose colour is a subtle mixture of pinkish orange to orangy pink with pastel tones and low-to-medium saturation when viewed in standard daylight. Sri Lanka has traditionally been the geographical origin of these renowned gems, but they are known from other localities, such as Vietnam and Madagascar.

Feldspar is one of the most common and diverse mineral groups; it includes many types of species that break down into even more varieties. One of these varieties that is regarded rather highly in this group, and just so happens to come in shades similar to Peach Fuzz, is sunstone. This gem material has brown, orange or yellow in its bodycolour. Phenomenal sunstone displays aventurescence, a glittery or iridescent effect caused by inclusions.



Above: Copper platelets and iridescent cleavage seen in an Oregon sunstone. Photomicrograph by John I. Koivula/GIA; field of view 0.576 mm.

Right: A light orange marquise-cut Oregon sunstone weighing 0.900 ct, courtesy of Dust Devil Mining Co. Photo by Orasa Weldon/GIA.

These inclusions are the cause and the appearance of the aventurescence. The inclusions tend to be platelets of copper, hematite or goethite. As light hits these inclusions, it reflects up to display the phenomenon. Goldstone is a manufactured product comprising glass with included small copper crystals; it is known in the trade as a sunstone imitation.

Sunstone that is mined in Oregon, on the West Coast of the United States, has increased in popularity over the past few years. The resulting uptick in production has allowed more stones to enter the market. These sunstones generally have decent transparency, and range in colours from pale yellow, pink, red and green. This locality has even produced stones that are bicolored and tricoloured (displaying

two or three colours when in the face-up position).

Other gems may also be found in similar shades to Peach Fuzz. Beryl comes in an assortment of colours, thanks to the presence of trace elements (in its pure form, beryl is colourless and is called goshenite). Morganite, the pink to orange-pink variety of beryl, gets its colour by the trace element manganese. Trade names for its colour include rose,



peach and salmon, making it an excellent choice for someone looking for Peach Fuzz to be captured in a gem material. Since rough morganite can be found in a plethora of sizes, saturations and transparencies, it is an excellent choice, not just for jewellery, but also for carvings.

Agate, the banded variety of chalcedony which is itself the cryptocrystalline gem species of quartz, also comes in a range of sizes and colours. The gemstone is semi-translucent to translucent with an eye-catching banded pattern, making it easy to identify. An aggregate material, agate is typically polished into a cabochon or tablet for use in jewellery. Agate is also commonly used in carvings and as an ornamental material. It can be found in slabs of various sizes as well as freestanding centrepieces.

Every new year, and even each new day, presents new opportunities to link ourselves to the world and the people around us. Through the use of colour, we are able to intensify our associations with specific moments and manifest even deeper connections within our lives. Pantone sees 2024 as the year that kindness needs to be contagious, a time where to embark on creating connections via community, a year where we are able to make fresh starts. Pantone's Peach Fuzz is a creative and fun way for gem and jewellery aficionados to ‘embrace the warmth’ that will be generated in 2024. ■



The pair of faceted morganites shown here weighs a total of 21.880 carats. Stones courtesy of Omi Gems.

Adornment and Splendour: Jewels of the Indian Courts

Reviewed by Claire Morgan

The al-Sabah Collection, privately owned by the Nasser Sabah al-Ahmad al-Sabah family of Kuwait, claims to be the first and one of the best assemblages of Islamic art in the world. The breadth, depth and quality of the collection, dating over 6,000 years, are virtually unparalleled as a collection of Indian royal gems, jewels and luxury objects. *Adornment and Splendour: Jewels of the Indian Courts*, is centred around items dating from the sixteenth and seventeenth centuries. This period is not just the creative high point of the Mughal Empire during the reigns of Jahangir — himself an avid jewellery wearer and collector — and his son, known gem connoisseur Shah Jahan. It also extends beyond the artefacts of

the Mughals to include items from the Deccan Sultanates, contemporaneous royal courts in central India that also flourished artistically until they were conquered by the Mughals at the end of the seventeenth century.

Sheikh Nasser and Sheikha Husna al-Sabah began collecting Islamic art objects in the 1970s. In 1983, they moved their collection to the Kuwait National Museum, where it remained on display until the Iraqi invasion of 1990. Much of the collection travelled to the British Museum in 2001 for a groundbreaking exhibition, *Treasury of the World: the Jewelled Arts of India in the Age of the Mughals*. The following year the exhibition moved to New York City's Metropolitan Museum of Art, as well as other major museums



By Salam Kaoukji, hardcover, 413 pp., illus., publ. by Thames & Hudson, Ltd., London, UK, £40.00. Photo courtesy of Thames & Hudson.



This jewelled and enamelled box is from India's Deccan Sultanate or Mughal dominion period, probably the mid-seventeenth century. It is fabricated from gold, champlevé enamelled and set in the Kundan technique with rubies, emeralds and diamonds.

“The pieces from this period... all had a role in transforming the human body into a walking, gem-bedecked sculpture.”

across the United States. A catalogue by the same name accompanied the exhibition. *Treasury of the World* included some of the best research on Mughal gems and jewels available at the time, and it has been widely cited.

While the original foreword for *Treasury of the World*, written by Sheikh Nasser al-Sabah — who passed away in 2020 — is included in this new publication, *Adornment and Splendour*, authored by Salam Kaoukji, current curator and manager of the collection, expands on the original exhibition catalogue by including over 300 new objects in its pages. This volume also features

more images, and those included are of higher quality; additionally, Kaoukji has elaborated on the descriptions accompanying the items. Readers familiar with the first publication may recognise some changes. Thirteen chapters have been condensed into six, and analysis of bejewelled arms and accoutrements has been moved to a separate volume. The provenance of a few objects has been reclassified, and groupings of the items has been somewhat reorganised. Even so, much will be familiar to those who have perused *Treasury of the World*.

What, then, is original to this version? Large, captivating images

of the collection's items are the main reason for acquiring this volume for one's library. A team of specially commissioned photographers have succeeded in capturing these strikingly beautiful, colourful pieces. Such very high-quality images, arranged as groups of multiple images of single objects shown from several perspectives, are seen in auction catalogues, but have only recently appeared in scholarly art books and art collection catalogues. Several gems and jewels are photographed from different angles, showing inscriptions and gem settings in close-up alongside full, and often full-page, images of the object. This matters because the book is not just displaying each item as a finished piece of art, it is also demonstrating the artistry and technical ability of the creator.

Kaoukji states, "Although varied in size, material and function, the pieces from this period can nonetheless be seen to relate to one another in the similarity of their techniques and artistic details. All had a role in transforming the human body into a walking, gem-bedecked sculpture." The images presented indicate just how magnificent these bejewelled bodies appeared.

Gemmologists will be fascinated by the first two chapters, which follow Sheikh Nasser's foreword and a brief introduction to the Islamic dynasties of the Indian subcontinent. The first covers inscribed royal gemstones, including spinels and emeralds, as well as three large diamonds. Readers are provided with a clear view not only of the inscriptions and relief carvings, but also of inclusions, abrasions and



A finger ring from India's Mughal dominions, probably first half of the seventeenth century. The ring is fabricated from gold and set in the kundan technique with rubies, emeralds, chrysoberyl cat's eyes, diamonds and a sapphire.



drill-holes. We learn that The al-Sabah collection of inscribed royal spinels is second only to those held in the National Jewels Treasury in Iran. Together, the two collections contain over seventy-five percent of the world's remaining inscribed spinels. Scholars will appreciate captions alongside descriptions of the styles of calligraphy used for the inscriptions on stones fashioned by diamond styluses. Examples of *thuluth*, *tamgha* and *nasta'liq* scripts are presented on the spinels, inscribing names and phrases on the stones. For example, "Ulugh Beg bn Shah Rukh Bahadur bn Amir Timur Gurgan," inscribed on the Timur Ruby in thuluth script, denotes the name of Timurid sultan Ulugh Beg alongside that of his father and grandfather, respectively.

Several pages are devoted to the Timur Ruby, perhaps the most famous artefact in the collection, that includes the inscription above, along with five others. Kaoukji explains it was neither owned by Timur (the engraving above was the first, added by the aforementioned Ulugh Beg, with the others added by subsequent rulers), nor is it a ruby. Rather, it is a pinkish-red 249.3 carat 'balas ruby', or spinel. →

The 249.3 ct engraved pinkish-red spinel known as the Timur Ruby.



Drawing on earlier research by art historians Susan Stronge and Manuel Keene, Kaoukji clarifies the provenance of the stone, differentiating it from a similar spinel in the British Royal Collection that was previously (and erroneously) labelled the 'Timur Ruby'.

The second chapter is devoted to 'Masterpieces of the Lapidary Arts', including emeralds with fine-relief carving. Inscribed and exquisitely carved emeralds feature prominently in this collection, thanks

to the Deccan courts. Kaoukji explains that the more naturalistic design on one stone suggests it derives from the Deccan era, while she associates other, more stylised floral and foliate designs with the Mughals. Although less numerous than the spinels, the emeralds are striking and among the most widely published of their kind. Kaoukji speculates that more emeralds were lost over the centuries due to being recut because of their greater market value. Additionally,

The Deccan Sultanate-era pendant shown here probably dates to the mid-seventeenth century. Fabricated from gold and set in the kundan technique with diamonds, rubies and emeralds, with an emerald pendant bead.

some that were previously part of The al-Sabah Collection were lost during the 1990 Iraqi invasion. Fortunately, transparencies of the pieces remain and are gorgeously presented here.

Three large diamonds with large facets are featured in a section of the second chapter. Two are amulets, including the 56.7 ct Shah Jahan diamond pendant, so-called because it appears in a miniature of the king holding a turban ornament containing the large stone. A 24.8 ct pendeloque diamond — rarely found in the modern trade — is also beautifully displayed and described.

The collection's chief strength is in its bejewelled pendants, which are truly exceptional and unsurpassed.



A cup and tray carved from pale greyish-green nephrite jade, inlaid with gold and set with rubies, is probably the Deccan Sultanates in the mid-seventeenth century. The two pieces are seemingly carved from the same material.

The middle sections of the catalogue are devoted to gem settings and enamel work. *Treasury of the World* provided a detailed description of the uniquely Indian kundan setting that is prevalent in royal Mughal and Deccan jewellery of the sixteenth and seventeenth centuries and remains a mainstay of traditional Indian jewellery worn in weddings to this day. The kundan setting also appears frequently in *Adornment and Splendour*. What is new here is a brief mention and close-ups of what Kaoukji calls the 'talab' setting (also known as 'talpe') and describes as a kind of channel setting that uses irregularly shaped stones rather like pieces in a jigsaw puzzle. This enables the jeweller to fashion large areas of colour with several stones placed securely alongside each other, surrounded by a kundan frame.



An example may be seen on the emerald legs of the figure of a seventeenth-century Mughal *bazuband*. I must admit I have never come across this term previously, although I have seen stones set in this way in many gem-encrusted pieces. The *ajour*, or backless, setting resembling stained-glass windows, is also noted but given less attention.

Enamel work, often seen on the reverse of royal Mughal and Deccan jewellery, is amply displayed throughout the book. Kaoukji explains that Europeans introduced to India, where it was perfected.

The al-Sabah Collection encompasses many beautiful types of jewellery, including rings, bracelets, necklaces, toe rings, anklets, earrings, armbands, hair ornaments and a turban ornament. It also contains jewellery components, such as gem-encrusted

These Mughal-era pair of earplugs from the first half of the seventeenth century are fabricated from gold, champlevé enamelled and strung with pearls.

jewellery fittings, beads and a cameo pendant. In fact, the collection's chief strength is in its bejewelled pendants, which are truly exceptional and unsurpassed; a large section of this book is devoted to these pieces. Several take floral forms, showing how irregularly cut diamonds and rubies may be artfully disguised when set in a gold frame using the kundan technique. Others resemble medallions decorated with inlaid flowers and birds, again set like pieces in a puzzle, while a third



Different views of an armband (bazuband) from India, probably the Mughal dominions, thought to date from the first half of the seventeenth century. Fabricated from gold, engraved and set in the kundan technique with rubies, emeralds, diamonds and yellow sapphires. The photo on the right shows a close-up of the armband's detail.

type include gem-encrusted birds of prey, complete with golden talons and ruby beaks. Kaoukji disputes previous research that claimed cameos were introduced by Europeans during Shah Jahan's reign, citing a travelogue that indicates they were already in India by the fifteenth century.

Finally, one particular decorative motif caught my attention: imbrication, a pattern of overlapping leaves or tiles, is mentioned in several places throughout the book. It can be seen on some of the carved beads, a gem-encrusted bottle, an enamelled platter, and some *objets d'arte*, sculpted from nephrite jade. The motif mimics the patterns of nature in the beautiful, bejewelled form for which the Mughals and the Deccan courts are famous.

Adornment and Splendour is a celebration of the masterful craftsmanship among lapidaries, jewellers, enamellers and sculptors of the Deccan and Mughal periods. In its descriptions and analysis, but most importantly its display of the artistry of India's royal courts captured in its many images and illustrations, this volume will be appreciated by gemmologists, jewellers, and jewellery historians alike. ■

All photographs © The al-Sabah Collection unless otherwise indicated.

Designing With An Eye for Nature's Handiwork

Our cover photo displays the Elentari necklace by Kendra Grace, who looked back on thirty years of gem curation and jewellery creation.

For many years, my husband and partner, Brian Cook, and I have indulged in the pursuit of exquisite gem materials and quality crystals corners of the globe. We have sourced gemstones from around the world, including Amazonian emerald, tanzanite, Nevada turquoise, black jade, multiple types of beryl, tourmaline and maw-sit-sit. We are well known for our use of Brazilian quartz, especially the Bahia golden rutilated variety. Curating these treasures has been a delightful journey. Each of our pieces is imbued with a story of its own.

Brian, who co-founded Nature's Geometry in 1989, creates rings comprising 24K forged gold and exotic gemstones and gem crystals in their raw and crystalline forms. This design motif is a signature of Nature's



All beads in this GemCharm Bracelet were hand-cut in the Cooks' lapidary studio, and were sourced from Brazil except for the 1.2 ct maw-sit-sit, which came from Myanmar (Burma) many years ago. A 4.5 ct stream-tumbled colourless topaz Imperial, 17.0 tcw plum garnet, 6.0 tcw imperial topaz, 7.0 tcw heliodor beryl and 16.0 tcw Bahia rutilated quartz. The bee is 10K gold and plated with 22K gold, while the logo is 18K gold.

of perfumes crafted from essential oils with the elegance of gemstones, thereby creating a precious synergy of nature's finest elements. I designed earrings and rings using gems and 18K gold. When clients expressed concerns about the potential for the essential oils to stain their clothing, I made earrings with the well for the oil positioned upside down. This design leveraged capillary action to ensure a controlled release of fragrance. I coined the term 'time-release evaporation' to describe the gradual, controlled emanation of perfume from our jewellery.

Recently, a spark of inspiration ignited. It dawned on me that these gems, once scattered and admired individually could be woven together to form something enchanting. Thus the idea for my elegant GemCharm bracelets emerged. An unseen force seemed to draw people to these bracelets, confirming a popular fascination with the simple beauty of Nature's Geometry. ■

Geometry creations. Brian imagines the concept of these rings as originating somewhere in Middle Earth, crafting nature's numinous charms and tools with an Elven touch. Our partner goldsmith, Paula Bailey, shares these tendencies. The gemstones selected for the rings reflect an aesthetic and complementary energy. For example, we have created many pieces that combine Paraiba tourmalines from Brazil's famous Batalha mine with orange spessartine garnet that we mined from a syngenetic pegmatite just 90 km from the Batalha mine. These gemstones are not only related through their complementary colours; they are also connected via their formation at the same time and place from the same thermo-tectonic processes.

In 1992, I established AromaJewels. My vision was to merge the world



The AromaJewels earrings shown here, made with 22 tcw Brazilian amethyst and 18K gold, illustrates the capillary action of the fragrance held upside down without spilling.

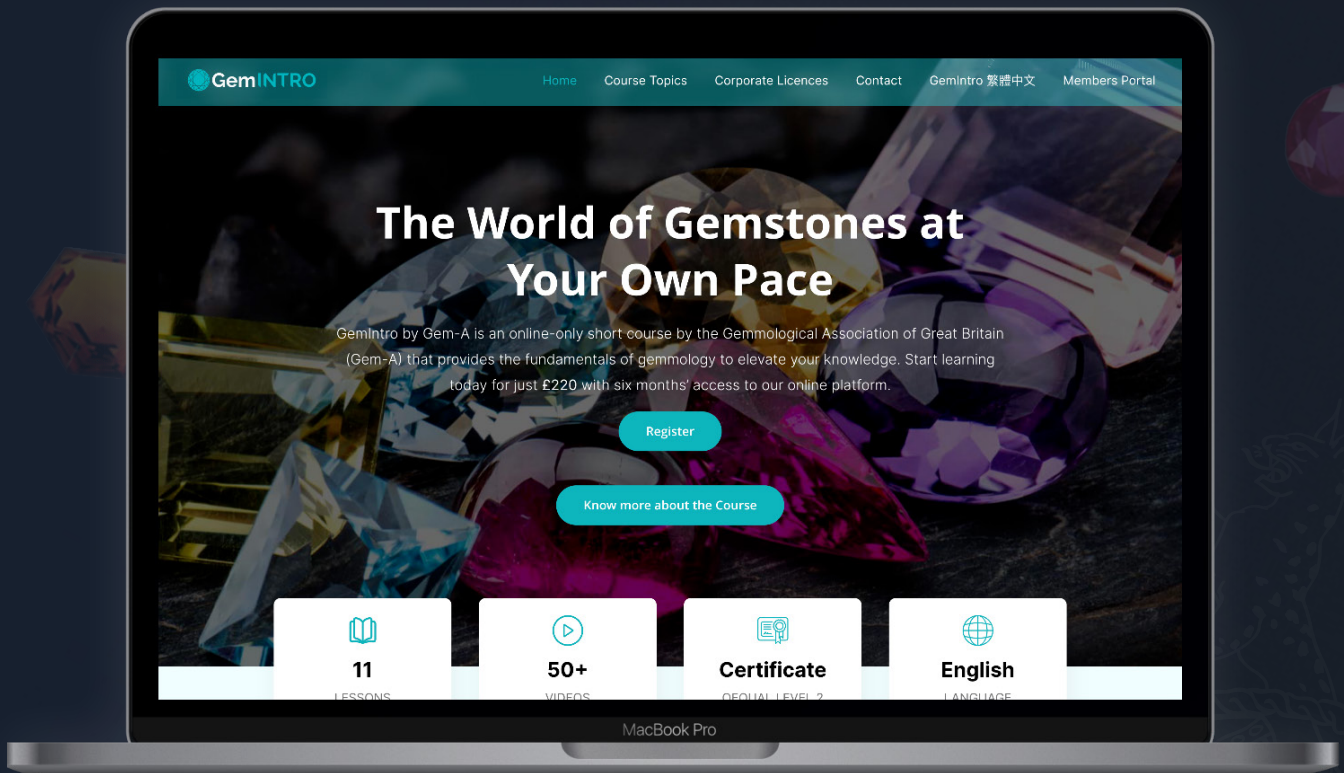
From left: A 1.7 ct ruby crystal from Madagascar, showing trigonal termination, flanked by 1.8 tcw stream-worn cognac diamond; a 6.7 ct spessartine garnet beside 0.8 tcw Paraiba tourmaline and a 0.4 ct Navajo garnet; a 3.1 ct Paraiba tourmaline surrounded by 2.4 tcw spessartine garnet; and a 1.2 ct spessartine garnet with a 13.0 ct etched aquamarine. Photo by Robert Weldon.



Photos by Quendi Cook Benitez unless otherwise noted.



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