




CIBJO
CONGRESS
2023

SPECIAL REPORT
DIAMOND COMMISSION



While geopolitics and consumer sentiment are agents of change, industry standards remain grounded in scientific discipline

By Udi Sheintal, President
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In CIBJO, we often refer to our Blue Book series of industry standards and nomenclature as living documents, which on a consistent and continual basis are subject to review. When necessary, they are amended

and updated. Our goal always has been that, at any given time, the Blue Books best reflect the body of knowledge and understanding that exists in the industry, and because those are dynamic variables, so may be the content in the documents.

But our approach to change is instinctively conservative, with proposed amendments



Udi Sheintal, President of the CIBJO Diamond Commission.

carefully scrutinised and debated, and then subject to multiple votes, before they eventually are approved and published in the latest edition of a Blue Book. This readiness to evolve, but in a most measured and deliberate way, is what over the years has provided the CIBJO standards with their international authority and respect.

Extraneous and external factors, which we are subject to but often have very little influence over, are often the catalysts for change. These may be technological developments, which took place outside the industry, but provide solutions and additional knowledge that previously did not exist. They may be market driven, as was the case with the mass introduction of laboratory-grown diamonds, which required that we refine and reconsider both testing and nomenclature, to ensure that buyers of diamonds understand exactly what they are purchasing. They may be consumer-driven, reflecting our customers' current sensibilities, particularly in terms of supply chain integrity and sustainability. They may be instigated by international events, such

as the civil wars in Africa in the late 1990s, which led to the conflict diamond crisis, and more recently the war in Ukraine, which has resulted in countries imposing sanction on the Russian diamond sector.

CIBJO is not a political body, although obviously we serve an industry whose members live and operate in a plethora of political environments. Our decisions are made on the basis of most accurate and verifiable knowledge that we are able to gather, and we use this to protect the interest of consumers, whom we fervently believe are entitled to absolute and honest transparency. The decision to purchase a diamond, or any other gemstone or item of jewellery, is theirs alone. What we seek to make possible is that, when they make it, they have all the information they require.

Origin determination still an elusive goal

For much of recent history, the origin of a diamond – meaning the geographic location at which a rough diamond was mined – was



Jean-Pierre Chalain, Vice President of the CIBJO Diamond Commission.



Mining rough diamonds at the Karowe mine in Botswana. Photo courtesy of Lucara Diamond Corp.

not considered consequential from a business perspective. The diamond industry traditionally sorted and valued its diamonds according to the 4Cs. Even the Kimberley Process Certification Scheme, the system design to eliminate conflict diamonds from the distribution chain, does not require the source of each diamond to be disclosed, but rather ensure the absence of goods from non-desirable locations.

This sense of impartiality when it comes to source is in sharp contrast to the coloured gemstone sector for example, where specific geographic origins can translate into massive premiums being placed on a stone – with Kashmir sapphires being the most notable example.

But origin is now becoming a factor in the diamond industry. This not because of any understanding that diamonds from one location



Sorting rough diamonds at the Karowe mine in Botswana. Photo courtesy of Lucara Diamond Corp.

may be any more or less desirable physically than diamonds from another location, but rather because certain regions are considered to pose lower ethical risk than other regions. That itself is a debatable hypothesis, especially if diamonds extracted by artisanal miners are considered higher risk. For if those miners are automatically excluded from the supply chain, an often-poverty-stricken sector would be cut off from their main source of income – hardly an ethical outcome.

With rising consumer demand for the geographic source of diamonds to be disclosed, an increasing number of diamond producers and

can accurately identify from which region of the world every individual diamond come from. It said it is able to do so by analysing a diamond's morphology — or in other words its chemical composition and optical properties.

As a matter of principle, the CIBJO Diamond Commission welcomes all efforts to advance research and development in the industry, but insists that any claim be supported by verifiable evidence and that results be repeatable. We would be happy to welcome the developer of any new origin-detecting device at the upcoming CIBJO Congress in Jaipur, India, and invite him



Photo by Edgar Soto on Unplash.

jewellery retailers have introduced initiatives that track the diamond from the mine to the jewellery store. Interest in origin has been further heightened by the Ukraine War, and the expectation that the G7 countries – which include the United States, Canada, Great Britain, Japan and EU members France, Germany and Italy – will impose sanctions on all goods sourced in Russia, even if they were substantially processed in another country.

In such an environment, the focus has shifted to the means of identifying a diamond's exact origin, and the question whether technology provides a solution. One company achieved a good amount of publicity earlier this year when it announced that it has developed a device that

or her to transparently demonstrate the system.

What we can only state with confidence is what is known at present. In a May 2023 article, Evan M. Smith, a senior research scientist at the Gemological Institute of America, provided a current overview of diamond origin determination.

Typically, he notes, gemstone origin is attempted by examining trace element in a stone that are specific to the geographic location from which it was extracted. The concentrations of many trace elements in gemstones such as rubies, sapphires, and emeralds are more than one part per million (ppm) by weight, often reaching tens to hundreds of ppm, he writes. But with diamonds, which are made up of closely-

packed and strongly-bonded carbon atoms, trace element concentrations are considerably lower, in the range of parts per billion or parts per trillion.

Even then, notes Dr. Smith, there are specialized techniques that are able to detect minute trace elements, but such tests are slow to run, can cost thousands of dollars per stone, and sometimes require the destruction of millimetres of the diamond's surface. They cannot viably be adopted when millions of rough diamonds need to be tested.

Furthermore, he notes, most mined diamonds were formed 150 kilometres to 200 kilometres below Earth's surface, within mantle rocks called peridotite and eclogite. The same kinds of mineral inclusions are encountered in most diamond deposits worldwide, reflecting similar diamond growth. Coloured gemstones, in contrast, form at lower depths in the crust of the earth, under more variable geological conditions, meaning that the chances are greater that they will exhibit clear and systematic differences between different deposits, Dr. Smith writes.

He concludes his article with the following words: "In summary, there has been no scientifically

robust study by any method demonstrating unique and measurable characteristics that would allow for independent provenance determination of a random individual diamond. Unfortunately, the ideal goal of determining origin independently through a lab analysis is not on the horizon. For now and the foreseeable future, the only definitive method to establish diamond origin depends on retaining country-of-origin and/or mine-of-origin information from the time of mining."

ISO Standard for quality control of small diamonds

In September 2020, the International Organisation for Standardisation (ISO) published International Standard 24016, specifying the terminology, classification and the methods to be used for the grading and description of single unmounted polished diamonds over 0.25 carats in weight.

The initiative to develop the new standard had come at the request of Schweizerische Normen-Vereinigung (SNV), the Swiss Association for Standardisation, and CIBJO had granted ISO permission to use PAS 1048, which is based on the CIBJO Diamond Blue Book and relates to



Photo by Sairam Rasa on Pexels



Photo by Sabrianna on Unplash.

terminology and classification of grading polished diamonds that were developed by CIBJO with the support of the German Standards Institute (DIN).

Jean-Pierre Chalain, Vice President of the CIBJO's Diamond Commission, was designated as the convener of TC174 Working Group 2, to oversee the project.

In the 2021 Special Report of the Diamond Commission, we revealed that, following the publication of International Standard 24016, work had begun on the prospective International Standard 6893, which would focus on quality control of diamonds of 0.25 carats and less. Once more, CIBJO's Diamond Commission Vice President Chalain was appointed the convener of the working group overseeing the project.

Already in 2015, the Federation of the Swiss Watch Industry FH had voiced its need for an

ISO standard for harmonizing the quality control of small diamonds. Switzerland currently applies almost 26,000 standards, of which only 1,000 are strictly Swiss. By way of comparison, there are 24,610 ISO standards and just over 20,000 European standards.

At the time, Jean Pierre argued that, because the nomenclature and testing methods for small diamonds derivate are derived from those large diamonds, it would make more sense to start with the ISO standard for goods more than 0.25 carats.

The still-to-be-approved Standard 6893 will deviate from International Standard 24016 in that it will describe under which conditions the quality control of batches of small diamonds can be performed. It will provide recommendations using a statistical tool, known as Acceptable Quality Level, which will enable laboratories to perform the quality control of large quantities of small diamonds – including parcels of 500, 2,000 and even more than 50,000 diamonds – based on random samplings.

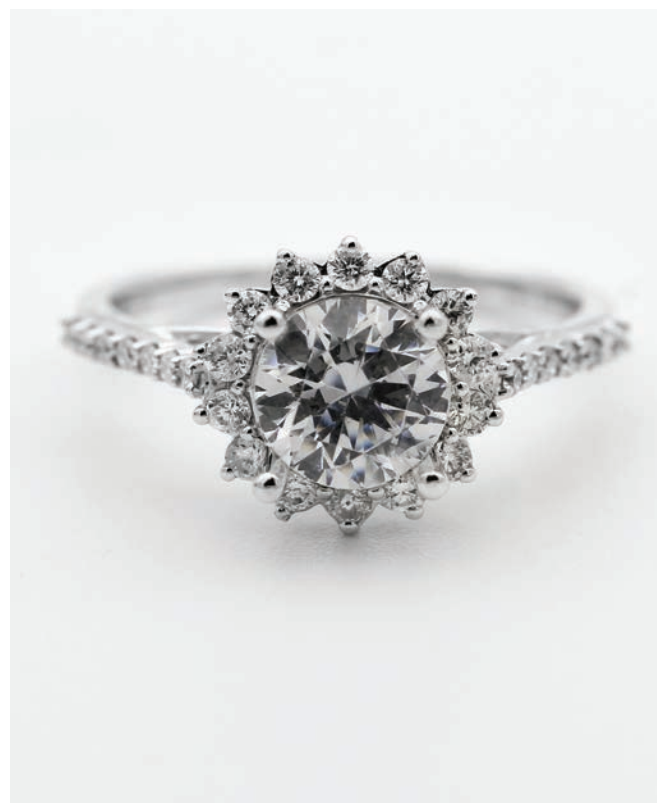


Photo by Sabrianna on Unplash.



Photo by Sabrianna on Unplash.

Attempting to defuse land mines

Earlier this year, both the President and the Vice President of the Diamond Commission were called on to review the Diamond Educational Module of the CIBJO Academy, which is the newly established body responsible for the preparation and delivery of educational programmes and materials, for both jewellery professionals and the consuming public, about standards, operating principles and terminology developed within the confederation's various commissions and expert committees.

It was an exercise that made us think very hard about a few issues, including one raised by Article 4.1.2.2 of the Diamond Blue Book, which deals with the total weight of mounted jewellery pieces. It reads as follows:

The total weight (5.70) of diamonds (5.23), other gemstones (5.36) and artificial products (5.3) (including synthetic diamonds (5.68) and/or diamond simulants) (5.45) contained in the same article can only be stated providing it is accompanied, with equal emphasis and conspicuousness, by the total separate weight(s) of each different material. An unacceptable example: gemstone, diamond and synthetic diamond cluster ring, total weight 1.00 ct.

After reading the paragraph multiple times, it dawned on us that the purpose of the Blue Book nomenclature is mainly to enhance consumer

confidence in natural diamonds, by providing warning signs to retailers, whose level of knowledge of diamonds generally exceeds that of their customers.

Buying a cluster ring with several types of gem materials can be a land mine that could explode in the face of the consumer, who usually is the party at a disadvantage when buying diamonds from a retailer. Article 4.1.2.2 aims to defuse that mine – not by forbidding the sale of such items, but by the requiring that the sales invoice states with equal emphasis and conspicuousness the total separate weight(s) of each different material.

But mentioning each material type is not the only land mine that needs to be defused. Imagine that the cluster ring is mounted with 2.00 carats of gemstones—a 1.00-carat natural diamond and a 1.00-carat laboratory-grown diamond, both of which are round white stones. Will the consumer feel safer if it is stated on the invoice that the cluster ring has 1.00 carat of natural diamond and 1.00 carat of laboratory-grown diamond, but does not specify which stone is natural and which stone is synthetic?

Should CIBJO intervene in the freedom of art and dictate that cluster rings like that cannot be made and sold to consumers unless they can visually identify which stone is natural and which stone is synthetic? Should CIBJO only

allow cluster rings of multiple gemstones on the condition that the consumer can distinguish between them by size, colour or shape?

How far should CIBJO go in order to enhance consumer confidence in the jewellery trade? Is the average consumer able to discern the degree to which he or she is being provided full disclosure, or we should presume ignorance, and demand that all simple measures be taken to ensure that there are no hidden land mines?

This is a not question limited to jewellery, but to other consumer products as well.

I do not have the answer to that dilemma. Do you?

IN MEMORIAM

Over the course of just two months earlier this year, our industry lost three of its finest sons, each of whom left an indelible mark on the gemstone and jewellery business.

They were of a similar age and blessed with long careers – individually quite different from one another, but at the same similarly committed to professional excellence and the industry's legacy. Although they lived in different countries, each had arrived as an immigrant, and had contributed greatly to their adopted home, as they did to our business in general.

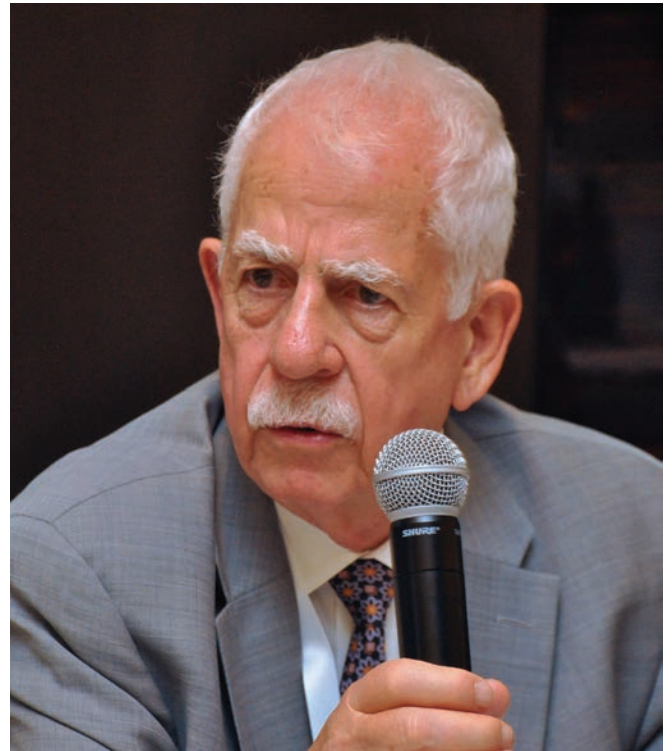
Roland Naftule

On April 1, 2023, we bid farewell to Roland Naftule, who passed away peacefully at age 85, in San Diego, California. He was a CIBJO Vice President.

For more than two decades, Roland also served as President of CIBJO's Sector A, overseeing the preparation, updating and maintenance of the entire Blue Book series.

Roland was born in Switzerland in 1937, into a family that was cutting and polishing gemstones for high-end watch makers in Geneva. In 1952 joined his father Jean, in expanding the business to the United States, starting in New York and growing it into a nationwide operation.

In 1976 he transferred the company headquarters to Scottsdale, Arizona, opening



Roland Naftule, 1937-2023.

an additional lapidary in Phoenix, where began nurturing another love – public service. He was one of the founding organisers of the American Gem Trade Association (AGTA), and served as its President from 1983 through 1985. He also was a founding organiser of the International Coloured Stone Association (ICA), and its Founding President from 1985 through 1989.

In 1989 he was the founding organiser and first Chairman of the Gemstone Industry & Laboratory Conference (GILC), which is dedicated to harmonising terminology provided on reports by leading gemmological laboratories.

Joining CIBJO as a U.S. representative, Roland held a variety of roles over a period of about a quarter of a century, among them Vice President, Sector A President, member of the Board of Directors, Executive Committee and President's Council, and President and Vice President of the Coloured Stone Commission.

His presence on every CIBJO body was substantial, but it was possibly as Sector A President where his mark on the gem and jewellery industry will be the most indelible.

Expanding the sector's scope of activity from diamonds, coloured gemstones and pearls, to include precious corals and gemmological laboratories, he oversaw a continuously growing and working enterprise that brings together gemmologists, gem professionals, academics and industry leaders.

Harry Levy

On May 15, 2023, the Diamond Commission lost its beloved Vice President, Harry Levy, who passed away in London at age 83.

Although English to the core, Harry was born Hanukkah Levy in Turkey, into a Persian-Jewish family, arriving in Britain as a young boy. He studied mathematics and philosophy at university, but was drawn to the world of gemstones, eventually setting up his own company, Levy Gems.

For most of his life Harry was a working dealer, owning and managing one of the most respected companies in London's Hatton Garden district. But he remained a scholar throughout, becoming an internationally respected authority on gemmology, and at the same time investing a major portion of his time in the public life of the industry.

At CIBJO, he served alternately as President and Vice President of the Coloured Stone Commission. He also served on the Gemmological Commission, and for 10 years was President of the Diamond Commission, following which he continued on as the commission's Vice President until the time of his death.

Harry also was President of the International Diamond Council, the supreme gemmological authority of the World Federation of Diamond Bourses (WFDB) and the International Diamond Manufacturers Association (IDMA). At home he served two terms as President of the London Diamond Bourse, the leading diamond trade organisation in the United Kingdom. He also was President of Gem-A, the Gemmological Association of Great Britain, and President of the British Jewellers Association.

A crowning achievement came in July 2015, when the International Organisation for



Harry Levy, 1939-2023.

Standardisation (ISO) published International Standard 18323, entitled "Jewellery – Consumer confidence in the diamond industry," specifying a set of permitted descriptors for the diamond industry that are meant to be unequivocally understood by consumers. It was the first ISO standard related to diamonds, and Harry served as Chairman of the Working Group that oversaw its formulation.

It was a long process, that required the polite and determined manner of a gentleman like Harry. Jean-Pierre Chalain remembers that when Harry first chaired the CEN inaugural meeting for drafting the standard on "Consumer Confidence in the Diamond Industry," three years already passed since its kick-off meeting held in Brussels on September 10, 2008. If it took that long to form a working group," Jean-Pierre thought at the time, no doubt Harry will face a difficult task!

Jean-Pierre, who attended all the meetings, remembers Harry's kindness, his patience, his

knowledge and expertise, his ability to listen and his exceptional way for finding compromises.

When in 2017, Jean-Pierre was nominated take over as Chair of the TC174 Working Group 2, he remembered the way that Harry conducted its meetings. Harry was a model, and thanks to his example, the second ISO standard on diamonds – ISO 24016 “Grading polished diamonds” was adopted in 2020.

Harry spoke his mind and was unafraid of taking up unpopular positions. Years ago, when he passed to me the torch of the Diamond Commission presidency, he was enthusiastically advocated that CIBJO also become the home of what was then universally referred to as “synthetic diamonds” manufacturers. For many at the time, it was an unthinkable proposal.

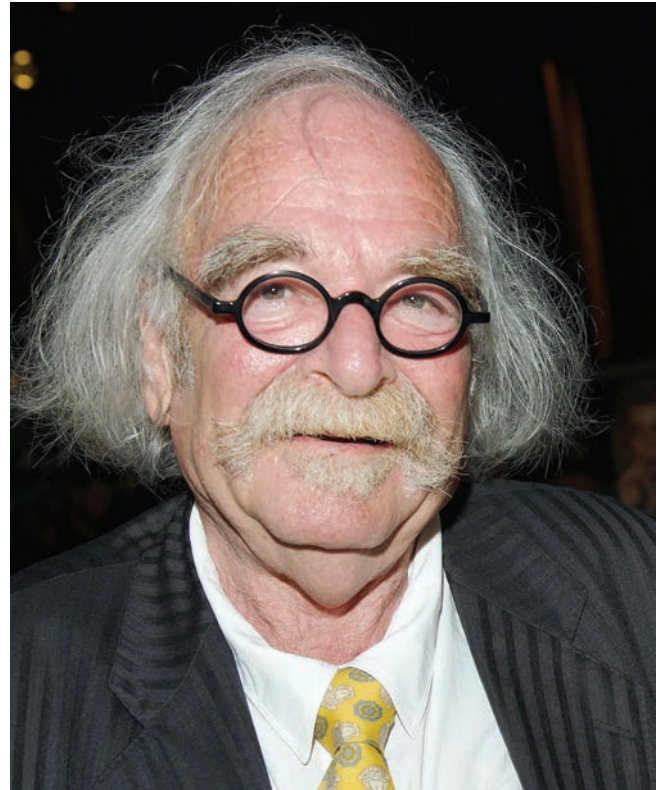
Harry believed that in order to enhance consumer confidence in “natural” diamonds – which was a descriptor he advocated when others avoided it -- the Diamond Commission must give special attention to the nomenclature of what became known as laboratory-grown diamonds.

He believed that, ultimately, the laboratory-grown diamond industry would become an integral part of CIBJO, and as time moved on, he was proven correct. A Laboratory Grown Working Group was created and it evolved into a fully-fledged committee, producing a guidance document for the trade. As Harry rightfully predicted, it operates under the auspices of the Diamond Commission.

Gabi Tolkowsky

On May 31, 2023, arguably the most famous diamond cutter in modern history, Gabi Tolkowsky, died in Israel at age 84. With his iconic moustache, rounded glasses and illustrious family name, he was one the most recognizable faces in the industry.

Gabi was born in pre-state Israel on January 1, 1939, but he was quintessentially Belgian. His father had been among the founders of what would become the Israeli diamond centre, after his family left Europe ahead of the rising Nazi tide in Germany. They would return to Antwerp



Gabi Tolkowsky, 1939-2023. Photo courtesy of Niels Ruddy Hansen.

after the war, and Gabi would make his career there and find his greatness.

He also a member of the sixth generation of a family that had found its way into the gem business in the first part of the 19th Century. His forebear Abraham Tolkowsky, a gemstone dealer, moved to Antwerp in the 1840s. Abraham’s one son Maurice was credited with inventing the first diamond bruting machine, and another son, Sam, was elected the first chairman of the Antwerp Diamond Exchange.

Arguably the most well-known Tolkowsky prior to Gabi was his great uncle Marcel. A mathematician as well as a diamond polisher, he was the father of the modern round brilliant diamond, defining the angles and proportions that have characterized the most popular cut to this very day.

Gabi was trained personally by his father Jean, and according to him was tasked with polishing a 100-carat emerald-cut diamond already at the age of 16. This expertise of working with

very large diamonds is what would cement his reputation as a master-cutter, and would bring him face to face with several of the largest stones unearthed over the past several decades.

He also was a pioneer cutter, commissioned by De Beers with creating a series of economically viable cuts for the often shallow and oddly shaped rough stones that came onto the market with a introduction of massive production from the now defunct Argyle Mine in Western Australia.

In the 1980s, Gabi and his son Jean Paul, himself a master-cutter, were secretly invited by De Beers to cut an unnamed 755.5-carat brown stone that had been discovered at the Premier Mine in South Africa. An underground vibration-free workshop was constructed especially for the job, and it was polished into a 545.65-carat gem that remains the largest cut and faceted diamond ever produced.

Completed in 1990, with 148 facets, the polished stone reflected a yellow-brown colour that was intensified by its brilliant cushion cut. It also became associated with royalty, when it

was bought as a gift for the King of Thailand in celebration of his 50 years on the throne. It's known as the Golden Jubilee Diamond.

In 1986 De Beers discovered a 599-carat rough stone in South Africa, and turned once again to Gabi to lead the team that would cut and polish it. It would become the world's largest D flawless stone, and named the Centenary Diamond in honour of the 100th year of operation of the famed diamond company. With a modified heart shape – a product of Gabi's unique imagination – it weighed 273.85 carats. The stone was reportedly insured for more than \$100 million.

Speaking later to a British trade journal, Gabi credited the work of the people he had assembled to complete the project. "Together we realized that every single diamond is effectively an individual that will attract every human's senses – each one of them is a unique beauty," he said.

Roland, Harry and Gaby were all diamonds, each in his own way.



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