CIBJO, the World Jewellery Confederation, is constantly looking to update and improve its standards, and, as was clear from the earlier special reports released by the Diamond Commission and the Coloured Stone Commission, is striving for consistency and clarity in the nomenclature that is used in the jewellery industry worldwide.

With that purpose in mind, earlier this year, gemmological laboratories around the globe were asked to complete an online survey about methods and nomenclature being used in relationship with synthetic diamonds and treated diamonds in their gemmological reports. This has helped CIBJO to get an overview of the current situation and it will
assist us in evaluating the rules and standards that currently appear in the CIBJO Blue Books.

Forty gemmological laboratories around the world were invited to participate in the survey, and 23, or 58 percent, responded.

The survey provided a clear picture of the similarities and differences on the reports issued by the various laboratories, and perhaps also suggested the requirements and preferences of different markets around the globe.

Overall the nomenclature used by laboratories is clear about the nature of the stones described, but there are inconsistencies with regard to the precise terms used, and whether or not grading of synthetic and/or treated stones is permitted. At the 2018 CIBJO Congress in Bogotá, Colombia, the results of the survey will be discussed in detail, and we will consider the need for further action.

Some of the trends and observations that emerged from the survey are listed below.

REPORTING ON SYNTHETIC DIAMONDS

- Of the responding labs, some of which are major institutions, 35 percent issue grading reports for synthetic diamonds.
- Only three of the eight labs issuing grading reports for synthetic diamonds reported that they issue documents with different colours and/or designs than those used for natural stones. One lab reported that it had used a different colour in the past, but currently does not grade synthetic diamonds.
- Some laboratories said that they only issue identification reports for synthetic diamonds. One lab explicitly stated: “Synthetics should not be graded. Grading relates to goods that have real inherent value.”
- Five out of eight laboratories indicated that they use different grades for synthetic diamonds. Some explained that they use the same system, but apply broader terms to describe colour and clarity, such as VVS instead of VVS1 and VVS2.
- Almost all of the laboratories use one of the internationally agreed terms to describe synthetic diamonds: “synthetic,” “laboratory-grown,” or “laboratory-created.” One major lab indicated that in addition to these terms, they also use the term “man-made.”

REPORTING ON TREATED DIAMONDS

- All but three of the laboratories that grade diamonds said that they also grade treated diamonds.
- Several of the major laboratories reported that there is no type of treatment that would exclude a diamond from being graded. Five laboratories stated that diamonds that have been subject to unstable or non-permanent treatments would not be graded, and two laboratories specifically said that glass-filled diamonds would be excluded. One laboratory noted that the only type of treatment that would not exclude diamonds from being graded is laser-drilling.
- Most laboratories indicated that they use the term “treated diamond” or a description of the specific treatment, either on a grading or identification report. The majority prefer to provide the name of the specific treatment. One laboratory stated “treated
natural diamond” for any type of treatment. A review of the example reports submitted by the participating laboratories showed that one lab prominently uses the term “Treated Natural Diamond” as a heading, together with an actual description of the specific treatment.

- Most grading reports for treated diamonds do not differ in style from the usual diamond grading reports. Only two laboratories indicated they use a different style, and one mentioned that it uses a different colour on its grading reports for treated diamonds.

**STATUS OF COMMERCIAL COLOUR TERMS**

At the 2017 CIBJO Congress in Bangkok, Thailand, the first draft of a document was presented, describing the situation in the industry regarding its use of commercial colour terms like “pigeon blood red” and “royal blue.”

With the lack of a universal standard, the document was meant to describe the current practices in the market, and to provide more clarity about what systems and standards are being used when issuing reports that include such terms. The document contained information provided by laboratories such as the Swiss Gemmological Institute SSEF, Gübelin Gem Lab, the Gemological Institute of America (GIA) and the Gem and Jewelry Institute of Thailand (GIT), explaining their individual positions, standards and rules.

Since then, additional insights have been provided by GRS GemResearch Swisslab, and summary charts have been added.

The updated document will be discussed again in Bogotá, and it is hoped that eventually a modified version may serve as a reference point, to increase transparency on this subject and advance the goal of harmonisation.

**FACTS AND OPINIONS**

As indicated in the recently released special report by the Coloured Stone Commission, our two committees are working together to study whether it is possible to separate test results from professional opinions on laboratory reports.

In section 5.8 of the CIBJO Gemmological Laboratory Book it is already stated that opinions on gemmological reports should clearly and expressly be stated as such, and should be presented separately from test results. However, it does not explicitly explain where test results and opinions should appear on a report. From their experience in the trade, it is felt by members of the Coloured Stone Commission that CIBJO should issue more precise requirements concerning the separation of facts and opinions on gemmological reports.

From a laboratory’s perspective, the distinction between facts and opinions might be more complicated than it may appear at first sight. That is why laboratories have always put emphasis on the precise wording of results.

Test results are based on a collection of data that need to be interpreted. In a majority of cases interpretation of these data is straightforward, leading to answers that are correct with a high degree of probability. But there are also (often individual) cases, however, which are more complicated to
The use of varietal names will be discussed at the 2018 CIBJO Congress. Better definitions and standards are needed to be able to make consistent calls on so-called ‘borderline cases.’ For example, this natural corundum be called pink sapphire or padparadscha? © Netherlands Gemmological Laboratory

interpret, and which may sometimes lead to different views or outcomes.

In pre-congress discussions on this topic, it was suggested that, in addition to opinions on country of origin and the use of specific colour terms, a degree of subjectivity exists in quantifying clarity enhancements, making statements about low-temperature heating, deciding whether or not a stone can be called padparadscha, and identifying beadless cultured saltwater pearl.

To what extent test results based on interpretations of collected data, and how professional opinions can or should be presented separately on a laboratory report will be discussed at the upcoming congress in Colombia.

DEFINITIONS OF GEM VARIETIES
One of the other pressing concerns that was raised during this past year is whether varietal names are being used consistently throughout the industry, and to what extent nomenclature rules are present or known. Generally accepted definitions of gemstone varieties have to be looked at again, in relation to existing scientific data or a lack thereof, as well as definitions and standards.
The names of mineral species are defined by the Commission on New Minerals, Nomenclature and Classification (CNMNC) of the International Mineralogical Association (IMA), but the names of mineral varieties are not addressed by IMA. Possibly as a result of this oversight, the differences between varietal names and trade names has become unclear.

A working group with members of both the Coloured Stone Commission and the Gemmological Commissions will especially look at this extensive topic, and the first comprehensive process of consultation will begin at the congress in Bogotá.

Defining a mineral is already a difficult task, but distinguishing varieties is even more cumbersome, as they may only show very slight variations in physical properties or minor amounts of impurities.

It is the so-called “borderline cases” that need special attention and for which more precise descriptions must be considered.

These include instances where we must identify the differences between ruby and pink sapphire, the differences between padparadscha and pink or orange sapphire, and the differences between aquamarine, green beryl and emerald, to name a few.

In many cases this is about very subtle differences in colour. Consequently, technical specifications of the light sources used and ways of describing colour will be part of the equation, among many other factors.

If we are successful in our efforts, the distinguishing criteria should eventually become relatively easy to check, and to work within the trade.