

LMHC makes progress on harmonisation of colour description and new treatment issues

NOVEMBER 29, 2018: Significant achievements in the harmonisation of wording on laboratory reports and the reporting of new treatments have been chalked up during the 29th meeting of the Laboratory Manual Harmonisation Committee (LMHC), which was hosted by the Gübelin Gem Lab in Lucerne, Switzerland, on November 14 and 15, 2018.

The LMHC is currently comprised of representatives from the Central Gem Laboratory (CGL), CISGEM Laboratory, DSEF German Gem Lab, Gübelin Gem Lab, GIA Gem Laboratory, the Gem and Jewelry Institute of Thailand (GIT) and the Swiss Gemmological Institute SSEF. The organisation is not formally connected to any trade organisation.

During the meeting, the LMHC members agreed to modify [infosheet No. 4](#), concerning the use of the term “padparadscha.” The infosheet now specifies that the term is not applicable if the colour of the stone is unstable and shifts to pink when exposed to a colour stability test (see Figure 1). Additionally, a new infosheet about organic fissure-filling in any gemstone ([IS No. 12](#)) and an infosheet about hydrophane opal ([IS No. 13](#)) were unanimously approved by the laboratory representatives.



Figure 1: Corundum with unstable colour not qualified to be called ‘padparadscha’ (see modified LMHC information sheet No. 4).

All LMHC infosheets, including the two new releases, are accessible on the new LMHC website (<https://www.lmhc-gemmology.org/>).

The LMHC also discussed issues raised by new treatments. These include the low-temperature heating of corundum and a new sapphire heat treatment, which has been incorrectly named High Pressure-High Temperature (HPHT) heating in the trade (see Figure 2). Current scientific knowledge and available data from the LMHC laboratories indicates that the latter treatment is essentially a form of heating, and as such is similar to most known heating techniques. It consequently does not currently require specific reference on the laboratory reports of the LMHC members.



Figure 2: Sapphires heated with a new heating process, incorrectly named High Pressure-High Temperature (HPHT) heating in the trade.

Nonetheless, LMHC would again like to stress that all heat treatments may create fissures or expand pre-existing fissures in a gemstone, especially when high temperatures are applied. These could have a negative impact on the stability of the heated stone.

Additionally, during their meeting in Lucerne the LMHC members initiated a project which is aimed at harmonising the use of colour descriptions and colour trade terms at the various LMHC laboratories.

“We are very pleased to see that all laboratories represented at LMHC are constructively working together for a harmonisation on issues that are important for the trade and consumers,” said Dr Lore Kiefert, host of LMHC, summarising the achievements made during the meeting in Lucerne.

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About LMHC

The Laboratory Manual Harmonisation Committee (LMHC) draws on the individual experiences of its members with the purpose of creating a general philosophy for proper gemstone nomenclature and disclosure for laboratories, as well as to initiate and suggest “preferable” language to be used on their gemmological reports. LMHC's goal is to achieve the harmonisation of language on gemmological reports and consequently the revision of this harmonised report language as used by LMHC members.

LMHC is currently comprised of representatives from CGL, Japan; CISGEM Laboratory, Italy; DSEF German Gem Lab, Germany; Gübelin Gem Lab, Switzerland; GIA Gem Laboratory, USA; the Gemological Institute of Thailand (GIT), Thailand; and the Swiss Gemmological Institute SSEF, Switzerland.

LMHC does not maintain formal relationships with special interest groups or trade organizations.