

The Gem and Jewelry Institute of Thailand (Public Organization)

## GIT LAB INFO FACT SHEET ON 'PARAIBA' TOURMALINE

By Gem Testing Laboratory August 15, 2012

'Paraiba' tourmaline is a famous colored stone that typically possesses strikingly beautiful bright blue color or the so-called 'electric or neon blue'. Because of its attractive color this type of tourmaline in one of the most sort-after stones that usually command very high price in the trade. Being driven by the market demand, many confusions and misuse of identification report have arisen in the market due to the unclear definition of 'Paraiba' tourmaline and other copper bearing tourmalines, some traders may assume that all copper bearing tourmalines can be called 'Paraiba' while some may still stick to the locality-specific name where it was first mined that the 'Paraiba' tourmaline has to originate from Brazil only. To clarify these confusions, GIT as the national gem institute and a member of LMHC (Laboratory Manual Harmonization Committee) would like to release this fact sheet to everyone who involve in this matter.

The 'Paraiba' is presently being considered as a variety-name of an exotic color tourmaline, green to blue, in which its color is due to the presence of copper (and manganese) as important trace elements in its structure regardless where it is originated from. The name 'Paraiba' derived from its original mines in Batalha region of Brazil. Apart from Brazil, there are also some other localities such as Nigeria and Mozambique, where there have been reported as being the important sources of copper-bearing tourmaline. In fact, Mozambique, in particular, has become the world largest supplier of copper-bearing tourmaline in the last few years. Most 'Paraiba-type' tourmalines from every sources are commonly heat-treated, especially those having purplish blue shade in order to remove the pink hue from the stone and leaving the stone more preferred blue.

According to LMHC Information sheet number 6 (available at www.lmhc-gemology.org), members have agreed to give the updated definition of 'Paraiba' tourmaline as below;

"A Paraiba tourmaline is a blue (electric blue, neon blue, violet blue), bluish green to greenish blue or green tourmaline, of medium-light to high saturation and tone (relative to this variety of tourmaline), mainly due to the presence of copper (Cu) and manganese (Mn) of whatever geographical origin. The name of the tourmaline variety 'Paraiba' is derived from the Brazilian locality Paraiba where this gemstone was first mined."