MINERALOGY AND GEM TESTING LABORATORY

The Mineralogy and Gem Testing Laboratory attached to the Directorate of Mining and Geology, since its inception in 1985, has been rendering service to the general public and the Gem and Jewellery industry in particular. The Lab, equipped with state-of-the-art facilities, is an authority in the field of rock and mineral/gemstone identification and is the only one of its kind under Government of Kerala. The study of rocks in thin sections is essential in studying the geology of an area and for mineral exploration. The laboratory undertakes petrographic studies for the department and also for the public on payment basis. The laboratory issues Gem Test Certificates with security hologram and digital image.
Infrastructure

The sophisticated Gem Testing instruments in the laboratory are:

* Stereo Binocular Microscope with digital imaging facility

* Stereo Binocular Microscope with fibre optic illuminator

* Refractometers

* Spectroscope

* Polariscope

* UV lamps

* Thermo diamond probe

* Digital weighing balance

* Petrological microscope

* Isodynamic Separator for heavy minerals
* Rock cutting, grinding and polishing machines

Other equipment include Chelsea Colour Filter, Dichroscope and gemstone faceting unit.
Services Rendered

The Lab undertakes the study and identification of minerals/gemstones, megascopic and microscopic identification of rocks and issues certificates and test reports.

The laminated mineral/gemstone certificate issued by the Lab contains the following information: the name of the mineral/gemstone, type of gemstone (natural or synthetic), stone’s physical properties and optical parameters (please see the specimen certificate). Test report of rock specimen contains the mineralogy, macroscopic and microscopic descriptions of the rock and its name.

A white paper on commonly encountered gemstones can be downloaded from here
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