

After a dramatic day of mining at the Daring Taung 'Royal Blue' sapphire mine in West-Mogok, the miner leads Dr. A. Peretti through the production of rough red spinels, rubies and sapphires.

A highly valuable 'Royal Blue' sapphire gets special attention.

Image: Copyright GRS Gemresearch Swisslab AG



Mogok mines, spinel come into focus at Sept HK Fair

GRS Lab (HK) is hosting a seminar on "Expedition to the Origin of Spinel and a Movie on the Mogok Mines" on September 16 at the Hong Kong Convention & Exhibition Centre (HKCEC). The seminar, which will be held on the sidelines of the September Hong Kong Jewellery & Gem Fair, will take place in Room S228 of the HKCEC from 2pm to 5pm.

The speaker, Dr A. Peretti, will focus on two topics namely "The Mogok Mines – New and Previously Unseen 3D Mining Images" and "The Origins of Spinel – A 10-Year Research Summary."

Research findings

According to Lawrence Hahn, managing gemmologist of GRS Lab (HK), the seminar "promises to be an invaluable treasure trove of research findings for gemstone and jewellery industry members." "This unique film will transport viewers into a world that only a few have ever understood," Hahn added.

Unprecedented access

GRS has been monitoring the Mogok Mines since 1994, which allowed the lab to collect valuable data during its gemmologists' many field trips to the region, the lab said. "Only very recently, Mogok became open to a select few gemmologists. Through a series of complicated permit procedures, GRS gained unheard-of access to every single mine in Mogok. These expeditions targeted the locale of the most important source of Pigeon's Blood ruby, which up until this time had remained off-limits to outsiders," GRS said.

The mine for this rare ruby deposit is accessed by a completely vertical 300-metre elevator. According to Peretti, founder of GRS, "Convincing the mine owner that GRS would film a first-ever 3D movie at the mine was key to his granting us access to this very important deposit."

A marble mountain fitted with a sophisticated and complex elevated transportation – common in South African gold mines – was completely unexpected at this ruby site, Peretti said. The elevator system guides miners to a large number of vertically inclined shafts created for ruby mining. The mountain itself consists of folded marble rocks interspersed with compositional layering. Because the ruby is only found in certain layers, mining is both costly and extremely difficult. Just one ruby turned up during GRS' tunnel exploration, highlighting the extreme scarcity of these stones, he said.

Conditions now

While there is no lack of consumer demand for top-notch gemstones, acquiring them is another story. "Currently, the number of miners has decreased dramatically," Peretti said. "But the remaining operations have dramatically increased in size."

With the influx of heavy machinery, entire valleys are now open-pit surface-mined. This includes waste deposits of old mining sites, Peretti revealed. "Hence, the quantity of gemstone findings per tonne of moved earth has decreased, resulting in an upswing in per-carat gemstone value." **JNA**