



## The 1<sup>st</sup> International Symposium on Gemstone Trading in Iran Focusing on Persian Piroozeh (Turquoise) and Agate

### **Persian Aqeeq, Terminology & Mineralogy**

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Many Aqeeq deposits are present in Iran. It is written also “akik or aqiq” and in many literatures, it is identical to agate. However, aqeeq deposits of Iran are varies in color, brightness, patterns and many other gemological features. To improve its trade, scientific identifications need to reveal the differences. Scientific and trade terminology also should be define for different types. Petrography, gemology, Raman analyses, SEM, ICP and XRF studies of samples from east of Qazvin, north of Qom and Torbate Heidarieh reveal that aqeeq deposits in Iran are not simply like agate made of chalcedony. Many different silica phases include chalcedony, quartz, opal and moganite identified.

In gemological terminology, it is suggested and offer ”aqeeq” in the uniform way of writing the term and only should use it for rocks mainly made of silica phases of chalcedony and moganite equal to agate. However, for parts mainly made of opal, the term of aqeeq is not correct and the term of opal as rock should be used. When sequence of opal and aqeeq are present, opal-aqeeq could be used. Most of the silica deposits in Iran need treatment. The first step is to study mineralogy of each deposit to characterize the best treatment method.

**Keywords:** Aqeeq, opal, silica phases.