LAPIS LAZULI – PETROLOGICAL AND GEOCHEMICAL CHARACTERIZATION OF RAW MATERIAL AND ARCHAEOLOGICAL ARTEFACTS

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The magic ocean-deep blue of lapis lazuli gemstones beguiles humankind for over 6000 years. Lapis lazuli was used for artefacts, interior and exterior design, sometimes almost monumental objects and even today for all kinds of jewelry like necklaces or earrings (TOSI & VIDALE, 1990).

This study attempts to reveal the origin of Archaeological lapis lazuli artefacts and objects, and to reconstruct prehistoric and trade relations. Other studies involving mediterranean and eurasian lapis lazuli artefacts show mostly Afghan provenience (HERMANN, 1968). Furthermore, slightly over a dozen other modern occurrences (e.g. in Tajikistan, Russia, Myanmar, Chile) are known worldwide so far, which makes an unambiguous allocation easier in theory. A leading study on this topic is by GIUDICE et al. (2017) providing a guideline for modern lapis lazuli provenance analyses in general. The multi-technique analytical approach introduced to Archaeological provenance questions by BRANDL et al. (2018) will be applied here to our lapis lazuli artefacts and objects which includes state of the art archaeological, petrographic, mineralogical, geochemical and geological methods.

Besides a significantly larger amount of samples compared to previous undertakings (target value 30-50), this study provides a better in-depth analysis for both, non-destructive and destructive methods with FEG-EPMA and LA-ICP-MS, respectively. Egyptian lapis lazuli objects (e.g. Scarabs) will be investigated and compared to reference material from Afghanistan, Tajikistan, Lake Baikal and Myanmar. The famous lapis lazuli occurrences from Chile will additionally be studied for comparison.

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