## Natural forgeries: Falsification techniques of museum specimens (fossils and minerals)

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The acquisition of important specimens to complete or integrate museum collections is a difficult process, not only from the financial point of view, because of the substantial economic value of the quality specimens on the global market, but also for the high scientific risk involved due to the large number of circulating forgeries. Some of the forged specimens are easily spotted by an expert curator, though many others may be subject to hot debates because they are unusual pieces, very rare, or astonishingly well artefact. The conceptual frame and strategies of intervention concerning natural specimens are indeed very similar to those long established in the field of art and archaeological items, where the number and quality of forgeries parallels their economical value in the collector's market. The project wishes to characterize specific classes of forged items recently introduced in the collector and museum markets, with specific focus on well-crystallized minerals inserted in geologically plausible matrices (Fig. 1), and remounted fossils assembled with the pastiche techniques. The results are bound to provide fundamental indications towards the identification of fakes having high scientific and museum potential.

Collaborations are active with some of the major museums of Natural History (Muséum National d'Histoire Naturelle, Paris; Museo della Natura e dell'Uomo, Padova; Natural History Museum, London). Funds are available for stages at collaborating museums and for the scientific investigation of the suspected items.



Figure 1. Upper left: natural geode with okenite spherules from India; upper right and below: artificially coloured okenite-gyrolite spherules often sold as Chinese specimens.

## Reference

ARTIOLI G.: *Authentication and the perception of fakes. Forgeries of natural specimens.* In: Salvadori M., Bernard E., Zamparo L., Baggio M. (eds.) "Beyond forgery – Collecting, authentication and protection of cultural heritage", Antenor Quaderni 52, Padova University Press, Università degli Studi di Padova, pp. 67-77, 2022.