

**SISTEMA MUSEALE Di Ateneo** Università degli Studi di firenze

## <u>Mineralogy and Lithology</u>. History of the collections: the collectors

## **Niels Stensen**

The original core of the current Natural History collections is certainly represented by the specimens from the Royal Gallery. Among the collections transferred from the Uffizi to the new Museum, certainly the most important for its consistency and the great stature of the scientist in the evolution of earth sciences is the collection by Nicolaus Steno (Niels Stensen).

The Danish Steno, a distinguished anatomist, scholar of natural sciences, passionate traveler and observer of geological phenomena, arrived in Tuscany in 1666 forging relationships of esteem and friendship with representatives of the Florentine scientific world and with Grand Duke Ferdinand II and his brother Leopold, who were admirers of his. It is precisely from the Grand Duke that Steno was commissioned to take from the Gallery of Pisa some natural "curiosities" for the gallery was being formed in Florence. The Grand Duke also acquired the mineral collection that Steno himself collected for his studies.

The main references of the Stenian material that was transferred from the Gallery to the Museum are found in the "Catalogo delle Produzioni Naturali che si conservano nella Galleria Imperiale di Firenze" (Catalogue of Natural Productions which are preserved in the Imperial Gallery of Florence) which, on the orders of the Grand Duke Francesco, had been drawn up by Giovanni Targioni Tozzetti between 1762-1763. The specimens registered by Targioni are described in a very detailed way, indicating, in some mineralogical specimens, also references to an "Indice di Cose Naturali forse dettato da Niccolò Stenone e copiato dall'originale esistente nella Real Galleria" (Index of Natural Things perhaps dictated by Niccolò Stenone and copied from the original existing in the Real Gallery"). In this list, which Targioni attaches to the Catalogue of natural products, over 350 specimens are listed, of which just over half are minerals. Some of them, such as quartz and hematite crystals, are of extraordinary importance for the history of mineralogy, since certainly on these Stenone made the observations on the constancy of the dihedral angles, concluded in the "De solid intra solidum ..." with the famous comment, "Non mutatis angulis" which marked the beginning of crystallography. It was thanks to the examination of these documents and an accurate verification of the various catalogues, that it was possible to identify some specimens, such as the calcite sample thus described by Stenone: "Due croste di pietra fatte intorno a due bastoncini di legno con legno dentro unite, fra di loro, fra le quali sono attaccati certi nicchietti" (Two stone crusts made around two wooden sticks with wood inside joined together, between which



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certain niches are attached). In addition to this, a goethite and another limestone incrustation part of the current collections are certainly from Steno's collection.