

## **TourinStone: a free mobile application for promoting geological heritage of Torino (NW Italy)**

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The knowledge of stone resources (minero-petrographic features, their use and exploitation techniques from ancient times to the present) can provide a broad overview of the historical and cultural significance of such materials, highlighting the relevance of an economic activity so important for the history and traditions of the different cultures developed through the centuries all over the Mediterranean area. In every Italian region a significant historic heritage on rocks exists, which can be found in the historical buildings. The abundance of stone materials coming from Piemonte (NW Italy) employed over the centuries to realize paving, monuments and public buildings shows the close link between the city of Torino and the surrounding territory, emphasizing the role that stone has played on the culture and economic wealth of Torino during the centuries: first as capital city of Savoy kingdom, then as the Italian capital, and finally as the main center of the domestic industry. In recent decades, however, because of the economic situation, also Torino has undergone a deep transformation that has led it to become a tourist town full of cultural attractions. Its monuments and stone buildings built over the centuries represent a major excellence of the city. In this framework, the knowledge and enhancement of historic ornamental stones from Torino can lead to a new geotouristic approach for the development of urban geological heritage.

TourinStone is an application for mobile to promote, increase and enhance the urban geological heritage of Torino, thanks to which the visitor can enjoy the cultural and the scientific aspect at the same time. The application illustrates twenty-six historical sites of interest where most ornamental stones of historical and scientific interest can be observed in detail. The sites are grouped in four georeferenced thematic itineraries through which the user can discover and enjoy the city from a cultural and a geomaterial point of view.

A numbered list of the stones used in all described monuments reports the specific data of each rock. This list is divided according to the genesis of rocks: igneous intrusive, igneous effusive, metamorphic and sedimentary. The form of each rock is organized according to the following fields: scientific classification, trade name, quarrying district, simplified geological map, geological setting, macroscopic description of the rock, main uses (*i.e.*, monuments, churches or significant palaces where the rock has been employed), macroscopic photo of the rock.

The mobile application can be downloaded free from the App Store or Google Play for Apple and Android devices, respectively.