

THE COMMITTEE ON ROMAN CONCRETE, JSCE (COM-NO. 114)

The Committee on Roman concrete (Com-No. 114), is one of the special subcommittees in the Concrete Committee, JSCE, Japan Society for Civil Engineers. This committee is chaired by Prof. E. Sakai, Tokyo Institute of technology, and propelled by seven active members. Furthermore, Dr. M. Aoyagi, director-general of the National Museum of Western Art of Japan, and Dr. Matsuyama, University of Tokyo oversee this committee. Moreover, this committee is closely relates to the Somma Excavation Project managed by the University of Tokyo on the concrete materials research aspect.

The purpose of this committee is to investigate the long term durability of concrete, focusing especially on the material phase. In addition, the important mission of this committee is to reflect the results of these investigations for the development of society, public welfare, growth of civil engineering, and concrete engineering. One of the mission of this committee is to contribute establishing the standard specifications for design and construction of concrete structures that require long-term durability, such as huge concrete structures for storage of nuclear waste.

It is well known that concrete deteriorates due to rain falls, CO₂ in the air, chloride ion in seawater. Therefore, the properties of concrete change remarkably due to their long history of exposure condition, although their performances are same at the initial stage.

From these viewpoints, it is quite important to collect aged concrete samples as much as possible. Especially, the ancient Roman concrete, sampled from Somma or Baia will give us useful and important information.



Somma Vesuviana



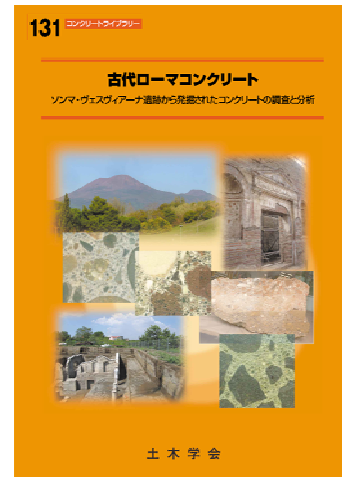
Cut Sample from Somma



Sample from Baia



Huge concrete structures for storage of nuclear waste in Aomori, Japan



JSCE Committee 114 research report (Draft)

The committee, therefore, collected some concrete samples from historical sites. Specifically, the committee collected concrete samples from different locations, such as from submerged location or atmospheric location which have been exposed almost in constant condition for more than 1,500 years.

The committee report was finally published in April, 2009; Ancient Roman Concrete - JSCE Concrete sub-committee 114 research report: the properties of concrete and other cementitious materials sampled from the Ancient Roman Heritage, Somma Vesuviana -. A seminar regarding this report will be held on 24 April, 2009 at JSCE hall, Tokyo.

The Committee on Roman concrete (Com-No. 114), JSCE

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