## To Reach the Light: The Monumental Byzantine Stairs of Caesarea, a Conservation and Restoration Project

N. Maklada<sup>1\*</sup>, S. Hadid<sup>2</sup>, D. Abuhatsira<sup>3</sup>, P. Gendelman<sup>4</sup>, Y. Oz<sup>5</sup>, and D. Siboni<sup>6</sup>

## **ABSTRACT**

Ancient Caesarea has established in the years 25-10 BC and named after Emperor Augustus. Throughout history, from the early Roman until the Byzantine period, Caesarea was a major city and one of the largest and most important port cities in the Mediterranean. During the Byzantine period, the city encompassed an area three times larger than that delimited by the Herodian wall and became an important center of Christianity.

The monumental stairs led to the Byzantine octagonal Church built from two staircases were connected with giant vault, in the remains of the enormous Roman stairs of Augustus temple. Stairs led a large number of people from the vast harbor, to the Temple stage.

The Byzantine vault located 17 meters from the ancient pier rim is 8 meters long and 4-meter width, built with specific technology from local sandstone named Kurkar. The vault fall after the Byzantine period and the staircases severely damaged due to the long exposure of almost 2000 years and environmental conditions such as capillary rise, daily winds carrying sand, high temperature, moisture, salts, and deliberate destruction, for instance, stealing stones and collapse parts from the wall.

The characteristics of the Kurkar with sustained deterioration and this environmental condition have led to different conservation problems, at various levels of severity erosion, the disintegration in both bonding materials and stones.

The conservation measures' purpose is to stop the ongoing weathering process and prevent a deterioration state of the staircases, to restore the vault and stabilize the structure of the stairs to carry 48 tons of the vault stones.

The findings of the project show that a suitable solution to ensure effective and sustainable protection of complicated staircases structure from destruction and various weathering condition to carry new massive vault depends on understanding the ancient application of building technologies and techniques, the use of original bonding material, integrated monitoring, and ongoing maintenance.

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<sup>&</sup>lt;sup>1</sup> Conservation Researcher, Conservation Department, Israel Antiquities Authority, (IAA), Rockefeller Museum, P.O.B 586, Jerusalem 91004, Israel, e-mail: nabe26@gmail.com

<sup>&</sup>lt;sup>2</sup> Rappaport Faculty of Medicine, Technion-Israel Institute of Technology

<sup>&</sup>lt;sup>3</sup> Conservation Planning Office, 3 Har Shlomo St, Or Akiva 306000, Israel

<sup>&</sup>lt;sup>4</sup> Archaeological Research Department, Israel Antiquities Authority

<sup>&</sup>lt;sup>5</sup> Schaffer & Ronen, Conservation Engineering, 33 Jaffa St, Jerusalem 94221, Israel

<sup>&</sup>lt;sup>6</sup> Conservation Manager, Conservation Department, Israel Antiquities Authority