

SCG010-P01

会場:コンベンションホール

時間:5月25日10:30-13:00

## ARCHAEOGEOPHYSICAL STUDIES CONDUCTED ON SINOP MITRIDATES PALACE (BALATLAR CHURCH) ARCHAEOGEOPHYSICAL STUDIES CONDUCTED ON SINOP MITRIDATES PALACE (BALATLAR CHURCH)

Fethi Ahmet YUKSEL<sup>1</sup>, Nihan HOSKAN<sup>2\*</sup>, Gulgun KOROGLU<sup>3</sup> Fethi Ahmet YUKSEL<sup>1</sup>, Nihan HOSKAN<sup>2\*</sup>, Gulgun KOROGLU<sup>3</sup>

<sup>1</sup>I. U. Eng. Fac.Dpt. of Geophysical Eng., <sup>2</sup>I. U. Eng. Fac.Dpt. of Geophysical Eng., <sup>3</sup>M.S.U. of Fine Arts, D. of Hist. of Art <sup>1</sup>I. U. Eng. Fac.Dpt. of Geophysical Eng., <sup>2</sup>I. U. Eng. Fac.Dpt. of Geophysical Eng., <sup>3</sup>M.S.U. of Fine Arts, D. of Hist. of Art

Sinop, Turkey was founded at the tip of Cape Boztepe on Sinop Peninsula on the most northern edge of the Black Sea coast. The Balat Church complex in Sinop houses a stratigraphic structure stretching from Roman times to the Ottoman period. These structures include an area that has been systematically used for long periods from the Romans to the Ottoman State on the Black Sea coast of Anatolia.

From the early period to the present day since Sinop was built on the same location, it is not easy to discern the urban fabric of different periods. Within the city, the most important archeological finding involving the late Roman and early Byzantium periods, and known in scientific journals and colloquially, is the Balatlar Church or the Mitridates Palace. This site is a cross planned large structure and although there are no remains of the roof of the structure, the 5 to 6 m height walls have remained intact to this day and consist of what may be defined as triangular planned chambers that are inter-connected to each other. Despite the fact that only the outer walls remain standing, remnants or traces of carriers or the grounds of the inner sections of the area surrounded by the walls are not present. The remains of a cistern of four sections attached to each other that is triangularly planned and that is covered with barrel vaults are assumed to be related to this structure.

The building complex known as Balatlar Church is surrounded by chambers with high walls that are connected to each other. This large complex considered as an important structure when first built was used for different purposes in later periods. Various views on the function of the structure are as follows: It is thought that the name Balat comes from the Latin Palatium and that it was a palace dating back to the late Roman-early Byzantium period. Historical sources indicate the existence of large silos that stored grains arriving from the northern Black Sea to Sinop during the Byzantium Empire. Since a large part of the remnants of the structure are in the shape of large chambers, it is assumed by researchers that these chambers were used to store grains. Another hypothesis is that the structure might be a section of well-known gymnasium of Sinop bath (Thermae) complex dating back to the Roman period. The fact that large cisterns are located nearby and that layout of the plan recalls the monumental baths of Roma increases the likelihood that this hypothesis is correct. It is also assumed that the structure was used as a monastery at a later time.

Given historical past of Sinop, the Pontos inscriptions on the walls and being known as a palace, the debate on what the function of the Balat Church complex is still continues. The Palace has been considered as a grain silo, as a gymnasium bath (bearing in mind its scale) or as a monastery. However, the common view of researchers is that it is not possible to know the period the structure was built, its phases and its functions until excavation work is conducted on the site.

In planning the excavation work on the Balat Church complex, geophysical work was conducted in identifying the existence of the architectural remains of the well-known gymnasium bath complex of Sinop dating back to Roman times: the Pistina (pool), Apoditerium (the changing room section), Caldarium (the hottest section of the baths), Hypocaust (the heating installations section) and the Tepidarium (the tepid section of the baths). Using a proton magnetometer, a measurement of the vertical gradient was taken of the site. With the magnetic maps obtained, the magnetic anomalies attributed to the architectural remains of the underground heating installation made up of brick or stone columns where hot air could freely circulate from the hearth or furnace of the Roman bath were identified.

 $\neq - \nabla - F$ : Sinop-Mitridates Palace, Archaeogeophysics, Magnetometer, Balatlar Church, Gymnasium, Roma Bath Keywords: Sinop-Mitridates Palace, Archaeogeophysics, Magnetometer, Balatlar Church, Gymnasium, Roma Bath