TREATMENT AND CONSERVATION OF A GROUP ROMAN COINS DISCOVERED IN TELL BASTA, EGYPT.

Abstract:
A group of coins [٥٢ coins] was discovered in Tell Basta excavations, east of Delta, Egypt. They were covered with a thick green corrosion layer mixed with soil particles that disfigured them and hid their figures and inscriptions.

The aims of this work were cleaning the group of coins from the superficial dirt and the corrosion products in order to discover as much as possible the surface topography, and to reveal the surfaces details that will be of potential interest not only to the historian and the archaeologist, but also to the numismatist, the art dealer, and the art historian. And because of the coins interest to the economist, and the metallurgist, one of this work's aims is to identify the metallic composition of the coins, investigate the nature of corrosion grown during the long-term burial and identify its products that will help us to understand the corrosive factors and the degradation mechanisms. And finally to establish them against further deterioration with virtually no loss of evidence; cleaning them by removing the corrosion products in order to discover as much as possible the surface topography, and establishing them against further deterioration. The corrosion products were analyzed by X-ray diffraction. The surface of coins were examined by scanning electron microscope and analyzed by X-ray fluorescence to determine their metallic constituents. Chemical cleaning was chosen for treating them. They were isolated and preserved against further attack. After treatment and conservation, the coins figures and inscriptions that could be identified showed that this group of coins dates back to the Roman Period especially to the emperor Nero [٥٤ -٤٨ B.C].