46 Captions

Fig. 46.1. (a) Statuette representing the El god, principal god of Ugarit. The figure was originally gilded bronze but many gold parts are missing and the exposed areas are covered by a thick green corrosion layer. H. 13.5cm, Late Bronze Age (fourteenth century BC). National Museum of Damascus, inv. RS23. (b) Statuette of the weather god Baal. The figurine was originally gilded bronze but only a few gold parts are preserved in the head area. H. 12.5cm, Late Bronze Age (fourteenth century BC). National Museum of Damascus, inv. 3572. Photo:

Fig. 46.2. The customized head of the micro-XRF portable spectrometer (ARTAX Bruker Nano GmbH) during a measurement of the Baal god figurine at the Conservation Laboratory of the National Museum of Damascus. Photo:

Fig. 46.3. The area on the Baal god figurine was analyzed with (thin line) and without (thick line) the use of a filter in the excitation path. When using filtered excitation, the pile-ups were eliminated, the background noise was reduced, and the presence of traces of selenium and lead was revealed. Photo:

Fig. 46.4. (a) Photo of the analyzed area (back side of El god figurine), outlined by the black quadrangle. From the photo, it is clear that the examined area contains a green (upper right) and a black (lower left) region. Photo: (b) Elemental intensity of Cu-Kα line. (c) Ratio of the elemental intensities of Sn-Lα to Sn-Kα lines. In the graphs, the warm colors correspond to higher values

Fig. 46.5. Elemental composition of the base bronze metal for the Baal god figurine. Although all analyzed areas look similar, only area (b) was screened to ensure that it best represented the true alloy surface, providing quantitative results representative of the original alloy composition. Analyzed areas (a) 89.2 ±1.0 wt % copper, 9.82 ± 0.5 wt % tin; (b) 92.5 ± 1.0 wt % copper, 6.32 ± 0.3 wt % tin; (c) 81.9 ± wt % copper, 16.4 ± 0.8 wt % tin.