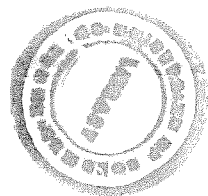
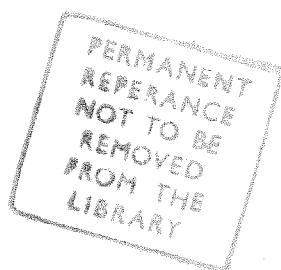


METALLURGICAL VARIATIONS OBSERVED IN SOME
ANCIENT COINS FOUND IN SRI LANKA



A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
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ABSTRACT

The non destructive method XRF was used in this study for the analysis of archaeological coins which were found from three coin hoards in Mantai, Pidurangala and Mirigama.

The presence of large number of metallic impurities like Ni,Ag,As,Ca,Sb,Fe,Al and non metallic impurities such as S, P were detected. In general the analysed Cu coins contained As as an impurity coming from the ore which contributed to increase the hardness of a casting and later Sn had been introduced to achieve this property. Precious metals like Au and Ag which is likely to have been introduced deliberately were present in the Polonnaruva-Dambadeniya period coins. Variations in the composition among the same type of coins was also observed in the present study.

