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Instrumental neutron activation analysis of postclassic and historic-period pottery from Soconusco, Chiapas, Mexico
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The study involved utilizing Instrumental Neutron Activation Analysis (INAA) at the University of Missouri Research Reactor (MURR) on 96 pottery samples from the post-classic Mayan (ca. 1000-1500 C.E.) and historic eras excavated from the Soconusco region of Southern Chiapas, Mexico. This was done in order to understand and map the long-distance trade networks of Mesoamerica via the unique chemical characteristics of pottery. The samples were irradiated according to MURR procedures and measured at specific intervals on a gamma-ray spectrometer to yield the relative concentration of elemental composition. The data obtained from the use of INAA has allowed for the creation of compositional groups according to the chemical signatures of the pottery. These groups were then compared with other compositional reference groups from throughout Mesoamerica accumulated within the MURR archives. The results indicate a complex and diverse trade relationship with post-classic pottery dominated by samples produced either locally or in the surrounding Chiapas, and historic pottery being imported across Mexico from Colonial New Spawn sites such as Puebla, Mexico City and perhaps as yet un-identified production centers. It is hoped that an increase in further comparative data will help in the locating of these additional pottery production centers. From these results, this study seeks to add greater depth to the discussion of inter-regional trade systems across Mesoamerica in both the post-classic and historic periods and enhance the conclusions drawn from those discussions.