













14th International Congress on the Archaeology of the Ancient Near East

ABSTRACT SUBMISSION

Archaeological geophysics: Blue prints from ancient cities in Mesopotamia

FASSBINDER J. 1*

¹ Geophysics Dept. Earth and Environmental Science Ludwig-Maximilians-Universit Mnchen, Mnchen, Germany

*Corresponding author

Abstract

Archaeological geophysics, magnetometer, - resistivity measurements and radar prospecting have been used in the Middle East since the 1960s to complement archaeological research. This field of science has now developed from an indispensable tool for archaeologists to an independent branch of research in archaeology. Without geophysical prospecting, it is almost impossible to carry out a new archaeological excavation project. Geophysical methods applicable to prospect large areas in great detail have their specific advantages and disadvantages that must be considered before planning. Magnetometry is among the most successful prospecting methods on large open areas such as ancient Mesopotamian cities. An essential prerequisite for a successful geophysical measurement is not only the existence of a physical or magnetic contrast between the soil layers and the archaeological findings but also a precise knowledge of the magnetic properties of soils and building materials. Here I will present recent archaeo-geophysical results and interpretations of case studies with total field magnetometer prospecting from Khorsabad, Assur and Uruk to exemplify the potential of interdisciplinary research between archaeology and geophysics.

Keywords

archaeological geophysics, magnetometry, Khorsabad, Uruk, Assur

Session

Natural resources and anthropised landscapes

Workshop

A16621MB - Title: Environmental multi-proxies in Southwest Asia: scale constraints and new perspectives

Type of paper

Oral presentation