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Environmental and geoarchaeological studies at Vörs-Máriaasszony sziget site, SW Hungary

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Vörs-Máriaasszonysziget (Transdanubia, Hungary) is a multiperiod archaeological site, with archaeological finds ranging from Early Neolithic to Mediaeval Period. It is located on a low sandy peninsula protruding an ancient embayment of Lake Balaton. The special importance of the site is twofold: on one hand Vörs is known as one of the northernmost extensions of the Starèevo culture of South-Eastern origin, and at the site human remains, representing the oldest dated inhabitants of Transdanubia, were found in two graves. On the other hand, the archaeological finds, together with the auxiliary sampling results show how the environment of the Lake Balaton has changed. The lake, the largest one in Central Europe, is a very young feature from geological point of view: it has come into existence in the latest Pleistocene and in the Holocene it evolved to achieve its present extent. However, the only major river that carries sediment to the lake, the Zala river reaches the lake in the near vicinity, causing the silting up of the area. This, partly swampy environment mixed with sandy habitable spots provided defence possibilities even until the Medieval times for the inhabitants. However, the climatic changes and the varying sediment discharge of the river changed the environment of site that is traceable in the archaeological finds. The archaeological investigation of the site started in the 1950-ies and became intensive by the 1990-ies involving large surface rescue excavations by the Somogy County Museum Directorate and, later on, systematical scientific excavations lead by the Hungar-

ian National Museum. The main objective was to study the Early Neolithic period, but not only from archaeological point of view but natural scientific investigations of the site have also been started in the prospection phase including extensive geophysical measurements on the core area of the site. We could adopt the results of the survey in later excavations as well and it also helped in the exact location of previous excavation units. During the recent excavations, essential amount of local sediments were collected and silted for scientific analysis (sedimentology, plant and animal remains). In order to analyse its immediate environment to study palinological evidence and soil samples systematical shallow drilling has been carried out.

The site area as seen today is a sandy peninsula inside the Kis-Balaton (Little Balaton) marshes. In the time of the prehistoric settlement it was probably an open lake-shore. The depth of the surrounding water could be 2-4 meters with eutrophic water. The rhythm of inhabited periods was in close relation to the water level of Lake Balaton. Former vegetation could be reconstructed and details of site formation established. The scientific elaboration of the excavations and the related natural historical samples was supported by the grant of OTKA (Hungarian Scientific Research Fund) project T-046297, 2004-2007.