

Ancient Egyptian glassmaking recreated

December 14 2007



The reconstructed kiln built by Dr. Paul Nicholson of Cardiff University and Dr. Caroline Jackson of Sheffield University. Credit: Cardiff University

A team led by a Cardiff University archaeologist has reconstructed a 3,000-year-old glass furnace, showing that Ancient Egyptian glassmaking methods were much more advanced than previously thought.

Dr Paul Nicholson, of the University's School of History and Archaeology, is leader of an Egypt Exploration Society team working on the earliest fully excavated glassmaking site in the world. The site, at Amarna, on the banks of the Nile, dates back to the reign of Akhanaten (1352 - 1336 B.C.), just a few years before the rule of Tutankhamun.

It was previously thought that the Ancient Egyptians may have imported their glass from the Near East at around this time. However, the

excavation team believes the evidence from Amarna shows they were making it themselves, possibly in a single stage operation. Dr Nicholson and his colleague Dr Caroline Jackson of Sheffield University demonstrated this was possible, using local sand to produce a glass ingot from their own experimental reconstruction of a furnace near the site.

The team have also discovered that the glassworks was part of an industrial complex which involved a number of other high temperature manufacturing processes. The site also contained a potter's workshop and facilities for making blue pigment and faience - a material used in amulets and architectural inlays. The site was near one of the main temples at Amarna and may have been used to produce materials in state buildings.

Dr Nicholson, who has been working at Amarna since 1983, said: "It has been argued that the Egyptians imported their glass and worked it into the artefacts that have been discovered from this time. I believe there is now enough evidence to show that skilled craftsmen could make their own glass and were probably involved in a range of other manufacturing industries as well."

Source: Cardiff University

Citation: Ancient Egyptian glassmaking recreated (2007, December 14) retrieved 26 April 2024 from <https://phys.org/news/2007-12-ancient-egyptian-glassmaking-recreated.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--