## EXPERIMENTAL ARCHEOLOGY: BRONZE AGE POTTERY PRODUCTION IN *TERRAMARE* (NORTHERN ITALY)

Y. Brodà -- A. Cardarelli -- V. Cannavò -- S.T. Levi -- G. Pellacani -- I. Pulini -- S. Marchetti Dori -- C. Zanasi

Università degli Studi di Modena e Reggio Emilia, Dipartimento di Scienze della Terra, L.go S.Eufemia 19, 41100 Modena, Italy

During the Middle and Recent Bronze age the Po Valley (Northern Italy) settlements are fortified villages called *terramare*. The *terramara* of Montale (Modena) has been recently excavated and is now an archaeological park with many experimental activities (www.parcomontale.it).

The pottery of Montale ond other sites of the same area has been classified in 11 phases (1600-1250 BC) and investigated with archaeometrical and technological analyses (PE, XRD, XRF, radiographies) in order to define the raw materials and the manufacturing techniques.

According the analytical results a new series of experiments has been conduced in the park of Montale, with a professional potter, to test the similarity between the composition and the technology of ancient pottery with the experimental reproductions.

Different shapes (bowls, cups, jars, pithoi) for each phase have been reproduced using the most compatible local clay, tempered with grog, the pots have been manufactured the traditional techniques (coils and moulds), and the firing has been performed in a kiln that reproduces an bronze age model.

All the production phases have been recorded and described focusing on tools, time and difficulty (technical and "artistic").

The results helps to define the manufacturing process of the different shapes (and decorations) in the various phases, and contribute to the discussion of the craft specialization.