

## An Environmentally Friendly Approach towards the Conservation of Vernacular Architecture

**Authors :** Maria Philokyprou, Aimilios Michael

**Abstract :** Contemporary theories of sustainability, concerning the natural and built environment, have recently introduced an environmental attitude towards the architectural design that, in turn, affects the practice of conservation and reuse of the existing building stock. This paper presents an environmentally friendly approach towards the conservation of vernacular architecture and it is based on the results of a research program which involved the investigation of sustainable design elements of traditional buildings in Cyprus. The research in question showed that Cypriot vernacular architecture gave more emphasis on cooling rather than heating strategies. Another notable finding of the investigation was the great importance given to courtyards as they enhance considerably, and in various ways, the microclimatic conditions of the immediate environment with favorable results throughout the year. Moreover, it was shown that the reduction in temperature fluctuation observed in the closed and semi-open spaces, compared to the respective temperature fluctuation of the external environment - due to the thermal inertia of the building envelope - helps towards the achievement of more comfortable living conditions within traditional dwellings. This paper concludes with a proposal of a sustainable approach towards the conservation of the existing environment and the introduction of new environmental criteria for the conservation of traditional buildings, beyond the aesthetic, morphological and structural ones that are generally applied.

**Keywords :** bioclimatic, conservation, environmental, traditional dwellings, vernacular architecture

**Conference Title :** ICSAUD 2015 : International Conference on Sustainable Architecture and Urban Design

**Conference Location :** Barcelona, Spain

**Conference Dates :** August 17-18, 2015