World Academy of Science, Engineering and Technology International Journal of Architectural and Environmental Engineering Vol:15, No:07, 2021

Shape-Changing Structure: A Prototype for the Study of a Dynamic and Modular Structure

Authors: Annarita Zarrillo

Abstract : This research is part of adaptive architecture, reflecting the evolution that the world of architectural design is going through. Today's architecture is no longer seen as a static system but, conversely, as a dynamic system that changes in response to the environment and the needs of users. One of the major forms of adaptivity is represented by kinetic structures. This study aims to underline the importance of experimentation on physical scale models for the study of dynamic structures and to present the case study of a modular kinetic structure designed through the use of parametric design software and created as a prototype in the laboratories of the Royal Danish Academy in Copenhagen.

Keywords: adaptive architecture, architectural application, kinetic structures, modular prototype **Conference Title:** ICADB 2021: International Conference on Adaptive and Dynamic Buildings

Conference Location: Copenhagen, Denmark

Conference Dates: July 19-20, 2021