Lessons from Nature: Defensive Designs for the Built Environment

Authors: Rebecca A. Deek

Abstract : There is evidence that erratic and extreme weather is becoming a common occurrence, and even predictions that this will become even more frequent and more severe. It also appears that the severity of earthquakes is intensifying. Some observers believe that human conduct has given reasons for such change; others attribute this to environmental and geological cycles. However, as some physicists, environmental scientists, politicians, and others continue to debate the connection between weather events, seismic activities, and climate change, other scientists, engineers, and urban planners are exploring how can our habitat become more responsive and resilient to such phenomena. There are a number of recent instances of nature's destructive events that provide basis for the development of defensive measures.

Keywords: biomimicry, natural disasters, protection of human lives, resilient infrastructures

Conference Title: ICSDCE 2015: International Conference on Sustainable Design and Construction Engineering

Conference Location: Copenhagen, Denmark

Conference Dates: June 11-12, 2015