Sustainability with Health: A Daylighting Approach

Authors : Mohamed Boubekri

Abstract : Daylight in general and sunlight in particular are vital to life on earth, and it is not difficult to believe that their absence fosters conditions that promote disease. Through photosynthesis and other processes, sunlight provides photochemical ingredients necessary for our lives. There are fundamental biological, hormonal, and physiological functions coordinated by cycles that are crucial to life for cells, plants, animals, and humans. Many plants and animals, including humans, develop abnormal behaviors when sunlight is absent because their diurnal cycle is disturbed. Building codes disregard this aspect of daylighting when promulgating windows for buildings. This paper discusses the health aspects of daylighting design.

Keywords : daylighting, health, sunlight, sleep, disorders, circadian rythm, cancer

Conference Title : ICUTS 2015 : International Conference on Urban Transformations and Sustainability

Conference Location : Istanbul, Türkiye

Conference Dates : March 23-24, 2015