The monitoring of TSP and PM10 in carpeted and non-carpeted rooms: Case study of Faculty of Environment and Resource Studies, Mahidol University

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Abstract

The comparison of air quality between carpeted and non-carpeted rooms at the Faculty of Environment and Resource Studies, Mahidol University among rooms carpeted over 5 years, less than 5 years and non-carpeted rooms was investigated. Air samples were collected at 3 different heights: 30, 80 and 160 centimeters above the floor. Samples were then measured for total suspended particulate (TSP) and particulate matter which has a diameter less than 10 μm (PM10). Equipment used in this study included the following: 1) personal air pump for collecting total suspended particulate (TSP) and 2) personal air pump with cyclone (cut-size unit) for collecting particulate matter which has diameter less than 10 μm (PM10). It was found that the amount of TSP and PM10 collected from rooms with carpet was less than the TSP and PM10 from non-carpeted rooms. It varies to the using time of carpet.

Keywords: TSP, PM10, carpeted room

Article history: Received 16 May 2016, Accepted 14 July 2016