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كتاب ملخص

الأوراق والمصقات العملية المقدمة في المؤتمر

Proceeding Book

Abstracts of Conference Papers and Poster



Saudi Scientific International Conference
المؤتمر العلمي السعودي الدولي

Investing in knowledge المعرفة في الاستثمار



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Abstract no.421: Daily Air Pollution Levels and Asthma; Exploring the Influence of Time-Activity Patterns on Exposure in Al Jubail Industrial City, Saudi Arabia

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Air pollution is a risk factor for adverse health effects, for example many studies have shown a link between air pollution exposure and hospital admissions for asthma. Many epidemiological studies have used outdoor concentrations to estimate human exposure. Personal exposure monitoring has become available over recent years thus allowing more precise exposure estimation covering both outdoor and indoor exposures but so far there is no such evidence from Saudi Arabia. This study will assess the link between exposure to air pollution and asthma hospital visits in the industrial city of Al Jubail and will identify factors that influence personal exposure.

Abstract no. 27: Exploring the Influence of Time-Activity Patterns on Personal Exposure to PM_{2.5} in different microenvironments in Al Jubail Industrial City, Saudi Arabia

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There is robust scientific evidence showing that exposure to air pollutants is associated with both acute and chronic health effects (WHO, 2008). There is evidence that exposure to air pollution can aggravate symptoms in asthmatic patients. Some of these studies have evaluated the short-term effects of particulate matter on asthma attacks and emergency department visits. Many epidemiological studies have used outdoor concentrations of air pollutants as a surrogate for human exposure (Avery et al., 2010). A common feature of such studies is their reliance on ambient fixed-site measurement stations. . In recent years the technology has improved in that personal monitoring to cover both indoor and outdoor environments in detail have become available. Little is known about the relationship between personal or indoor and outdoor air pollutants concentrations in developing countries, especially in the Middle East countries. To the best of our knowledge, no study of this kind has been conducted in an industrial city in Saudi Arabia. This study will investigate the association between exposure to air pollution and asthma hospital visits and identify factors that influence personal exposure in Al Jubail Industrial City. Such a study will fill important gaps in our understanding of the influence of time activity patterns and microenvironments on personal exposure in this setting.