

**A COMPARISON OF INDOOR AND OUTDOOR CARBON MONOXIDE  
CONCENTRATION LEVELS AT A PUBLIC SCHOOL IN ATHENS.  
APPLICATION OF A STATISTICAL PREDICTION TOOL**

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**ABSTRACT**

Transport is a major source of air pollution in cities and therefore special attention is given to traffic pollutants, such as carbon monoxide (CO). In the experiments described in this paper, simultaneous measurements of indoor and outdoor carbon monoxide (CO) concentrations were conducted at a public school in Athens, using a properly modified Non-Dispersive Infrared Analyzer (NDIR). The concentration measurements described in this paper were conducted in winter and are compared with concentrations measured at the same site during summer (Haloulakou *et al*, 2000). Concentration time series follow similar trends in the two seasons, but in general higher concentration levels are observed in winter, both indoors and outdoors. Indoor concentration levels were correlated with outdoor concentrations and meteorological parameters. One of the most attractive features of simple regression relations is that the user may supply as input data to these relations outdoor concentrations and meteorological data recorded at the nearest fixed outdoor monitoring site.