## C426231 : MAJOR ENVIRONMENTAL SCIENCE
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VASIN MAHATNIRUNKUL : FACTORS AFFECTING CONCENTRATIONS OF SUSPENDED PARTICULATE MATTER AND LEAD IN BANGKOK ATMOSPHERE. THESIS ADVISOR: SANGSANT PANICH, Ph.D. 82 pp. ISBN 974-583-420-3

This study analyzed the air quality monitoring data for the year 1985-1990 , of Office of the National Environment Board (presently Pollution Control Department).The correlation coefficients of concentrations of suspended particulate matter (SPM) and lead near roadside are found to be higher than those found in off-street locations at 0.6858 and 0.2103 respectively. The factors affecting concentrations of lead in ambient air are SPM concentration, humidity, gasoline consumption, year, windspeed and working day, which yield multiple correlation coefficient of 0.353. The factors affecting concentration of lead near roadside are SPM concentration, humidity, windspeed and working day, which yield multiple correlation coefficient of 0.708. The main component of SPM in Bangkok's atmosphere was found to be elemental carbon ( 22% in ambient air samples and 46% in roadside air samples).