

## COMPARISON AMONG MEASUREMENT INSTRUMENTS OF SUSPENDED PARTICLES ACCORDING TO METEOROLOGICAL PARAMETERS

D. Kim<sup>1</sup>, W. Yang<sup>2</sup>

<sup>1</sup>*Environmental Science, University of Daegu, Kyongsan, Korea*

<sup>2</sup>*Occupational Health, University of Daegu, Kyongsan, Korea*

This study was carried out to evaluate the concentrations of suspended particles among measurement instruments with different flow rate by weather condition such as temperature, humidity, wind direction and wind velocity during 6 months in 2003. Measurements instruments was low-volume air sampler with cyclone (Kimoto Electric Co., LTD) for PM10 with 440 L/min, MiniVol portable sampler (Airmetrics) for PM2.5 and PM10 with 5 L/min, PEM (personal environmental monitor, SKC Inc.) for PM2.5 with 2L/min, and Cyclone(SKC Inc.) for cut-off 3.5 with 2.5 L/min. Instruments used in this study showed the similar concentration trend of suspended particle except cyclone for cut-off 3.5. Mean concentration by Cyclone for cut-off 3.5 was significantly higher than those of others ( $0 < 0.05$ ). This difference caused to be wind velocity among meteorological parameters.