

Fine particles problem in Korea

Yong Pyo Kim¹

¹Department of Chemical Engineering and Materials Science, Ewha Womans University, Republic of Korea
Email: yong@ewha.ac.kr

Keywords: PM2.5, Chemical pathways, Emissions, Transport from outside, Effective communication

The Korean Government has paid special attention on improving the air quality in Korea but still most citizens are not satisfied with the government action. Unlike PM10, a major fraction of the PM2.5 mass is generated in the atmosphere via chemical reactions. Thus, to develop effective control strategies against PM2.5, it is necessary (1) to understand the major chemical pathways of generating PM2.5, (2) to validate the emission inventories and ambient levels of precursor species, (3) to quantify the effect of the transport of PM2.5 from outside to the SMA, and (4) to communicate citizens and stakeholders effectively.

In this presentation, the trends of the air pollutants' concentrations are shown, the air quality management plans or policies carried out have been reviewed, and current understanding of the state of the air quality are presented to partially answer these questions. For example, the annual mean concentrations of PM10 and PM2.5 have decreased steadily since the early 2000s as shown in Fig. 1.

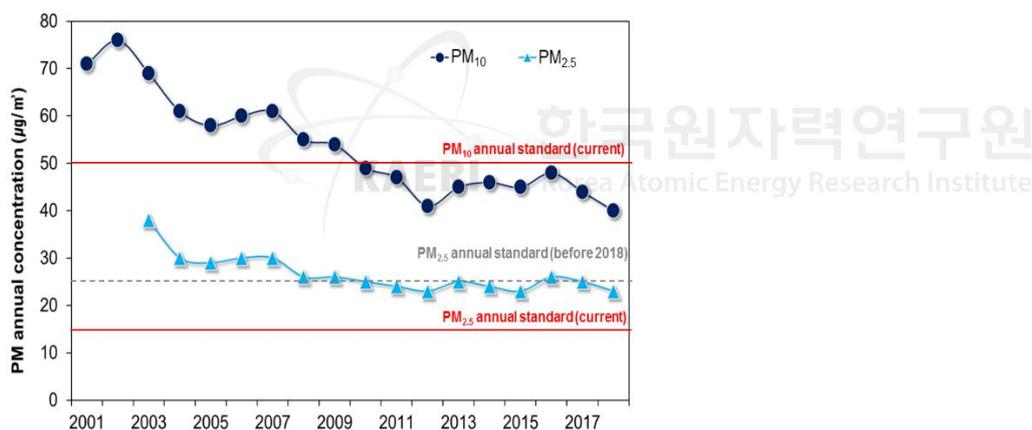


Fig. 1. Variation of the PM10 and PM2.5 annual mean concentrations in Seoul.

