

## **Evaluating effects of elemental composition in atmospheric particles on measured value of the developed black carbon monitor**

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### **Abstract**

It is well known that measured value of a black carbon monitor with optical technique is affected elemental composition in atmospheric particles. Consequently, in order to evaluating effects of elemental composition in atmospheric particles on the measured value of the developed black carbon monitor, we performed that 1) elemental composition of atmosphere particle sample collected with the developed black carbon monitor was analyzed by PIXE method, and 2) comparisons were made between the measured value and elemental carbon value by thermal-optical method. As a result, the measured value of the developed black carbon monitor was not affected elemental composition in atmospheric particles, and the measured value was measured in high accuracy.