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# 서울地域의 酸性降雨現象에 關한 硏究

環境調査科

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# Studies on the Present State of Acid Precipitation in Seoul Area

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**=Abstract=**

This study was carried out to investigate the phenomena of acid precipitation.

The pH value, electro conductivity, cations (Sodium, Potassium, Ammonium) and anions (Sulfate, Nitrate, Chloride) were measured by automatic acid rain monitor, Ion chromatography at 5 points in Seoul area from Jan. to Dec. 1989.

1. The range of pH value in measured area was 4.40~4.75 and reginal intensity of that was Sungsu (4.40)>Bangi (4.58)>Kuro (4.62)>Hannam (4.74)>Ssangmun (4.75) respectively.
2. The occupancy rate of below the pH 4.0 (in a year) was 69% in Sungsu 63% in Kuro, 63% Bangi, 63% in Ssangmun and 40% in Hannam.
3. The electro conductivity in precipitation was showed high in Winter and low in Summer.
4. The annual average of sulfate was showed more highly in Spring 10.33 mg/l than other seasons in reginal comparison the highest was 14.23 mg/l in Sungsu and the lowest was 5.66 mg/l in Kuro.
5. In analysis of nitrate, the highest average value was 2.6 mg/l in Sungsu and the lowest value was 1.61 mg/l in Kuro, the annual average of chloride was 4.42±3.15 mg/l.
6. In analysis of occupancy rate of each ion in precipitation, the anions were showed sulfate (52.2%)>chloride (32.7%)>nitrate (15.1%) and the cations were showed potassium (50.9%) ammonium (39.2%)>sodium (9.9%) respectively.
7. In correlation analysis between pH and measured components sulfate and conductivity were showed negative correlation in total precipitation with pH.

## 緖 論

産業發展은 우리의 生活水準을 向上시켜 온 反面에 우리가 共有하고 있는 環境을 汚染시키는 逆機能을 同時에 擴散增大시키고 있다. 現在 全世界的으로 問題視되고 있는 酸性雨의 主汚染源은 $SO_2$로써 人工排出量은 유럽 34.8 $TgSy^{-1}$(全世界 48.8%), 北美 19.1 $TgSy^{-1}$(全世