

عنوان مقاله:

Seasonal Variations and Sources of Heavy Metals in Free Fall Dust in an Industrial City of Western India

محل انتشار:

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نویسندگان: Meena Marju - Department of Chemistry, Government College, Kota- ۳۲۴۰۰۱, Rajasthan, India

Meena Bharat Singh - Department of Chemistry, Government College, Kota- ٣٢٢-0-1, Rajasthan, India

Chandrawat Utra - Department of Chemistry, Government College, Kota- PYFool, Rajasthan, India

Rani Ashu - Department of Pure and Applied Chemistry, University of Kota, Kota-FYF.O.D., Rajasthan, India

خلاصه مقاله:

This study investigates seasonal variations in average concentrations of metals in free fall dustsamples (350) collected at various sampling sites situated in five different zones of an industrial city Kota, India.Average concentrations of heavy metals (Cu, Cd, Zn and Pb) were higher in winter and lower in summer andreverse trend was observed for crustal metals (Fe, Ca and Mg). Overall, the order of average concentrations ofheavy metals were Zn >Pb> Cu > Cd in both seasons. Seasonal differences in metal concentrations were due to differences in wind direction, wind strength, temperature, relative humidity and anthropogenic activities atsampling sites. Enrichment factor and positive correlation between anthropogenic metal species such as Cu andCd; Cu and Zn; Cu and Pb; Cd and Zn; Cd and Pb; Zn and Pb in both seasons indicate that their origin sourceiscommon i.e. coal combustion at thermal power .station

کلمات کلیدی:

Free fall dust Heavy metals Wind direction Enrichment coefficients Thermal power station Correlation coefficients

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