

Summary

Ambient concentrations of 16 polycyclic aromatic hydrocarbons (PAHs), adsorbed on particles of PM_{2.5}, were measured at 4 points located in Silesia and Małopolska Regions during 2004 through 2005 period. The fine dust was collected on filters at locations representing conditions of urban background, communication artery and industrial area. Distinctive differences between heating and summer season PAH concentrations were observed. The highest PM_{2.5} related PAH concentrations were observed in Krakow, within the effect of industrial and traffic sources, equally in summer and heating seasons. For selected cities, relations between the particular PM_{2.5} related PAHs were determined.

The results show that contamination of the investigated PM_{2.5} with PAHs is considerable and comparable with that in other areas of similar degree of urbanization and industrialization.