STRUCTURE OF ATMOSPHERIC AEROSOL IN THE UPPER SILESIAN AGGLOMERATION (POLAND) – CONTRIBUTION OF PM2.5 TO PM10 IN ZABRZE, KATOWICE AND CZĘSTOCHOWA IN 2005–2007

KRZYSZTOF KLEJNOWSKI, WIOLETTA ROGULA-KOZŁOWSKA, ANDRZEJ KRASA

Abstract: The PM2.5/PM10 ratio expresses the anthropogenic share in atmospheric dust. Very high values of this ratio, i.e. high contribution of PM2.5 to PM10, have occurred recently in atmospheric air within European industrialized areas. The paper compiles results of three year pair wise measuring of concentrations of PM2.5 and PM2.5–10 and compares shares of PM2.5 in PM10 at three urban background sites in Upper Silesia Poland (towns of Zabrze, Katowice and Częstochowa). At all the three locations, the PM2.5/PM10 ratio of daily concentrations of dust only occasionally differed considerably from the PM2.5/PM10 ratios for the seasonal and yearly concentrations that, in turn, did not differ from the PM2.5/PM10 ratios at urban sites in Europe.