ASSESSMENT OF AIR QUALITY IN THE URBAN ZONE OF ŠABAC, SERBIA, BASED ON THE ANALYSIS OF SNOW

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Abstract: The aim of this work is to give assessment of air quality in city environment, based on the physical and chemical properties of snow. During January 2017, snow was collected at urban area of Šabac, Serbia. Snow was sampled at four locations in the Šabac, right after the formation of snow cover. In addition, a snow from one location 10 km far from the city in the uninhabited area was also sampled. Electrical conductivity, pH, dry residue, content of organic matter and concentration of chemical species (SO_4^2 , NO_3^2 , NO_2^2 , NH_4^+) were analyzed in snow samples. Comparison of the results obtained in the samples taken in the city with the values measured in the sample of snow from the uninhabited area showed that air quality in the city does not differ significantly from the air quality in the uninhabited area.

Keywords: snow chemistry, Šabac-Serbia, air pollution