

## EMISIE A IMISIE ZNEČIŠŤUJÚCICH LÁTOK Z PREVÁDZKY ATÓMOVÉHO ABSORPČNÉHO SPEKTROMETRA A PRÍPRAVNÝCH ZARIADENÍ

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### ABSTRACT

Blaho J., Ladomerský J., Lalík V., Mikulášová R. & Hrols J.: **Emissions and ground-level concentrations of polluting agents from atomic absorption spectrometer AAS and its auxiliary equipment running**

During preparation of the samples for analysis and also during the analysis itself by the AAS method gaseous and aerosol pollutants arise and can pollute free working environment. During the preparation mineralization of the samples is carried out and for this process nitric acid or hydrochloric acid, sometimes both, are used. For the ashing microwave heating is applied. A mineralizer is installed in a fume cupboard with the air exhaustion into free environment. An AAS device has a separate exhaustor of flue gas into free environment. There are tabulated excessive emission values of such pollutants as NO<sub>2</sub>, NO, HCl, Cu, Pb, Ni, Sn, CO, CO<sub>2</sub> that are occurred in gases escaping into free environment during the samples of bearing metal analysis. The measurement and analysis results show that if we keep all the projected parameters (the height of exhaust plants and the exhaust polluted air current) in accordance with the legislation. the acceptable values of emissions and