

An Evaluation of Air Pollutant Concentrations in Győr, Hungary

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Abstract : The purpose of this study was to evaluate the concentration levels of common inorganic gases, benzene and particulate matter (PM₁₀ and PM_{2.5}) in ambient air of Győr (Hungary) based on the latest published monitoring data. The concentrations of PM₁₀-bound heavy metals (Pb, Cd, As and Ni) and some polycyclic aromatic hydrocarbons (PAHs) were also assessed. The levels of pollutants were compared with the Hungarian and EU limit or target values defined for health protection and the WHO air quality guidelines (AQGs) or estimated reference levels. Based on the Hungarian or the EU air quality standards and using the Hungarian Air Quality Index it was found that mainly an excellent (SO₂, CO, C₆H₆, heavy metals) or good (NO₂, O₃, PM₁₀, PM_{2.5}, benzo(a)pyrene (BaP)) air quality was observed in the urban area of Győr for the year 2016. The annual mean pollutant concentrations (excluding BaP) were not exceeded or just reached the WHO AQGs or reference levels.

Keywords : aerosols, air pollutant, air quality, health protection

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