Anthropogenic factors of atmosphere pollution

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The increasing of anthropogenic aerosols’ emission has become particularly noticeable since the mid XX century, which negatively has impacted at ecosystems and human health. Therefore, precise forecast of anthropogenic factors causing climate change produced negative results has high importance. In presented manuscript, the dynamic of anthropogenic origination aerosols and their spatially-temporal distribution, also the negative influence of meteorological factors (cloudiness, humidity, temperature, wind) at their propagation and concentration in complicated conditions of relief and climate of Georgia is discussed. The main sources of manmade “Greenhouse gases” emission in cities and regions of Georgia, during 1990-2010y., from different sectors of economic activity (energetic and agriculture etc.) is determined. The vehicles emission’ dynamic is separately assessed. It is defined that 88% of manmade pollution on Georgian territory is caused by vehicles. Total contaminants concentration in industrial cities more than 10 times exceeds the MPC. On the basis of carried out research, the correlation between the pollution’ rate and meteorological conditions is revealed. It is determined that besides contaminants type and their capacity, the ecological conditions of atmosphere, also depends on orography and meteorological situation of area, that caused microclimate change.

Biography

Lamzira Lagidze is Associate Professor of Iv. Javakhishvili Tbilisi State University (TSU), Faculty of Exact & Natural Sciences, Department of Hydrometeorology; Department of Atmosphere Ecology in the Institute of Applied Ecology at TSU, Head of Department. She has completed her PhD in Radio-Meteorology from TSU in 1985. She has published over 70 papers (some of them in reputed peer-reviewed journals).

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