
**Abstract:** Aldehydes are organic compounds widely present in natural environment. The studies performed demonstrated that total content of aldehydes washed out from the troposphere by precipitation may amount to 2800 mg/m³. The average aldehyde content in surface waters was a few times lower than in rainwater. However, during thermal stratification season (spring and summer) aldehyde concentration in the metalimnion of lakes significantly increased. A significant increase in concentration of nonanal and decanal in surface waters was recorded during plant vegetation period. Formaldehyde, acetaldehyde, propanal, glyoxal, and methylglyoxal were found to be the most frequently identified aldehydes in aqueous environment.

**Keywords:** Water quality, carbonyl compounds, total organic carbon, precipitation.