

This work focuses on optimization and application of voltammetric methods for determination of 5-nitroquinoline in model samples of drinking and river water using carbon film electrode (CFE).

The advantages of carbon film electrode are primarily its wide potential window in both cathodic and anodic regions and also low environmental stress compared to mercury electrodes.

In this contribution, CV and AdSV were used to observe electrochemical processes. For determination of 5-nitroquinoline DPV and FIA were used. Solid phase extraction was investigated as a method for preliminary separation and preconcentration for DPV. Determination of 5-nitroquinoline at CFE is based on cathodic reduction of nitrogroup. This work demonstrates the application of carbon film electrode for determination of 5-nitroquinoline in submicromolar concentrations in model samples of water.