

Abstract:

A method for analysing benzophenone-3 on carbon paste electrode was developed. As a solvent a mixture Britton-Robinson buffer and methanol was used. The pH value of 12 was determined as optimal for further measurements. It was also found out that methanol added to the analyte solution did not negatively influence the voltammetric measurement. To decrease the limit of benzophenone-3 determination the accumulation of the analyte in the electrode surface was studied. The accumulation time of 300 seconds and accumulation potential of +400 mV were used as optimal.

When measured under optimal conditions the limit of detection was 6×10^{-7} M in deionised water and $5,5 \times 10^{-7}$ M in drinking water.

Real sample was measured using differential pulse voltammetry and spectrophotometry.