Abstract:

This thesis was dedicated to the possibility of replacing glassy carbon electrode using cheaper composite carbon rod with carbon coating applied onto its surface and to the consequences of adding a modifier to the electrode material.

To understand the effects of having pasting liquid contained in carbon paste electrode on substance accumulation, partitioning coefficient of mineral oil/water compound was experimentally determined for 2NP, 4NP, 24DNP and 24TNP.

Adsorption coefficient was experimentally determined to find out sorption possibilities of 2NP and 4NP on MMT.

Surface of the carbon coating was imaged using scanning electron microscope to find out distribution of MMT and polystyrene in said carbon coating.

A method for accumulating 2-nitrophenol and 4-nitrophenol on montmorillonite-modified carbon coating was successfully developed