

## **Polarographic and Voltammetric Studies of Selol a Seleninoglyceride Compound**

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The UV and VIS spectra recorded for the extract of Selol 1% calculated as Se(IV) and polarographic studies showed that organoselenium(IV) compound Selol can be extracted into dimethylsulfoxide. Maximum of absorption was observed in UV at wavelength 273 and 285 nm. Electroactivity of Selol in different supporting electrolytes was examined by means of differential pulse polarography and cyclic voltammetry at a controlled growth mercury drop electrode, electrodes – platinum and glassy carbon. The best defined and the most reproducible curves were obtained in 0.1 mol l<sup>-1</sup> NaClO<sub>4</sub> in dimethylsulfoxide. In this solution, at the mercury electrode, three cathodic peaks at potentials: -0.69 V, -0.84 V and -1.16 V were observed. In the case of cyclic voltammetry, one cathodic peak at potential -0.75 V (platinum electrode) or -0.58 V (glassy carbon electrode) occurred. Under the same conditions, Se (IV) was reduced in one step at either -1.11 V (differential pulse polarography) or -0.57 V (cyclic voltammetry on glassy carbon electrode). The spectroscopic and electrochemical results of studies of 1% Selol suggest that it is possible to use the proposed methods for analytical examinations.

Selol (1% w przeliczeniu na selen(IV)) ekstrahowano za pomocą dimetylosulfotlenku. Widma UV i VIS ekstraktu wykazują maksima absorpcji przy 273 i 285 nm. Metodą polarografii impulsowej różnicowej oraz woltamperometrii cyklicznej na elektrodzie rtęciowej o kontrolowanym wzroście kropli oraz na elektrodach dyskowych – platynowej i z węgla szklanego, zbadano elektroaktywność Selolu w różnych elektrolitach podstawowych. Najlepiej ukształtowane i powtarzalne krzywe uzyskano w 0,1 mol l<sup>-1</sup>

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