STUDI OPTIMASI PENENTUAN Cu(II)
DENGAN MENGGUNAKAN KALKON SEBAGAI PENGOMPLEK
SECARA VOLTAMMETRI STRIPPING ADSORPTIF (AdSV)

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ABSTRACT

The research about determination of Cu(II) by adsorptive stripping voltammetry (AdSV) was conducted. AdSV method was applied to the determination of copper in ultra trace concentration. The parameters of ligand, accumulation potential, accumulation time, pH and ligand concentration was studied. Calcon was found as complexing agent that give the highest peak current. The optimum condition are accumulation potential -0,7 V, accumulation time 60 s, pH 10, and calcon concentration 0.12 mM. The relative standar deviation (n=8) at 10 µg/L standard concentration were obtained 4,27 %. This method was applied to determination of Cu(II) in sample from Batang Air Dingin, Lubuk Minturun and Muara Padang. The sample concentration were 4,778 µg/L and 5,189 µg/L for Batang Air Dingin and Muara Padang, respectively. The recovery of this method was studied for sample from Muara Padang and 98,31 % was obtained.

Key words :   *Adsorptive, Stripping, Voltammetry, Calcon and Copper*

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