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DEVELOPMENT OF A SENSOR TO DETECT LEAD (II) IN WATER USING AMMONIUM SALT OF DIETHANOLDITHIOCARBAMATE

A PROJECT REPORT PRESENTED BY

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DEVELOPMENT OF SONSOER TO DETECT LEAD (11) IN WATER USING A LIGAND

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ABSTRACT

Pb(II) is a general metabolic poison which causes damage to central nervous system, Kidney and affect reproductive system either with chronic or acute toxicity. It is a common pollutant in several industrial, laboratory and domestic discharges. Determination of lead(II) in water at sub micro level using conventional methods is difficult in country like Sri Lanka due to high cost of instrumentation. Recently developed methods that are adapted for this purpose depend entirely upon stripping voltammetry. This requires a preconcentration on to the working electrode prior to the direct or indirect determination by means of an electroanalytical techniques. In this study an a Ammonium salt of diethanoldithiocarbamate used as cyclic voltammetric sensor which has shown a good selectivity and sensitivity at sub –micro level concentration range in the detection of Pb(II).