CSHER

ELECTROCHEMICAL DETECTION OF CHROMIUM (VI)

A PROJECT REPORT PRESENTED

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to the

POSTGRADUATE INSTITUTE OF SCIENCE

In partial fulfillment of the requirement for the award of the Degree of

MASTER OF SCIENCE

of the

UNIVERSITY OF PERADENIYA SRI LANKA

September 1999

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ABSTRACT

Cr (VI) is a proven carcinogen causing lung cancer, and is a common pollutant in several industrial and laboratory discharges. The conventional methods used for the determination of Cr (VI) fail at trace levels. Recently developed methods that are adapted for this purpose depend entirely upon stripping voltammetry. This requires a Pre-concentration step followed by electrochemical detection. Diphenyl carbazide, as a cyclic voltammetric sensor, has shown a good selectivity and sensitivity at sub-micromolar concentration range in the detection of Cr (VI).