

A DISSERTATION SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE
DEGREE OF MASTER OF SCIENCE IN
ANALYTICAL CHEMISTRY

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ABSTRACT

In this study an attempt was made to obtain electrolytic iron powder from the waste pickle liquor through an electro-chemical process. The pickling agents used were hydrochloric acid and sulphuric acid.

Different electrode systems were tried and a suitable set of electrodes were selected. The optimum conditions such as cell voltage, temperature, addition of salts, rotation of electrodes were studied in order to obtain maximum current efficiency.

These conditions were applied in the study of extraction of iron powder from Dala iron ore (Ratnapura area)-