

C  
540  
FA3

**REMOVAL OF IRON FROM RUBBER FACTORY EFFLUENT  
USING DRIED SALVINIA PLANT MATERIAL**

**A PROJECT REPORT PRESENTED BY**

**U.M. FAZEEL**

to the Board of study in Chemical Sciences

of the

**POST GRADUATE INSTITUTE OF SCIENCE**

*in partial fulfilment of the requirement  
for the award of the degree of*

**MASTER OF SCIENCE IN INDUSTRIAL CHEMISTRY**

of the

**UNIVERSITY OF PERADENIYA**

**SRI LANKA**

**2004**

**580451**

## ABSTRACT

The new developments in industrial technology are constantly intensifying environmental pollution problems and creating new ones. Environmental scientists are forever seeking more economical methods of preserving the environment, consequently research is continuously underway to find answers to pollution problems, in particular pollution due to heavy metals including essential elements like iron, as they directly affect the human health. Iron can be effectively removed from aqueous solution using dried salvinia plant material packed columns. This methodology can be successfully utilized for treatment of iron rich effluents and consequently, the amount of iron after treatments falls below the maximum permissible level. The efficiency of iron removal through columns packed with dried salvinia plant material demonstrate an alternative method of iron removal compared to existing chemical methods. Environment friendliness, ready availability and low cost are other attractive features to these columns.

