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**STUDIES OF MAGNETIC FILTRATION TECHNIQUES  
TO PURIFY POTABLE WATER  
AND WASTE WATER**

A project report

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in

Information and Telecommunications Engineering

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TO MY PARENTS:

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## **ABSTRACT**

The effects of Electromagnetism on potable water and waste water has been proven in practice but not scientifically proven to the extent that it is accepted by Engineers and Engineering Consultants. The operating principle of magnetic filtration or separation is based on the interaction of electromagnetic fields with the materials under test. Technical water system (TWS) system configuration has been analysed to determine the system characteristics. Three field trials and some laboratory experiments have been reported in this report. Finite element software has been used for the analysis of magnetic field distribution of the TWS system and also for magnetic separation modelling. There is a need to do some more experiments for more convincing and conclusive outcome.

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