i

377.04

APPLICATION OF PHYSICO CHEMICAL PRINCIPLES IN INDUSTRIAL CHEMISTRY

A PROJECT REPORT PRESENTED

BY

M.LM. MUKARRAM

to the

Board of Studies in Science Education of the

POST GRADUATE INSTITUTE OF SCIENCE

In partial fulfilment of the requirement for the award the degree for

MASTER OF SCIENCE IN SCIENCE EDUCATION

Of the

UNIVERSITY OF PERADENIYA PERADENIYA

SRI LANKA

2008



620217

ABSTRACT

APPLICATION OF PHYSICO CHEMICAL PRINCIPLES IN INDUSTRIAL CHEMISTRY

M.LM. Mukarram

POST GRADUATE INSTITUTE OF SCIENCE

UNIVERSITY OF PERADENIYA PERADENIYA

SRILANKA

Students learn lot of chemical principles in their school life. They are not aware of the situations where these chemical principles are practically utilized. In order to learn meaningfully, students should know how the learned principles are utilized or can be used in the real life. In addition, students should have an ability to materialize and relate the learned concepts.

Analysis of recent advanced level Chemistry exam papers indicates that questions were prepared on the basis of relating concepts found in various units in chemistry syllabus. Earlier this concept was not practised. Units were considered mostly as a separate component. Furthermore, questions were asked based on the real world objects and events. Nowadays students face difficulties in understanding the questions and also answering the questions. Mainly a diagnostic test was administrated to find student's difficulties. Results of this research clearly indicate that the student's learning difficulties are due to lack of making relationship among the concepts and principles and their poor applications. Eventually, the result highlights the necessity of proper guidance towards the students as well as the teachers.