

C
540
PEIRIS

**A STUDY TO PREPARE A WORKBOOK
FOR THE SELECTED SUB UNITS OF BASIC CONCEPTS
IN THE ADVANCED LEVEL CHEMISTRY SYLLABUS**

A PROJECT REPORT PRESENTED

**BY
K.S.K. PEIRIS**

to the

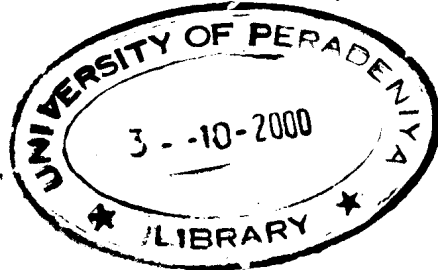
POSTGRADUATE INSTITUTE OF SCIENCE

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

**MASTER OF SCIENCE
of the
UNIVERSITY OF PERADENIYA
SRI LANKA**

December 1999

531607



The research study which is 'A Study to Prepare a Workbook for the Selected Sub Units of Basic Concepts in the Advanced Level Chemistry Syllabus' is done by K.S.K. Peiris as a partial fulfillment of the Master of Science Degree programme conducted by the Post Graduate Institute of Science, University of Peradeniya, Sri Lanka.

In this study the contents and characteristics of a workbook in chemistry is listed specifically, and also the strategies needed to prepare a successful work book is presented along with the instruments needed to evaluate the workbook.

In the first chapter, the importance of the study was stated. Then the operational definition of a 'workbook' and the conceptual framework for the study were discussed.

In the second chapter literature reference was done so as to carry out the research successfully. In this chapter literature about workbooks, unit planning, evaluation of a workbook and also the G.C.E. (A/L) syllabus were discussed.

In the third chapter preparation of research instruments were presented. For the pilot study 12 chemistry teachers and 35 students were participated. For the principal research study six chemistry teachers from three schools and 409 students were participated, in which 205 students belong to the experimental group whereas

the other 204 to the control group, In this chapter presentation and analysis of data were also examined.

In the fourth chapter data analysis was done and for that percentages, context analysis, index computations and variance analysis were used. All the interpretation were also done in this chapter.

In the fifth chapter answers to the all research questions were presented logically, with the light of analysis and the interpretations done in the previous chapter. This chapter was concluded presenting a research based valuable suggestion to improve the achievement level in chemistry along with clues for further research.