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**STUDY ON DIFFICULT AREAS OF G.C.E. ADVANCED LEVEL  
MOLECULAR GENETICS AND PREPARATION OF  
SUPPLEMENTARY STUDY MATERIAL.**

A PROJECT REPORT PRESENTED BY

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To the Board of Study in Science Education of the  
**POST GRADUATE INSTITUTE OF SCIENCE**

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

**MASTER OF SCIENCE IN SCIENCE EDUCATION**

of the

**UNIVERSITY OF PERADENIYA**

**SRI LANKA**

**2005**

**591004**

## Abstract

**STUDY ON DIFFICULT AREAS OF G.C.E ADVANCED LEVEL  
MOLECULAR GENETICS AND PREPARATION OF  
SUPPLEMENTARY STUDY MATERIAL**

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According to the new education reforms the new subject area of molecular genetics for the G.C.E Advanced Level was introduced under the biology subject in 1998. After introducing the new subject materials students and teachers faced some difficulties in teaching and learning process of molecular genetics. Among these difficulties was the finding of appropriate study materials. The main objective of this research was to prepare a supplementary study material for molecular genetics. In order to achieve this objective a survey was conducted to find the needs of the study material, required subject content and the presentation strategies of the supplementary book. The survey was launched in schools of North Western province. Questionnaires and structured interview were used to collect the data. Four hundred students who study biology and forty teachers who teach biology were selected for questionnaires and twenty teachers who teach biology were selected for structured interview. Tables and graphs were used to present and analyze the data. All the statements and the questions were analyzed individually. It was concluded from the survey that the students and the teachers needed the supplementary study materials to study and teach molecular genetics. The content and the presentation strategy of study material were planned according to the analyzed data. CD copies of the study material were distributed among five biology students and five biology teachers. A questionnaire was used to evaluate the usefulness of the study material. The supplementary book and the questionnaires are included in the appendix.