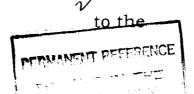
A SELF STUDY GUIDE: TO UNDERSTAND THE BERNOULLI'S EQUATION AND ITS APPLICATION

A PROJECT REPORT PRESENTED
BY

P.K. AGALAWATTE



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

March 2000

ABSTRACT

A new syllabus for the teaching of science for the advanced level students has been introduced from the year 1995. Under the new syllabus several new sections have been introduced in the physics subject.

The modern concept in education is to guide the students to seek knowledge rather than teach them. It is a student centered education approach. Under this system students would need simple, easy to understand learning materials for self-learning.

Bernoulli's equation has been introduced as a part of the Mechanics section of the physics subject. The main objective of this self study guide is to make the students understand the Bernoulli's equation easily, learn its application to understand some of the phenomena commonly seen in day to day life and to improve problem solving skills of students. To enable students to understand the Bernoulli's equation, the conditions under which it is applied in its applications the topic is broken into a series of short and simple steps. These steps are arranged in a sequential order for any one to follow them easily.

Examples, problems, and questions, relevant to each section are given in order to facilitate comprehensive learning. Questions, which have been included at the end or beginning of each section, have to be answered before proceeding further and this serves as a method for self-evaluation as well. The correct answers are given, to assist with the self-evaluation.