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NEW APPROACHES IN TEACHING CHEMICAL KINETICS

A PROJECT REPORT PRESENTED BY

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ABSTRACT

Title : New approaches in teaching Chemical kinetics
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Summary :

In this project report, new approaches for teaching introductory chemical kinetics in Sri Lanka is discussed. Integration of life-experiences, different types of teaching methodology and analogies are used to explain the concepts of chemical kinetics for beginners.

In addition, colourful experiments to illustrate kinetic concepts are presented. In experiment-I, decolouration of methylene blue by vitamin-C is used to investigate the factors affecting the rate of a reaction. In experiment-II, catalytic effect of electrolytes on the reaction between magnesium and water is studied using phenolphthalein as the indicator. In experiment-III The *Blue bottle* experiment is used to explain the concepts of reaction intermediates and mechanism of a reaction.

All three experiments can be carried out at relatively low cost without the use of expensive instruments. All experiments discussed, can be carried out to produce results of a desirable degree of accuracy varying from semi-quantitative to research level. Hence these experiments may even be used at undergraduate level.