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## EVOLUTION OF ORGANIC CHEMISTRY CONTENT IN SRI LANKAN SCHOOLS WITH SPECIAL REFERENCE TO ADVANCED LEVEL SYLLABUS

#### A PROJECT REPORT PRESENTED BY

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## EVOLUTION OF ORGANIC CHEMISTRY TEACHING IN SRI LANKAN SCHOOLS WITH SPECIAL REFERENCE TO ADVANCED LEVEL CLASSES

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Evolution of Organic Chemistry teaching in Sri Lanka in the Advanced Level Classes has been gradual. Science subjects were introduced into the school curriculum by the end of the nineteenth century. Chemistry is the most important subject in Science education. In the Advanced Level syllabus Organic Chemistry is a major section. Organic Chemistry pervades the entire environment and a solid foundation is necessary to master the subject.

The main objective of this research is to determine the changes in Organic Chemistry content of the Advanced Level syllabus. Specific objectives are to preserve documents such as syllabi and examination papers that would otherwise be lost; to provide information to those engaged in the teaching of Organic Chemistry; to present suggestions for further improvement in the syllabi and methodology of this subject. This research deals with data that already exist. The following sources were used to gather information viz documents such as syllabi, books, past papers, reports, sessional papers and theses. A questionnaire was prepared to obtain further information and post informal interviews were held to clarify the ideas presented.

The Organic Chemistry syllabus was unchanged from 1950 to 1976 but it was reduced after 1976. Though the content was enlarged in 1979 it was lesser than in 1950s. A few changes were identified in 1995 and this syllabus was used up to 2009. Due to the changes in the Ordinary Level syllabus, a change in the Advanced Level syllabus too is proposed this year.

Format, content and quality of the examination papers were changed according to the changes in the syllabi. Essay type questions were included in the papers of 1950s and 60s. From 1950 to 1958, 29% of the questions were allocated for Organic Chemistry. In 1959 it was increased to 55% and in 1965 and 1966 it was 44%. In 1968 it was 25%. From 1979 to 1999 the percentage was 36% and then up to now it is only 22%. The practical examination was abolished in 1971 and the Chemistry papers contained multiple choices, structured essay type and the Essay type questions. From 1971 to 1978, Organic questions were included in all three types but, from 1979, they were included only in MCQs and structured essay type questions.

Reserved marks for Organic Chemistry from 1971 to 1978 was 41% for the students who expected to enter Medical, Dental and Veterinary faculties and for others it was 33% or 26%. From 1979 it was further reduced for all to 22%.

Most of the MCQs in Organic Chemistry were based on the higher levels of Blooms taxonomy. The students need an ability to apply theoretical knowledge to other situations and analytical skills to solve this type of problem.

It would be more productive if the Advanced Level syllabus could be developed to suit the needs of day to day living.