

## **ABSTRACT**

This diploma thesis deals with the so-called Green Chemistry, its twelve basic principles and the possibilities of its application in teaching at lower secondary schools and lower level of high schools. The theoretical part is focused on the characteristics of Green Chemistry and its specifics. The practical part deals with an analysis of chemistry textbooks and especially the examination of teachers' experiences and attitudes to Green Chemistry, their awareness of this approach and the possible integration of Green Chemistry in teaching at lower secondary schools/lower level of high schools. The research instrument used to collect data from teachers at selected schools is a semi-structured interview. The data obtained is then processed and compared with the data results that emerged from the analysis of the textbooks for lower secondary schools/lower level of high schools. The responses obtained from the individual respondents indicated a correlation between the inclusion of green topics in the teaching of chemistry in lower secondary schools/lower level of high schools and the occurrence of the topics across textbooks. Further, they helped reveal the limitations of Green Chemistry that may arise in its inclusion in lower secondary schools/ lower level of high schools.

These limitations are mainly the excessive complexity of some of the principles of green chemistry, the lack of time due to the sequencing of environmental topics towards the end of the school year, and the absence of teaching materials for both teachers and students.