

TITLE

STUDENT NAME AND NUMBER

**A RESEARCH PROPOSAL SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR PHD (OR MASTER OF SCIENCE/ARTS ETC) IN ‘SUBJECT’**

DEPARTMENT

SCHOOL

FACULTY

TECHNICAL UNIVERSITY OF KENYA

DECLARATION

I declare that this proposal is my original work, and as far as I am aware, it has not been presented for the award of a degree in any university

SIGN.....DATE.....

Student name and number

This proposal has been submitted with our approval as university supervisors for the degree of PhD in chemistry.

SIGN.....DATE.....

Name of supervisor

Department

Technical University of Kenya

SIGN.....DATE.....

Name of second supervisor

Department

UNIVERSITY

SIGN.....DATE.....

Name of third supervisor (if necessary)

Department

UNIVERSITY

ABSTRACT

Upto 400 words

xxxxxxx

TABLE OF CONTENTS

XXXXXX

LIST OF ABBREVIATIONS

XXXXXXXX

LIST OF TABLES

XXXXXX

LIST OF FIGURES

xxxxxxx

LIST OF APPENDICES

XXXXXX

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

XXXXXXXX

Agoro et al. (2013) reported that hexazinone is an estrogenic and carcinogenic compound whose concentrations in drinking water and human food need to be regulated.

The restoration of wetlands is important for the sustainability of species diversity (Ahalya and Ramachandra 2002; Bansal and Goyal 2005).

The discussions on the significance of water treatment with respect to reduction of trace contaminants such as pesticide residues can be found in various publications (Faust and Aly 1987; Birech et al. 2006; CDPR 2010a; De Jong 2011).

As stated in a recent survey by Bajpai and Rajpoot (1999), a number of suitable adsorbents are available commercially in Kenya.

1.2 Statement of the Problem

XXXXXXX

1.3 Objectives

1.3.1 Main Objective

XXXXX

1.3.2 Specific Objectives

XXXXXX

XXXXXXXX

1.4 (Null)Hypothesis

1.5 Justification of the study

CHAPTER TWO

LITERATURE REVIEW

2.1 XXXXXe.g. Water Pollution

2.2xxxxxxx e.g. Impacts of chemical pollution on Ecosystems

2.3 xxxx etc

CHAPTER THREE

METHODOLOGY

XXXXXXXXXX

3.1 Materials

XXXXX

3.2 Site of Study

XXXXX

3.2 Experimental Methods

XXXXXX

3.3 Statistical Analysis of Data

XXXXXXXXXX

3.4 Expected results

XXXXXXXXXX

3.5 Expected outcome

XXXXXXXXXX

REFERENCES

[References should be arranged in alphabetical order as in the text, NOT (numbers)]

Agoro D. J., Kowenje C.O., Lalah J.O., Osewe E.T., and Ogunah J.A. (2013). Effects of Zeolite X on Dissipation of Hexazinone from Agricultural Waste Waters in Western Kenya. *IJERT* Vol. **10**: 2278 – 0181.

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Amit B. and Minocha A.K. (2006). Conventional and non-conventional adsorbents for removal of pollutants from water. *Indian Journal of Chemical Technology*. Vol. 13, pp 203 – 217.

Bajpai A. K. and Rajpoot M. (1999). Adsorption Techniques – A Review. *Journal of Scientific & Industrial Research*, Vol. 58, November 1999, pp 844 – 860. Bose Memorial Research Laboratory, Department of Chemistry, Government Autonomous Science College, Jabalpur 482 001, India.

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CDPR (California Department of Pesticide Regulations) (2010a). Pesticide chemistry database. California Environmental Protection Agency, Department of Pesticide Regulation, Sacramento, CA.

- De Jong, T. (2011). Water abstraction survey in Lake Naivasha basin, Kenya. Wageningen University. BSc. Internship thesis. Wageningen.
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- Faust S.D. and Aly O.M. (1987). Adsorption Process for Water Treatment. Butterworths Publishers, Stoneham, USA.
- Otieno J.O. (2012) Adsorbents for Pesticide intake from contaminated water: A review. *Journal of Scientific & Industrial Research*. Vol. **68**, pp 839 – 850.

Proposed Budget

XXXXXXXXXX

Work/Time Plan

XXXXXXX

APPENDICES

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