

INTERNATIONAL UNIVERSITY OF AFRICA FACULTY OF PURE & APPLIED SCIENCES DEPARTMENT OF APPLIED CHEMISTRY

DETERMINATION OF SODIUM, POTASSIUM AND CALCIUM IN DIFFERENT SAMPLE OF SOILS IN KHARTOUM

A Thesis submitted for the partial fulfillment of the requirements for M.Sc Degree in Industrial Chemistry

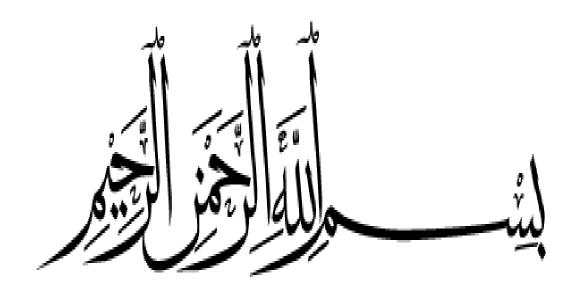
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DEDICATED

TO

MY LOVING PARENTS, "AND SAY MY LORD,

Have mercy on them(parents)both as they did care for me when I was little."

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All praises of Allah, the most merciful and most compassionate, the creator of the universe, who enabled me to complete this research work successfully. I offer my humblest and sincerest word of thank to holy Phrophet Hazart Muhammed (PBUH) who is a forever a torch of guidance and knowledge of humanity.

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Abstract:

The present study was conducted to determine the concentration of calcium, potassium and sodium present in soil with the help of different aspect of soil analysis. We estimated the nature of soil, like texture, moisture and as well as different absorbed minerals. In case of moisture determined in soil, we used the drying method. Similarly for the texture of soil, we did the separation of different layer by using of separating funnels, and in the last we determined the minerals present in soil, by titration method and by flame atomic absorption method. In titration method we titrated the soil sample by using different chemicals, like EDTA, NaOH, mercuric oxide (indicator), and in other method we determined the calcium, potassium and sodium in soil sample by flame atomic absorption spectroscopy.

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