

الاستهلال

قال تعالى :

بسم الله الرحمن الرحيم

أَوَلَمْ يَرَ (الَّذِينَ كَفَرُوا أَنْ السَّمَاوَاتِ وَالْأَرْضِ
كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ
أَفَلَا يُؤْمِنُونَ)

صدق الله العظيم

سورة الأنبياء الآية (30)

Dedication

To my parents ,,,

To my family ,,,

To my friends ,,,

Acknowledgment

Praises and thanks to almighty Allah.

I would like to express my gratitude to all those who helped during my work.

Special and deep thanks to my supervisor **Dr. Aziza Ali Karar**, and deep thanks would go to all staff of chemistry laboratories in Sudan university of science and technology.

Abstract

In this study analysis was carried for three surface water samples from different sources in El semeih in north of kordofan.

Different parameters were determined for water quality in the area and they compared with WHO standards.

Physical characteristics of surface water were determined including hydrogen ion concentration pH, electrical conductivity (EC), turbidity and total dissolved solids using pH meter, conductivity meter and turbidity meter, respectively.

Chlorides (Cl^-), total alkalinity, total hardness, Calcium (Ca^{2+}) were determined titrimetrically.

Flame photometer was used for determination of sodium (Na^+) potassium (K^+) concentration.

Spectrophotometry was used for determination of nitrate (NO_3^-), and iron.

Sulphate was determined gravimetrically.

المستخلص

في هذا البحث تم تحليل ثلاث عينات لمياه شرب مأخوذة من مصادر مختلفة في منطقة السميح في شمال كردفان.

تم قياس خواص مختلفة ومقارنتها بمقاييس منظمة الصحة العالمية.

الخواص الفيزيائية للمياه السطحية تضمنت رقم الحموضة، التوصيلية الكهربائية، العكورة، المواد الذائبة الكلية، قيست باستخدام مقياس الحموضة، مقياس التوصيلية ومقياس العكورة على التوالي.

تم قياس الكلوريد، والقاعدية، الكالسيوم، عسر الماء الكلي باستخدام المعايير.

مطيافية امتصاص الذهب استخدمت لقياس كل من الصوديوم، البوتاسيوم.

تم تقدير الكبريتات وزنيا.

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Study of Drinking water sample Collected from Elsemeih north of kordofan

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