

بسم الله الرحمن الرحيم

Sudan University of Science & Technology  
College of Graduate Studies

**Design of Heat Exchanger System Used For  
Industrial Purposes**

**تصميم نظام مبادل حراري للأغراض الصناعية**

A thesis submitted in partial fulfillment to the College of Graduate Studies; Sudan University of Science & Technology for the requirement of the degree of Master of Science in Mechanical Engineering (Power)

**By:**

Abdallah Mokhtar Mohamed Abdallah  
(B.Sc. Eng.)

**Supervisor:**

Dr. Mohammed Eltayeb Mansour

January 2009

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## الاستهلال:

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالَ اللَّهُ تَعَالَى:

{إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَالْخِلَافِ الْلَّيْلِ وَالنَّهَارِ وَالْفُلْكِ الَّتِي تَجْرِي  
فِي الْبَحْرِ بِمَا يَنْفَعُ النَّاسَ وَمَا أَنْزَلَ اللَّهُ مِنَ السَّمَاءِ مِنْ مَاءٍ فَأَحْيَا بِهِ الْأَرْضَ  
بَعْدَ مَوْتِهَا وَبَثَّ فِيهَا مِنْ كُلِّ دَابَّةٍ وَتَصْرِيفِ الرِّيَاحِ وَالسَّحَابِ الْمُسَخَّرِ بَيْنَ  
السَّمَاءِ وَالْأَرْضِ لَآيَاتٍ لِقَوْمٍ يَعْقِلُونَ}

صدقَ اللهِ العظيم

سورة البقرة: (164)