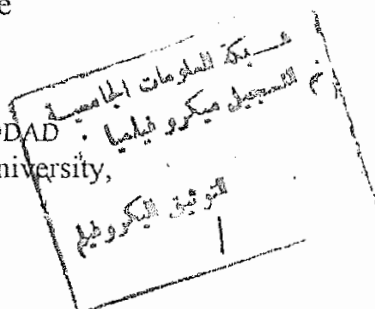


ENVIRONMENTAL IMPACT ASSESSMENT OF PETROLEUM POLLUTION IN SOME LIBYAN COASTS.

THESIS
Submitted to
Institute of Environmental Studies & Research
Ain Shams University, Cairo
for the M.Sc. Degree
In Environmental Science



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Cairo, Egypt.
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El Tahaddy University (1989)

Thesis Submitted in Partial Fulfillment
of Master of Environmental Science

In

Natural & Biological Department

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the fact that the *Journal of the American Medical Association* (JAMA) has been the most influential journal in the field of medicine for over a century (Roberts, 2002). The *JAMA* is a peer-reviewed journal that publishes research on a wide range of medical topics, and its findings are widely cited in the medical literature.

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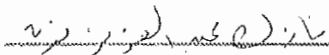
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APPROVAL SHEET

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Ain Shams University and supervisor.

Date of Examination : / /1997

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ وَهُوَ الَّذِي سَخَّرَ الْبَحْرَ لِتَأْكُلُوا مِنْهُ لَحْمًا طَرِيًّا وَتَسْتَخْرِجُوا مِنْهُ حَلِيَّةً تَلْبَسُونَهَا وَتَرَى الْفُلْكَ مَوَآخِرَ فِيهِ وَلِتَبْتَغُوا مِنْ فَضْلِهِ وَلَعَلَّكُمْ تَشْكُرُونَ ﴾

﴿صَلَّى اللَّهُ عَلَيْهِ﴾

الاية (١٤) من سورة النحل



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It gives me a great pleasure to express my deepest gratitude to prof. Dr. Abdel - Rahman Mahmoud Mousa, professor of Chemistry, the Faculty of Science, Ain Shams University, Dr. Mahmoud A. Hawehy, Lecturer in the Institute of Environmental Studies & Research , Ain Shams University, for their supervision, sympathetic support and valuable advice, helpful suggestions, throughout the investigation and during the time of this work. My thanks are also due to Dr. Mahmoud A. El Alus, Lecturer in the Faculty of Science, Naser University, Libya for his encouragement and care.

I would like to express my sincere gratitude and faith :

- To my parents and brothers.*
- To my wife and daughter.*
- To my Teachers through out my life.*

ABSTRACT

Environmental Impact Assessment of Petroleum Pollution in some Libyan coasts

Environmental study on petrochemical and industrial pollution of the sea shores of some coasts of Libya has been carried out. Three areas have been chosen, different in petroleum, petrochemical, industrial and human activities starting from Misurata to El Brega passing by Ras Lanuf, covering a sea shore of 600 Km length.

Trace elements and total hydrocarbons concentrations in water and local fishes have been estimated in two different seasons winter and summer, 1995.

Tar balls as well as solid waste pollution of the beaches have been monitored. The mean values of results of analysis of 240 water samples and 495 fish samples have been calculated and tabulated.

The general results of this study reveal that pollution is directly related to the type of the activity taking place in each specific area, however Libyan sea water and beaches appear to be relatively clean according to international standards.

Strict regulations are to be followed in order to prevent or minimize, pollution of the beaches with tar balls and solid waste disposables appearing occasionally.

