

**PETROGRAPHY, PETROCHEMISTRY AND
DISTRIBUTION OF RADIOACTIVE
MINERALS AND ELEMENTS IN GEBEL
EL - ZEIT GRANITE, EASTERN DESERT,
EGYPT**

By

ABLA AHMED ALI RAGAB

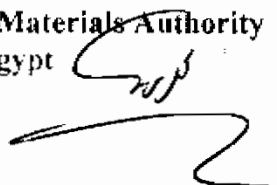
Nuclear Material Authority, (NMA)

Supervised by

Prof.Dr. M. E. Hilmy
Geology Department,
Faculty of Science,
Ain Shams University



Prof. Dr.M. Y. Attawiya
Research Division,
Nuclear Materials Authority
Cairo, Egypt



THESIS

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**TO
MY MOTHER
AND
MY DEAR HUSBAND**

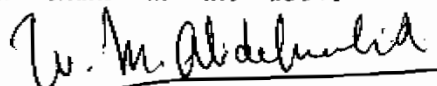


NOTE

The work of the thesis was carried out in Ain Shams University, for the partial fulfillment of master of science degree . Beside the research work materialized in this thesis the candidate has attended graduate courses in the following topics :-

- 1- Igneous petrology .
- 2- Sedimentary petrology .
- 3- Metamorphic petrology .
- 4- Mineralogy .
- 5- Geochemistry .
- 6- Crystallography .
- 7- Lab techniques .
- 8- Tectonics.
- 9- Structural Geology.
- 10- English .

She has successfully passed the final exam in the above mentioned courses.


Head of Geology Department ,
(Prof Dr. W. M. Abdelmalik)

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CHAPTER I INTRODUCTION

I. 1. General Statement

The present study deals with the petrography, petrochemistry and the distribution of radioactive elements and minerals in the granitic rocks of Gabal El Zeit in the North Eastern Desert of Egypt. The area under examination is limited by Latitudes ($27^{\circ} 25'$) and ($28^{\circ} 00'$) North and longitudes ($33^{\circ} 25'$) and ($33^{\circ} 35'$) East (Fig. 1). This area is represented by an elongated NNW - SSE granitic mass (Main Gabal El Zeit) flanked by sedimentary rocks of Paleozoic to Quaternary age (Salman et al., 1988).

I.2. Topography and Geomorphology

Gabal El Zeit area in general, represents a conspicuous elongated ridge which follows NNW - SSE direction parallel to the Gulf of Suez trend. The mountain range is separated by a wide depression from evaporites into the northern Main Gabal El Zeit and the southern little Gabal El Zeit. The maximum elevation point is 456 m in the north, while in the south it reaches 265 m. above sea level. The Main Gabal El Zeit is dissected by Wadi Kabrit dividing it into eastern Gabal El Zeit granite and western Gabal El Zeit sedimentary rocks. The little Gabal El Zeit shows a more complicated morphology due to the presence of several blocks within the two major central depressions.