



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
على هذه الأفلام قد أعدت دون أية تغييرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%



شبكة المعلومات الجامعية
التوثيق الالكتروني والميكرو فيلم



بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد
بالاصل



AIN SHAMS UNIVERSITY
FACULTY OF ENGINEERING
IRRIGATION AND HYDRAULICS DEPARTMENT

**GROUNDWATER POTENTIAL FOR VARIOUS
USES IN EGYPTIAN KARSTIC AREAS**

THESIS

Submitted in Partial Fulfillment of the Degree
of Master of Science in Civil Engineering

BY

HATEM SAAD EL-HARAIRY
B.Sc. Civil Engineering

SUPERVISED BY

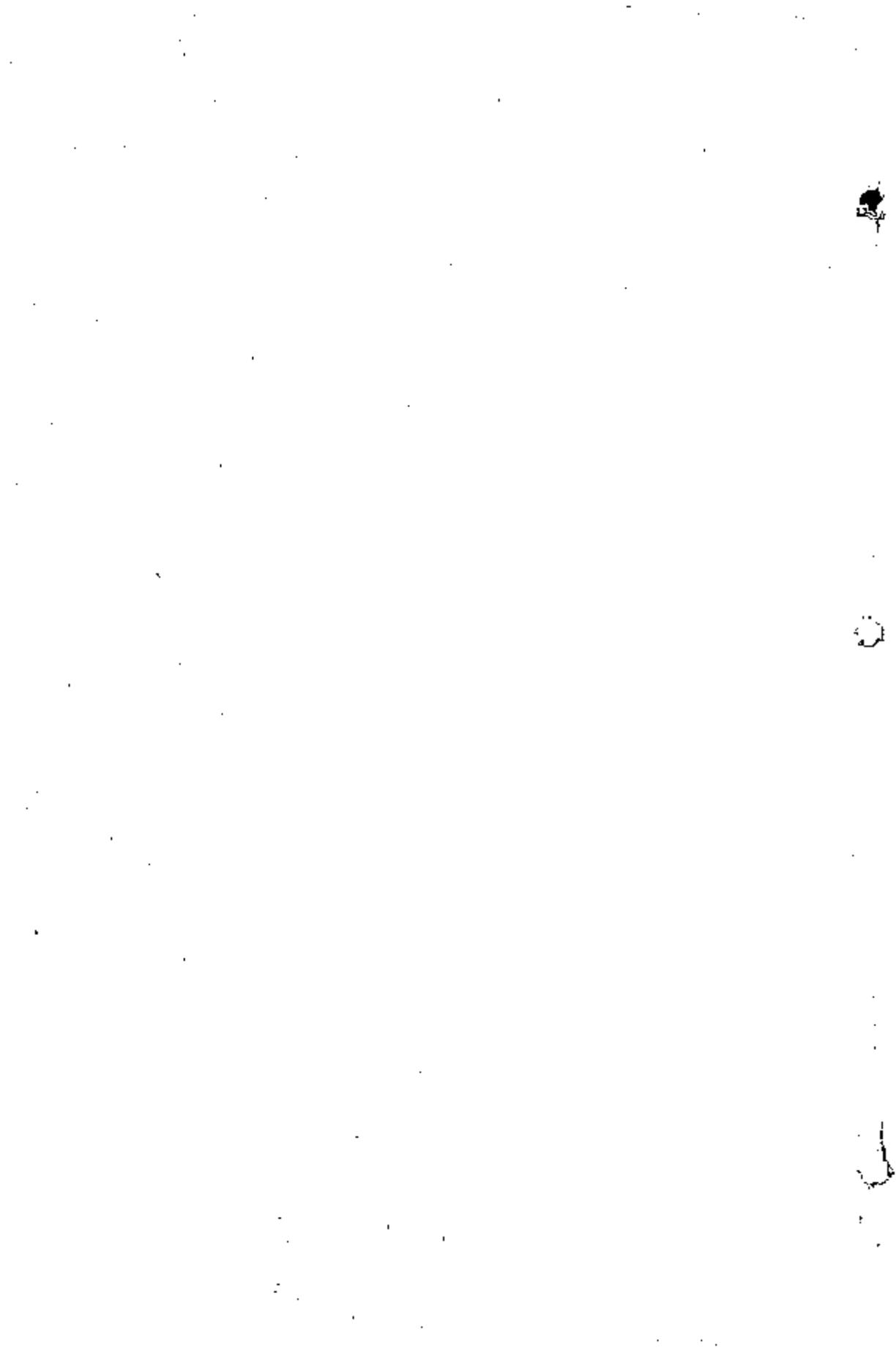
Dr. Osman A. Elnawawy
Associate Prof., Irrigation and Hydraulics Department
Ain Shams University

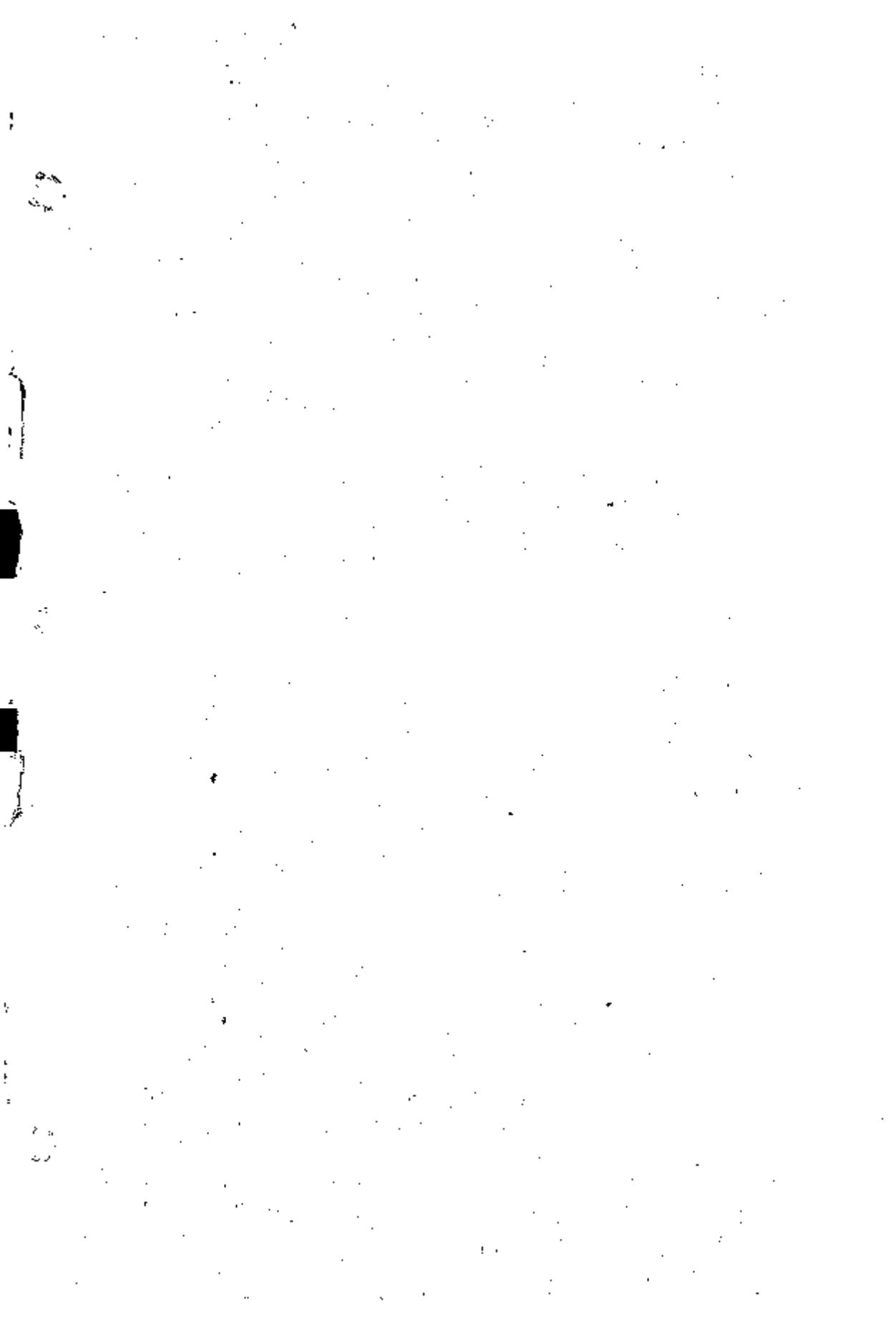
Prof. Dr. Fatma A. Attia
Director of Research Institute for
Groundwater
National Water Research Center

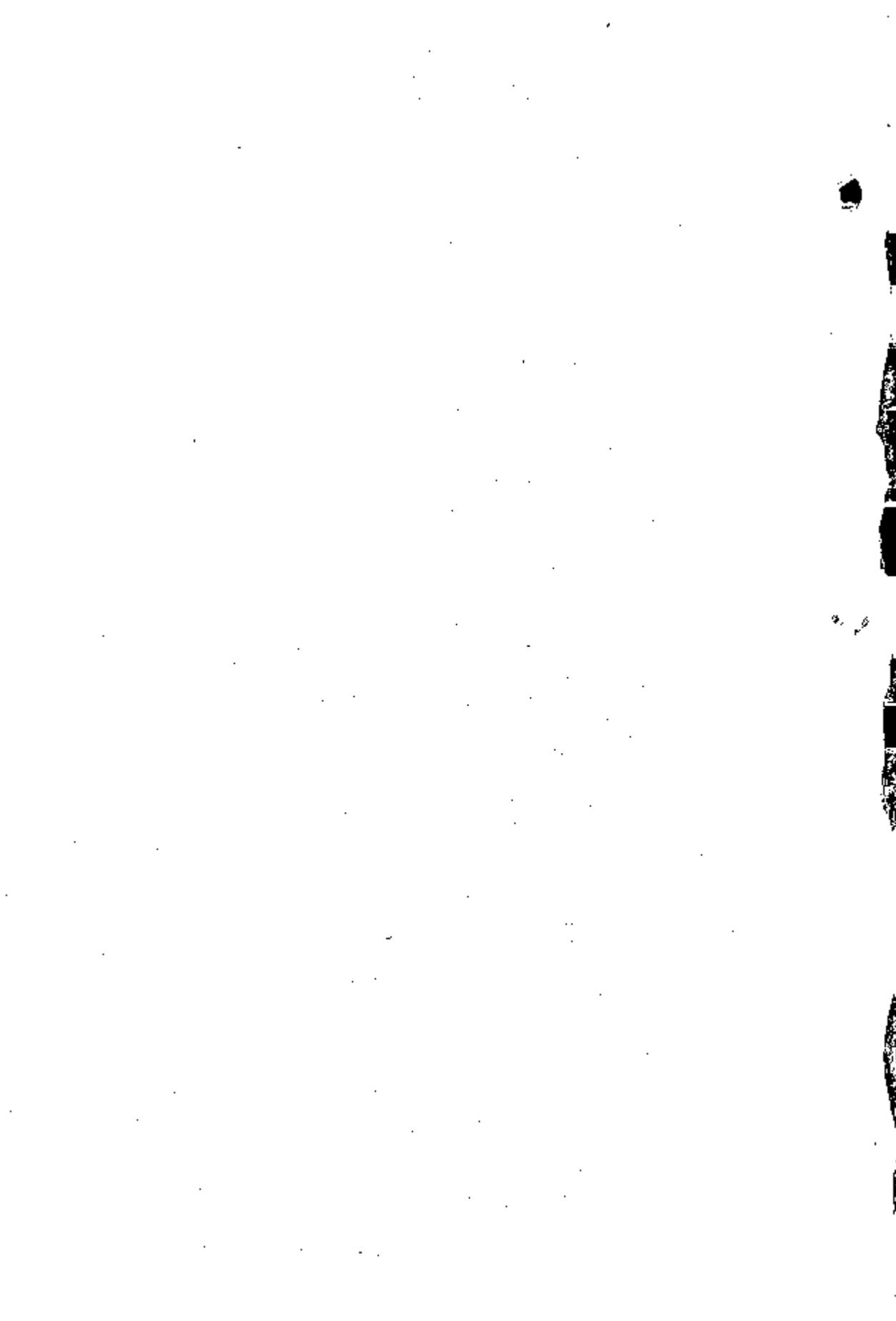
Dr. Taher M. Hasan
Head of Desert Department,
Research Institute for
Groundwater
National Water Research Center

1998

1149
CP







**AIN SHAMS UNIVERSITY
FACULTY OF ENGINEERING
IRRIGATION AND HYDRAULICS DEPARTMENT**

**GROUNDWATER POTENTIAL FOR VARIOUS
USES IN EGYPTIAN KARSTIC AREAS**

THESES

Submitted in Partial Fulfillment of the Degree
of Master of Science in Civil Engineering

BY

HATEM SAAD EL-HARAIRY
B.Sc. Civil Engineering

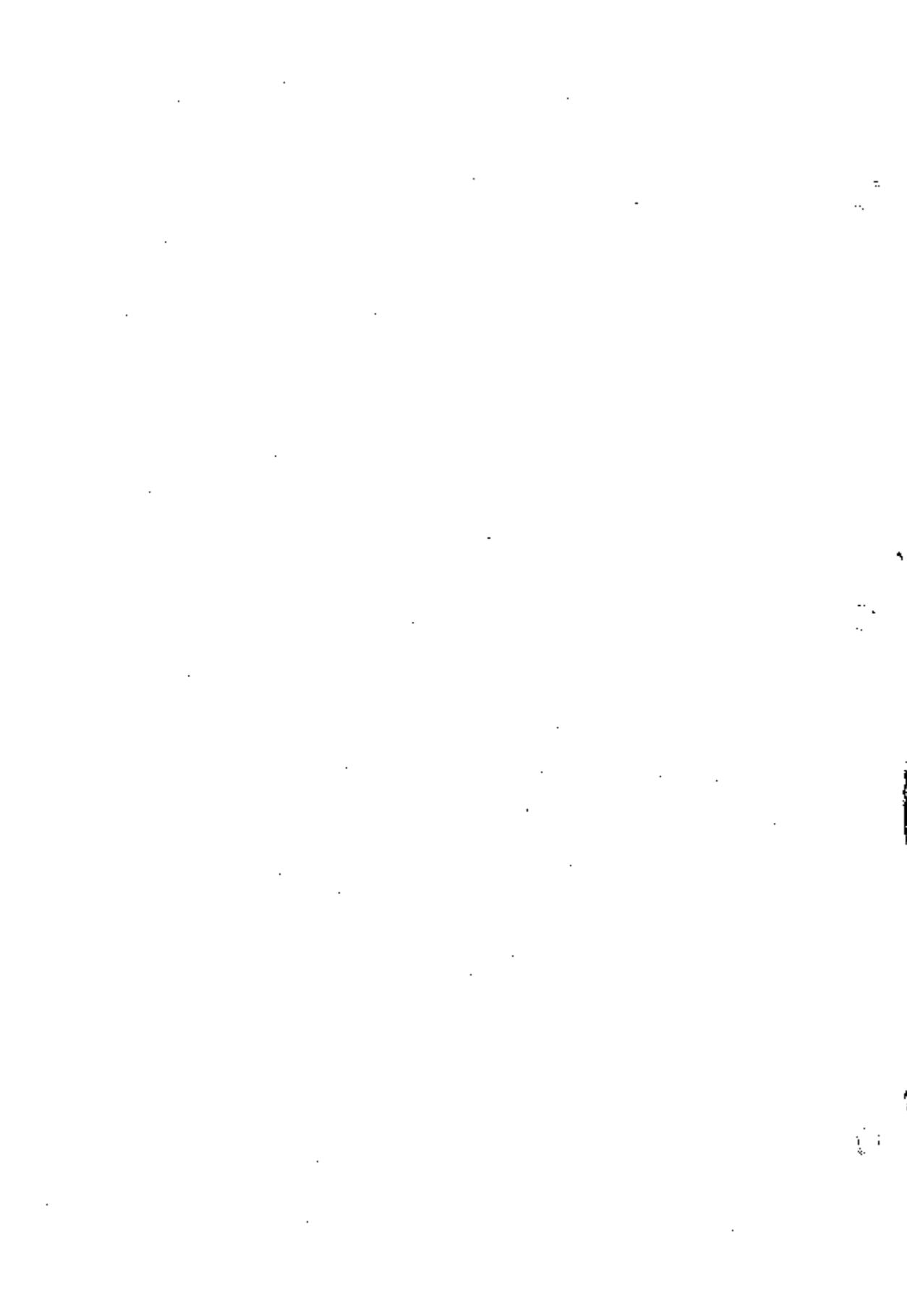
SUPERVISED BY

Dr. Osman A. Elnawawy
Associate Prof., Irrigation and Hydraulics Department
Ain Shams University

Prof. Dr. Fatma A. Attia
Director of Research Institute for
Groundwater
National Water Research Center

Dr. Taher M. Hasan
Head of Desert Department,
Research Institute for
Groundwater
National Water Research Center

1998



**GROUNDWATER POTENTIAL FOR VARIOUS
USES IN EGYPTIAN KARSTIC AREAS**

THESIS

Submitted in Partial Fulfillment of the Degree
of Master of Science in Civil Engineering

BY

HATEM SAAD EL-HARAIRY

B.Sc. Civil Engineering

This Thesis for M.Sc. Degree under the Supervision of:

- Dr. Osman A. Elhawawy** Associate Professor, Irrigation and
Hydraulics Department, Faculty of
Engineering, Ain Shams University
- Prof. Dr. Fatma A. Attia** Director of Research Institute for
Groundwater, National Water
Research Center
- Dr. Taher M. Hasan** Head of Desert Department,
Research Institute of Groundwater,
National Water Research Center



2

3

5/27/2014
10:00 AM



APPROVAL SHEET

GROUNDWATER POTENTIAL FOR VARIOUS USES IN EGYPTIAN KARSTIC AREAS

THESIS

Submitted in Partial Fulfillment of the Degree
of Master of Science in Civil Engineering

BY

HATEM SAAD EL-HARAIRY

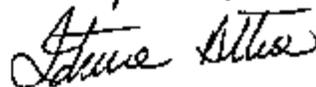
B.Sc. Civil Engineering

This Thesis for M.Sc. Degree has been Approved by:

Prof. Dr. : Mohammed El-Naizi A. Hammad
Professor, Faculty of Engineering, Ain Shams University



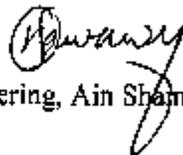
Prof. Dr. : Fatma A. Attia
Director of Research Institute for Groundwater



Prof. Dr. : Joseph B. Khalil
Vice Director of Research Institute for Groundwater



Dr. : Osman A. Elnawawy
Associate Professor, Faculty of Engineering, Ain Shams University



Date of Examination: 23/ 12 / 1998

