

# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار





# بعض الوثائق الأصلية تالفة







# بالرسالة صفحات لم ترد بالأصل



**CHARACTERIZATION OF ASPHALT PAVEMENT MATERIALS USING  
FRACTURE MECHANICS APPROACH**

By

**AHMED HASSAN ALI**

M.Sc. in Civil Engineering

Cairo University

1994

A Thesis Submitted to the Faculty of Engineering

Cairo University

In Partial Fulfillment of the Requirements for

The Degree of

**DOCTOR OF PHILOSOPHY**

In

**CIVIL ENGINEERING**

FACULTY OF ENGINEERING

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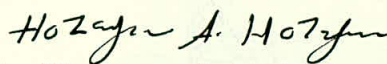
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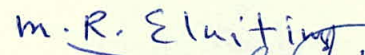
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Approved by the  
Examining committee

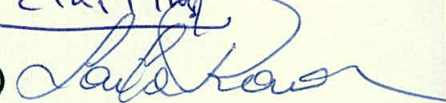
Prof. Dr. \ **Eissa Abdullah Sarhan** (Member)



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Prof. Dr. \ **Laila Salah El-Din Radwan** (Thesis main advisor)



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