# PREPARATION AND PHYSICAL CHARACTERIZATION OF NANO POROUS SILICON TO TAKE ADVANTAGE OF IT IN SOME ENVIRONMENTAL APPLICATIONS

# Submitted By Hager Abd El Hakim Mohamed Nawar

B.Sc. of Science (Physics), Faculty of Science, Ain Shams University, 2008

A thesis submitted in Partial Fulfillment
Of
The Requirement for the Master Degree
In
Environmental Science

Department of Environmental Basic Sciences Institute of Environmental Studies and Research Ain Shams University

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#### APPROVAL SHEET

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#### **LIST OF ABBREVIATIONS**

**FWHM** Full width at half maximum

**XRD** X ray diffraction

**PSi** Porous silicon

**FTIR** Fourier transforms infrared

**SEM** Scan electron microscope

**TEM** Transmission electron microscope

**TOF-SIMS** Time-of-Flight Secondary Ion Mass Spectrometry

**HF** Hydrofluoric acid

PL Photoluminescence

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