



Ain Shams University
Faculty of Women for Arts,
Science and Education

Physiological and Genetic Improvement of Egyptian Cellulolytic Microorganisms for Biotechnology Applications

A Thesis

**Submitted to Ain Shams University
for the Degree of Doctor of Philosophy**

**In
Microbiology**

By

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B.Sc. Microbiology and Chemistry (2004)

M.Sc. Microbiology (2010)

To

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Dedication
To My Dear Father,
My Lovely Mother,
My Dear Husband
Eng./ Ayman Ahmed Abd El-Wahab,
My Wonderful Sister Marwa,
and My Darling Brother Mahmoud

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