



**Ain Shams University**  
**Girls College for Arts, Science and Education**  
**Chemistry Department**

# **Synthesis, Characterization and Utilization of Modified Cellulose/Chitin Polymer Blends**

**Thesis**

**Submitted for the Degree of philosophy Doctor (Ph.D.) in  
Organic Chemistry**

Chemistry Department  
Girls College for Arts, Science and Education  
Ain Shams University

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To my Family

Father, Mother, Sisters and Brothers

My wife and his parents for caring my kids

*My Sons (Mohamed and Ahmed)*

and

To everyone who lighted me a candle to keep me on the right track

‘The more I learn,

The more I realise how little I know’

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