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Ain Shams University
Faculty of Science
Chemistry Department



Synthesis and Characterization of Some Nanomaterials for Environmental Applications

**A Dissertation Submitted for the Degree of Doctor
of Philosophy of Science**

In

Chemistry

(Physical Chemistry)

Presented by

Mohammad Samir Elkotb Salem

(M.Sc. Degree, Chemistry, Suez Canal University 2015)

(2022)



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Synthesis and Characterization of Some Nanomaterials for Environmental Applications

A thesis submitted by

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(M.Sc. Degree, Chemistry, Suez Canal University, 2015)

For the requirement of Ph.D. degree of science in Physical Chemistry

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List of Abbreviations

VB	Conduction bands
CB	Valance bands
TW	terawatt
E_g	Band gap
CNTs	Carbon nanotubes
ALD	Atomic layer deposition
GO	Graphene oxide
RGO	Reduced graphene oxide
BN	Boron nitride
TiO₂/rGO	Titanium dioxide doped reduced graphene oxide
TiO₂/BN	Titanium dioxide doped boron nitride