



***Preparation and characterization of PbSSe  
nanomaterials for electronic and photovoltaic  
applications***

A thesis submitted by

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***For***

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**Physics Department, Women's College for Arts, Science and Education**

**Ain Shams University, Egypt**

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بسم الله الرحمن الرحيم

" الحمد لله الذى هدانا لهذا وما  
كنا لنهتدى لولا أن هدانا الله "

صدق الله العظيم

سورة الأعراف الآية ٤٣







*To*

*My dear husband,  
my kind son and daughter  
and my family*



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# *Contents*