

FABRICATION OF ORGANIC SOLAR CELL WITH CHARACTERIZATION AND IMPROVEMENT

A Thesis

**Submitted to The council of the College of Education for Pure Science
University of Basrah as a Partial Fulfillment of the
Requirements For The Degree of Doctor of Philosophy in Physics**

By

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Certification

We certify that this thesis, which is entitled " **fabrication of organic solar cell with characterization and improvement** ", presented by " **Mohammed Kadhim Hamad**", was prepared under our supervisions in the physics department, College of Education for Pure Sciences, Basrah University, as a partial fulfillment of the requirements for the degree of doctor of philosophy in physics (**Renewable Energy – Organic/Inorganic Solar Cell**).

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