



**SIMULATION AND IMPLEMENTATION OF
SOLAR PV FED BRUSHLESS DC MOTOR USING
LUO CONVERTER**

A PROJECT REPORT

Submitted by

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*in partial fulfillment for the award of the degree
of*

BACHELOR OF ENGINEERING

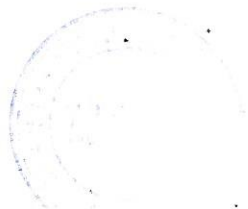
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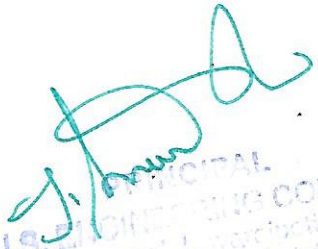
ELECTRICAL AND ELECTRONICS ENGINEERING

T.J.S. ENGINEERING COLLEGE, PERUVOYAL

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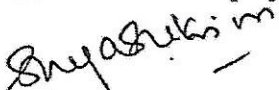

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BONAFIDE CERTIFICATE

Certified that this project report "SIMULATION AND IMPLEMENTATION OF SOLAR PV FED BRUSHLESS DC MOTOR USING LUO CONVERTER" is the bonafide work of the following students.

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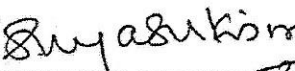
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INTERNAL EXAMINER 21/6/22


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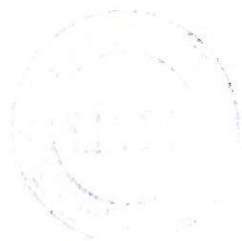
ABSTRACT

This project deals with the operation of the LUO (DC-DC) converter in solar photovoltaic array as an intermediate DC-DC converter between the solar photovoltaic array and soft starting of BLDC motor.

Among the several types of DC-DC converters, a LUO converter is selected and it is used to extract the maximum power which is available from the solar photovoltaic array and BLDC motor.

The positive output LUO converter performs the changes from positive input source to positive output load source. To avoid the high frequency switching losses the electronically commutated brushless DC with voltage source inverter can be operated at elementary frequency which results in higher efficiency.

The project also connected with 230V alternating current grid, in case of cloudy day or rainy day, we can run the motor using alternating current.




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