

# ANNAUNIVERSITY, CHENNAI

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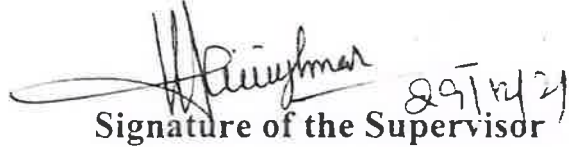
Certified that this report titled "SOLAR POWERED ENERGY EFFICIENT DISRIBUTION SYSTEM BASED ON INTERLEAVED FLYBACK CONVERTER TOPOLOGY" is the bonafide work of ANANTH R (E20PEF001) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



Signature of the Head of the Department

**Dr. V.MOHAN, M.E., Ph.D.,  
PROFESSOR & HEAD**

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Signature of the Supervisor

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Submitted for the Project Phase-I viva voce examination held on 29/12/2021




INTERNAL EXAMINER



EXTERNAL EXAMINER

ATTESTED




**Dr. S. RAMABALAN, M.E., Ph.D.,  
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Certified that this report titled "SOLAR FED FLC BASED LANDSMAN CONVERTER FOR EV APPLICATIONS " is the bonafide work of ANBARASAN U (E20PEF002) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



**Signature of Head of the Department**

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Submitted for the Project Phase-II viva voice examination held on 12/7/22



**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

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Certified that this report titled "IMPROVEMENT OF POWER FACTOR USING FLYBACK CONVERTER FED DC MICROGRID" is the bonafide work of HARIKRISHNA S (E20PEE003) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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## BONAFIDE CERTIFICATE

Certified that this Report titled "Device Simulation of Hybrid Quantum Dot Solar Cell for Power System" is the bonafide work of JHAGANNATH K (E20PEF004) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

  
Signature of the Head of the Department

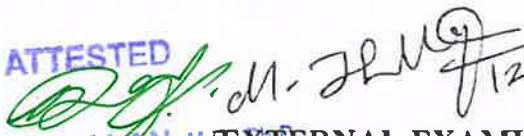
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## BONAFIDE CERTIFICATE

Certified that this report titled "SPEED CONTROL OF BLDC MOTOR DRIVE USING LUO CONVERTER" is the bonafide work of KALIDOSS S (E20PEF005) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

  
11/07/22

Signature of the Head of the Department

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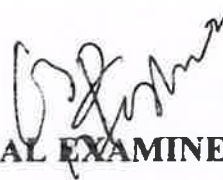
  
8/7/22

Signature of the Supervisor

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Submitted for the Project Phase-~~I~~ viva voice examination held on 12/07/22

  
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EXTERNAL EXAMINER

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## BONAFIDE CERTIFICATE

Certified that this report titled "A 21-LEVEL INVERTER FOR SEPIC CONVERTER BASED SOLAR APPLICATIONS USING ANFIS MPPT" is the bonafide work of MARIMUTHU B (E20PEF006) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



Signature of Head of the Department

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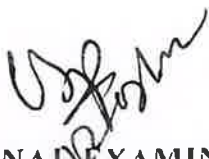


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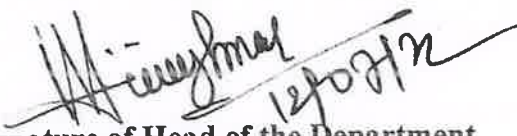
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## BONAFIDE CERTIFICATE

Certified that this report titled "HYBRID ENERGY STORAGE SYSTEM FOR GRID TIED EV APPLICATION" is the bonafide work of RAMANAN R (E20PEF007) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



Signature of Head of the Department

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Signature of the Supervisor

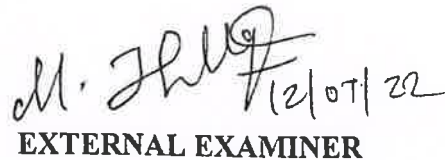
**Mr. R. ANANDARAJ M.E.,  
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Submitted for the Project Phase-II viva voice examination held on 12/07/2022



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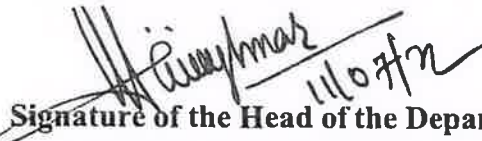
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**Dr. S. RAMABALAN, M.E., Ph.D.,  
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Certified that this report titled “SEPIC CONVERTER BASED BATTERY MANAGEMENT SYSTEM ” is the bonafide work of SAMSON EBINAZER J (E20PEF008) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

  
Signature of the Head of the Department  
Dr.M.VIJAYAKUMAR, M.E., Ph.D.,  
Associate Professor/PG HOD,  
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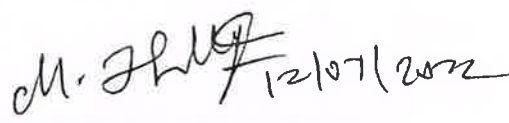
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Signature of the Supervisor  
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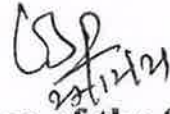
Certified that this report titled "FUZZY CONTROLLER BASED SINGLE PHASE BIDIRECTIONAL ELECTRIC DRIVE SYSTEM" is the bonafide work of SIVASANGARAN R (E20PEF009) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



**Signature of the HOD**

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**Signature of the Supervisor**

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**Dr. S. RAMABALAN, M.E., Ph.D.  
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