



**ELECTRIC VEHICLE WIRELESS CHARGING
SYSTEM USING BIDIRECTIONAL CONVERTER
A PROJECT REPORT**

Submitted by

S.CHANDRU	(112818105001)
V.JAGADEESH	(112818105003)
S.UDAYAKUMAR	(112818105011)
P.YOGESHWARAN	(112818105304)

in partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

ELECTRICAL AND ELECTRONICS ENGINEERING

T.J.S. ENGINEERING COLLEGE, PERUVOYAL

ANNA UNIVERSITY : CHENNAI 600 025

June 2022



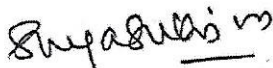
PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Thiruvallur,
Chennai - 601 206,
Thiruvallur Dist - 601 206.

BONAFIDE CERTIFICATE

Certified that this project report "ELECTRIC VEHICLE WIRELESS CHARGING SYSTEM USING BIDIRECTIONAL CONVERTER" is the bonafide work of the following students.

S.CHANDRU	(112818105001)
V.JAGADEESH	(112818105003)
S.UDAYAKUMAR	(112818105011)
P.YOGESHWARAN	(112818105304)

who carried out the project work under my supervision.


SIGNATURE

Mrs.M.SHUNMUGA SANKARI,M.E.,PhD.,

Assoc.Professor

HEAD OF THE DEPARTMENT

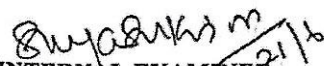
Department of Electrical and

Electronics Engineering

T.J.S. Engineering College

Peruvoyal

Submitted for viva voce held on 21/08/22 at T.J.S. Engineering College,
Peruvoyal.


INTERNAL EXAMINER


SIGNATURE

Mr. T. KAMALKUMAR, M.E.,

Asst.Professor

SUPERVISOR

Department of Electrical and


Electronics Engineering

T.J.S. Engineering College

Peruvoyal


EXTERNAL EXMINER



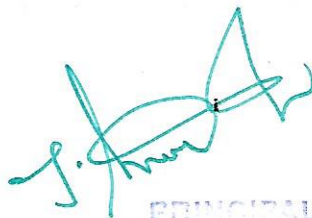

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Peruvoyal,
Chennai-601 206,
Thiruvallur Dist - 601 206.

ABSTRACT

The transfer of energy from a source to a receiver has traditionally necessitated the use of a physical connection. Indeed, electrical grids and power outlets span nearly the entire globe and deliver power to billions of people worldwide. Recently, there has been much interest into the area of wireless power transfer (WPT), that is, the transmission of power without the need for a physical connection.

WPT is an extremely useful technology that has numerous applications and benefits. Cell phones, laptops and other mobile devices could function without ever having to be plugged in, cars could drive on highways burning no fossil fuels; wireless power even has the potential to solve much of the renewable energy issues we face.

Wireless power transfer (WPT) can transmit electrical energy through a relatively large air gap. It shows the advantages of flexibility, convenience, and safety. Most of the disadvantages of conductive power transfer can be overcome or diminished by using this new technology. WPT can be employed in many applications such as electric vehicles, automatic underwater vehicles, and implantable medical devices. To expand the load lifetime and achieve better performance, the output voltage/current of a WPT system should be stable.



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal Puzhuppal,
Gummidipothana Road,
Thiruvellar Dist - 601 206.