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An Overview and Future Reflection of Battery Management Systems in Electric Vehicles

Vicky kumar Mandal[1*], Rajeev Ranjan[2], Partha Sarathi Bose[3], chandi Das Pal[4], Rituraj Yadav[5]

[1,4,5]Student, Department of Mechanical Engineering, Dr. B. C. Roy Engineering College, Durgapur- 713206, India*
[2,3]Assistant Professor, Department of Mechanical Engineering, Dr. B. C. Roy Engineering College, Durgapur- 713206, India

Email: [2]rajeevranjan.br@gmail.com, [3]parthasarathi.bose@bcrec.ac.in, [4]cpal12567@gmail.com , [5]riturajyadav369@gmail.com
Corresponding Email: [1]vickymandal432@gmail.com*

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Abstract: ***Researchers are becoming more interested in electric vehicle (EV) because it assist to minimise greenhouse impacts, reduce noise and air pollution, and provide freedom from fossil fuels. Electric vehicles depend on their batteries to safely supply the necessary power. The duration of time needed to charge the electric batteries is the biggest drawback of modern electric vehicles. Significant progress has been achieved in recent years to manage energy storage and speed up the charging process for electric vehicle batteries. In order to reduce energy consumption, boost system efficiency, lengthen battery life, and create a clean, efficient transportation system, it is crucial to build a battery management system that ensures long product life and a safe driving experience. This article attempts to provide a concise overview of various important battery management system features, including battery charging optimization, temperature control, and cell voltage balancing. The conclusion and recommendation of the article highlight the potential for further study in the area of electric vehicles.***

Keywords: ***Battery-Management System (BMS), Battery Charging Optimization, Managing Thermal Temperature, Cell Voltage Balance.***

1. INTRODUCTION

A Battery Management System (BMS) in a electric vehicles which manages every rechargeable parts in the vehicles, so for this reason it becomes one of the very critical parts in the vehicles in terms of managing the safety in EV. The main aim of battery management

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