|  |  |  |  |
| --- | --- | --- | --- |
| **Title:** | Thyristor-based Rechargeable Battery Charger | | |
| **Author(s) Name:** | Protik Parvez Sheikh, Tarifuzzaman Riyad, Bezon Dey Tushar, Sadman Shahriar Alam, Abu Shufian and Istiaq Mahmood Ruddra | | |
| **Contact Email(s):** | protik@aiub.edu | | |
| **Published Journal Name:** | Journal of Engineering Research and Reports | | |
| **Type of Publication:** | Journal | | |
| **Volume:** | 26 | Issue | 3 |
| **Publisher:** | Asia Pacific Publication | | |
| **Publication Date:** | 29.2.24 | | |
| **ISSN:** | 2582-2926 | | |
| **DOI:** | 10.9734/JERR/2024/v26i31097 | | |
| **URL:** | https://journaljerr.com/index.php/JERR/article/view/1097 | | |
| **Other Related Info.:** | Page 104-112 | | |
|  | | | |

|  |  |
| --- | --- |
| **Abstract:** |  |
| In this project, our main objective is to design an automatic battery charger using Silicon-Controlled Rectifier (SCR) and simulate their operation. Batteries play a crucial role in safely storing electricity by converting electrical energy into chemical energy. The primary focus of our project is on thyristor-based rechargeable battery chargers, known for their high quality and competitive pricing. We delve into the design and simulation of automatic battery chargers employing SCR technology. This article encompasses the simulation, implementation, and partial construction of such a charger. The electronic circuit will be tailored to meet specific charging process requirements. | |