

Report on Guest Lecture
“Battery Management System Technology”
Organised by
Department of Electronics and Communication Engineering
10th October 2018

Organized in association with: MITSAWA

Submitted by: Dr. B Prasanth Kumar. Senior Assistant Professors and •Dr. S. Rajasekaran, Senior Assistant Professors & Head, Department of Electronics and Communication Engineering, MITS

Resource Person: Mr. Vijaya Sudarshan (Alumni of Dept. of ECE, MITS, Network Analyst, Tech Mahindra)

Faculty attended:

- Dr. S. Rajasekaran, Sr. Asst. Professor & Head, Department of Electronics and Communication Engineering.
- Dr. Dr. P. Ramesh Reddy, Alumni Secretary, Assistant Professor, Department of Mathematics.
- Dr. B Prashanth Kumar Sr. Asst. Professor Department of Electronics and Communication Engineering.
- Dr. P. Ramanathan, Vice Principal (Academics)

Students Attended: ECE: 50 Students

Venue: Seminar Hall (South Block)

The department of Electronics and Communication Engineering organised a guest lecture on “*Battery Management System Technology*” on 10th October 2018 at 3 P.M. The main objective of this lecture was to bring awareness among Electronics and Communication Engineering students on the research and implementation of Battery Management in the broad areas of Electronics and Communication Engineering.

Programme Inauguration:

Dr. B Prashanth Kumar. Sr. Assistant Professor welcomed all the dignitaries, faculty and students and expressed his gratitude to the Management and Principal for giving permission and financial support to organize this programme. Dr.S. Rajasekaran, Sr. Asst. Professor and Head of the Electronics and Communication Engineering department addressed the gathering. He briefly explained the motto of the programme. Later, Dr. P. Ramanathan, Vice Principal (Academics), emphasized the importance of research scope in Electronics and Communication Engineering. Next, Dr. P. Ramesh Reddy, Alumni Secretary, Asst. Professor, Department of Mathematics emphasized the importance of this invited talk and congratulated the organizers of the ‘Guest Lecture’ and conveyed his happiness and thanks to the participants.

Session:

The department of Electronics and communication engineering in Madanapalle Institute of Technology and Sciences is not only known for its best academic performance but also for its extra-curricular activities. And as a part of it, the department of ECE conducted a small alumnus talk on 10th October 2018. to motivate the students and help them to take a right step towards their career. To address this talk, the department of ECE invited one of the alumni's of MITS "**Mr. Vijaya Sudarshan**". He delivered a valuable speech which made the students more confident and made them aware of the skills required by the engineers that an industry is looking for students who have knowledge on Battery Management System. He said that the Battery Management Technology, Battery state of charge (SOC) can directly reflect its sustainable power supply capacity and health. It is important basis to formulate balance and energy management strategy for battery management system (BMS). In this paper, a second-order RC battery model with factors affected battery characteristics was established based on the Gauss-Hermite quadrature filter (GHQF) theory. According to Kirchhoff's law a state space model was established and the parameters in the model were identified. The GHQF algorithm and model were verified, and comparison was made to an extended Kalman filter (EKF) algorithm on the MATLAB and Simulink simulation platform. Finally, the department of ECE along with some of dignitaries like HOD of ECE dept, vice-principal academics congratulated him and wished her best wishes for his future.

Memento Distribution:

Finally, Dr. S. Rajasekaran, Dr. B. Prashanth Kumar, Dr. P. Ramesh Reddy and Dr. P. Ramanathan, Vice Principal (Academics) felicitated the alumni persons with mementos.



