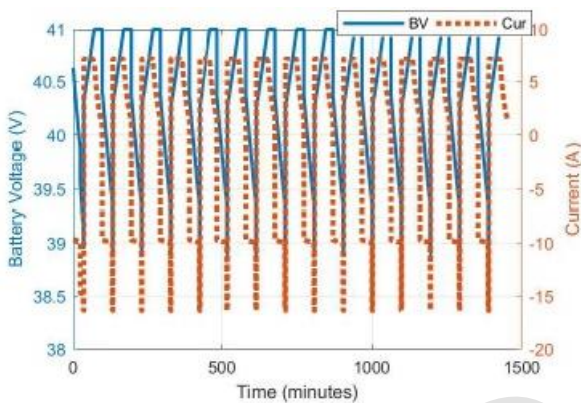


Energy Balance (EB) Model for Lithium ion Battery

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has indigenously developed software model for estimation of energy balance for spacecraft power systems with Lithium ion batteries.

Salient Features

- ❖ Specific to cell type based on proprietary testing
- ❖ Applicable to s-p or p-s configured batteries
- ❖ Covers battery tied /sunlit regulated or regulated bus of spacecraft



Major Description

- ✦ Energy balance of with Lithium ion batteries is a function of charge / discharge currents for given duration. The currents are decided by the power system configuration, power generation and loads.
- ✦ The EB Model is extensively used for analysis in various ISRO projects.

URSC-ISRO offers to transfer this technology of indigenously developed Energy Balance (EB) Model for Lithium ion battery to industries in India in space arena. To use the model, industries must have Matlab environment & should spare few cells with which the batteries are being made by them. The inputs requirements for EB analysis will be intimated on case to case basis.

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