Project-IV MEEN 689

There are two submitted projects.

Project_IV_Battery_efficiency.mo

Project_IV_Seat_design_Passive_Safety.mo

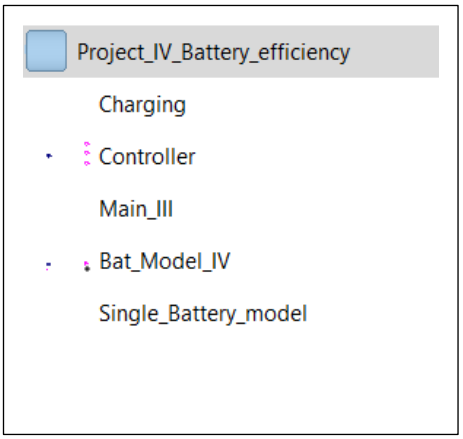
The first project Project_IV_Battery_efficiency.mo- a complete model and report is uploaded under name-MEEN_689_Project_4_Report.pdf

Project_IV_Seat_design_Passive_Safety.mo- Because of inadequate capabilities of current Dymola software, the project could not be completed and has absurd results. The discussion on incompetency and reason for unsuccessful model is presented in Discussion_Project_IV_II.pdf.

Project_IV_Battery_efficiency.mo

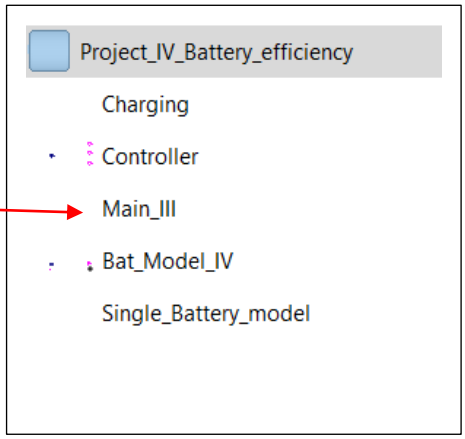
Following models are included in this package:

1. Charging.mo: Inductive Charging Model
2. Controller.mo: Controller for Dual Battery Model
3. Main_III.mo: Assembled model for Dual Battery
4. Bat_Model_IV.mo: Dual battery Model
5. Single_Battery_model.mo: Single Battery Model



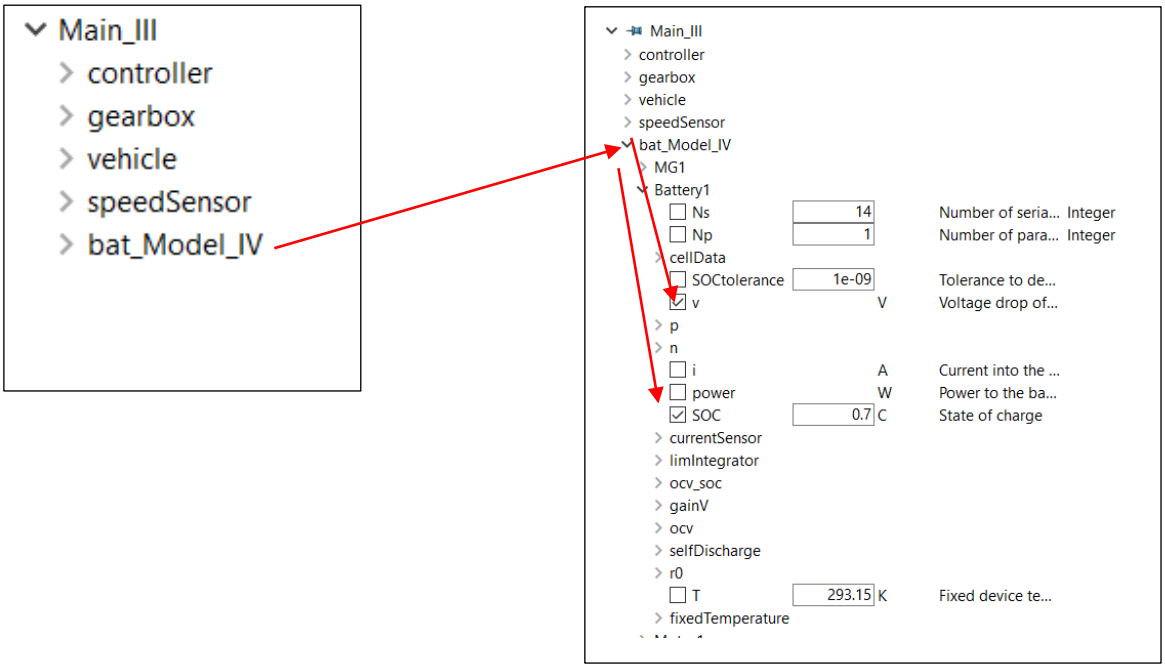
The assembled Dual battery model is :

Main_III.mo

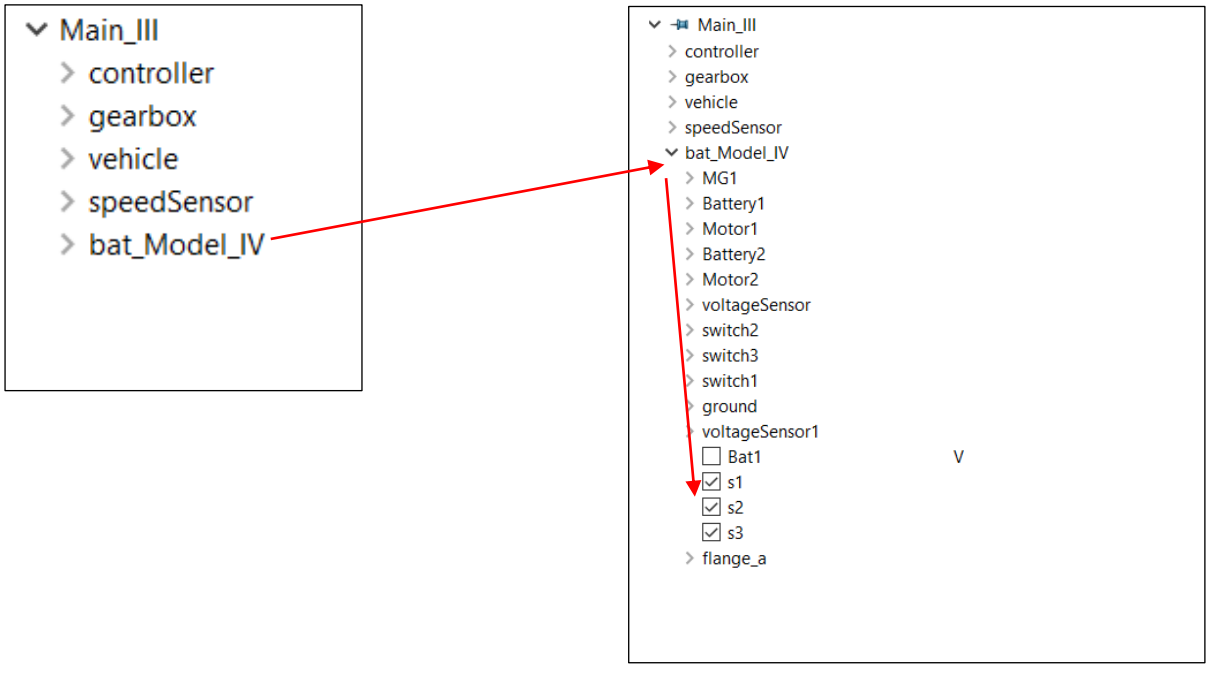


Plotting Graphs:

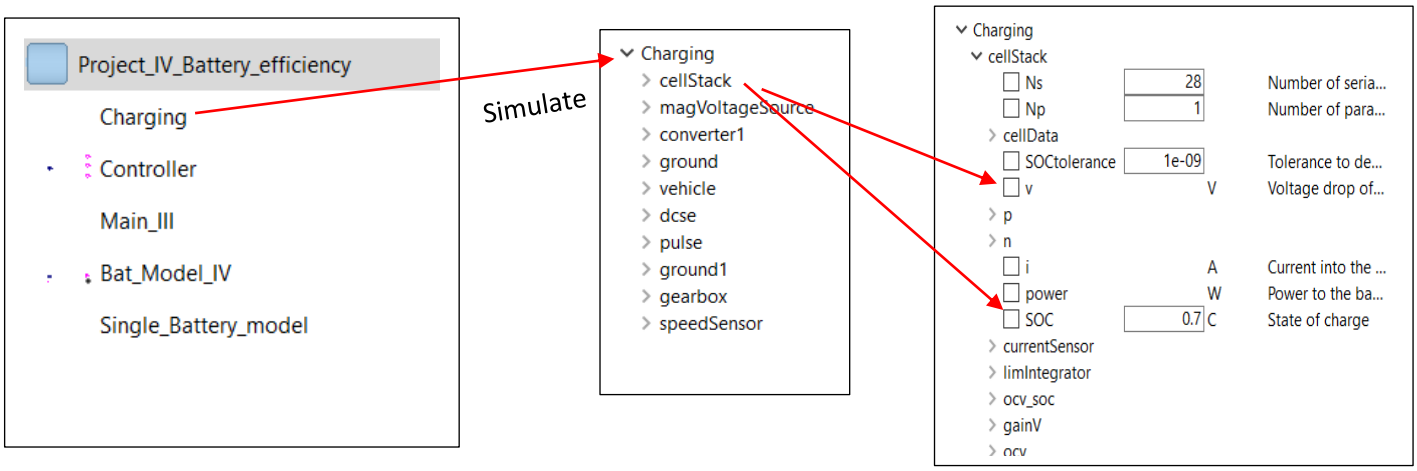
1. Voltage Difference and SOC(Dual Battery Model)



2. Switching action:



3. Charging by induction:



4. Single Battery Model: