

Road map for Transport Canada's research plans on Electric Vehicle Safety with NRC

September 11-13

EVS 16 - GTR

Gothenburg, Sweden



National Research
Council Canada

Conseil national
de recherches Canada

Canada

Research Activities

1. Thermal Propagation – Refer to presentations at this meeting
 - Pack level Thermal Propagation test using TRIM method – summer 2018
 - Vehicle level Thermal Propagation test using TRIM method – Fall 2018
 - Refine Thermal Propagation testing method based on THIS GTR discussion (ISC or TR reproduction, heater designs, positions, cell types), if required – Fall/winter 2018 - 19
 - Coordination of Thermal Propagation testing/validation with other GTR contracting parties - ongoing
 - Coordinating TRIM method with interested contracting parties – ongoing
 - Further pack or vehicle level testing, if required – Summer 2019

Research Activities

2. EV Battery Pack Diagnostics

- Investigate whether AC impedance technique developed at cell level for detection of abused cells can be scaled to module level – summer 2019
- Literature/patent and select validation experiments on other potential diagnostic methods for potential cell failure – summer 2019

Research Activities

3. Other Areas of Potential Research – past 2019

- Continuation of Thermal Propagation test method refinements/validation
- Charging/overcharging testing
- BMS or Charger failure testing
- Assessing vehicle alert systems during battery failure