Current Battery Safety Research Projects at Underwriters Laboratories Inc.

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Underwriters Laboratories Inc. has several battery safety research projects that are focused on characterizing the safety of lithium-ion cells and batteries. The aging of liion cells and modules and the trend in safety with aging has been studied for cylindrical metal can as well as pouch format cells. The safety of cells and batteries as packaged for transportation has been an area of concern to aviation as well as other transportation regulators and this has been studied using the protocols being drafted under the SAE/ICAO effort. Another area of research is in understanding the safety of li-ion cells and batteries with varying states of charge. The results from these projects will be presented.