Title:

Packaging Research in the Transportation of Lithium and Lithium-ion Batteries

Presenter:

Mark Petzinger Chief Engineer Strategic Projects FedEx Express

Abstract:

In response to several incidents involving cargo which contained lithium and/or lithium-ion batteries, FedEx has performed research into various methods of improving the safety of the transportation of batteries. Initial reviews were focused on existing Fire Suppression Systems; however it became evident that enhancements to the battery packaging would be required for some shipments. FedEx has proceeded with the development of a cooling device which cools an individual cell experiencing a thermal event to a temperature below the thermal runaway temperature of adjacent cells and thereby preventing the spread of thermal runaways.