

Canadian Association of Physicists

Association canadienne des physiciens et physiciennes

Contribution ID: 2371

Type: Plenary Speaker / Conférencier(ère) plénier(ère)

## Why do lithium-ion batteries eventually die and what to do about the situation.

Thursday 14 June 2018 09:05 (40 minutes)

Lithium-ion batteries used in smart phones last several years. However, they must last at least a decade in electric vehicles and many decades in electrical energy storage systems. In this lecture I will explain why Liion batteries eventually fail and introduce simple methods we have invented to rank lithium-ion cell lifetime in experiments that only take a few weeks. These simple methods are crucial for researchers, battery manufacturers and users who cannot test new battery chemistries for years and years to identify better batteries.

Author: Prof. DAHN, Jeff (Dalhousie University)

Presenter: Prof. DAHN, Jeff (Dalhousie University)

**Session Classification:** R-PLEN1 Plenary Session | Session Plénière - Jeff Dahn, Dalhousie University

Track Classification: Other Sessions or Meetings / Autres séances ou réunions