

## **NOUVELLE BATTERIE TESLA – Sept. 2019**

**Extrait du résumé de l'étude du Dr Jeff Dahn et al. –**

**Tiré de Electrek - 7 Sept. 2019**

The cycle and calendar lifetime of NMC/graphite cells has improved dramatically since the time references [2,5,6,8](#) were published. In addition, many researchers, OEMs and battery users believe the cycle and calendar lifetime of LFP/graphite cells are superior to that of NMC/graphite cells. We believe it is important to disseminate state-of-the-art data for NMC/graphite cells to aid future modelling efforts and to provide modern benchmarks for both old and new cell technologies. In this paper, testing results on [LiNi 0.5 Mn 0.3 Co 0.2 O2 / artificial graphite \(NMC532/AG\) cells](#) are presented. The NMC532 used in these cells is “single crystal” NMC532 as described in the papers by Jing Li et al. [12](#) and Lin Ma et al. [13–15](#).

[The artificial graphite \(AG\) used in these cells is provided by Kaijin \(China\) and is grade AML-400.](#) Over the last 10 years the Dalhousie research group has tested a wide variety of Li-ion cells with various positive electrodes, negative electrodes and electrolytes. [12–19](#)

Of all the cells tested, the ones with the longest lifetime are the single crystal NMC532/AG cells with optimized electrolytes reported here.