**Grant Number**: NEXTRODE (FIRG015), CATMAT (FIRG016), ReLIB (FIRG005, FIRG006 and FIRG27)

**Sponsor:** Faraday Institute

The following files have been archived:

|  |  |  |  |
| --- | --- | --- | --- |
| **File name** | **File description** | **Data collection** | **Collection date** |
| Al current collectors XPS spectra.xlsx | Excel spreadsheet showing the surface composition of pristine and reclaimed Al current collectors. | Data obtained by X-ray photoelectron spectroscopy measurements and recorded by a specific software. | 17th Aug 2022 |
| Cu current collectors XPS spectra.xlsx | Excel spreadsheet showing the surface composition of pristine and reclaimed Cu current collectors. | 17th Aug 2022 |
| Contact angle.xlsx | Excel spreadsheet showing the contact angle of NMC622 electrode slurry on Al current collectors and graphite electrode slurry on Cu current collectors. | Data obtained by a contact angle goniometer and recorded by a specific software. | 3rd May 2022 |
| Adhesion strength.xlsx | Excel spreadsheet showing the adhesion at the interfaces of NMC622 coatings and Al current collectors, graphite coatings on Cu current collectors. | Data obtained by a rheometer and recorded by a specific software. | 23rd Aug 2022 |
| Electrical conductivity.xlsx | Excel spreadsheet showing the electrical conductivity of NMC622 electrodes on Al current collectors and graphite electrodes on Cu current collectors. | Data obtained by four-point probe measurements and recorded by a specific software. | 19th May 2022 |
| Battery testing at different C rates.xlsx | Excel spreadsheet showing of the gravimetric capacities of NMC622 electrodes coated on Al and graphite electrodes coated on Cu at different C rates. | Data obtained by a battery tester and recorded by a specific software. | 7th May 2022 |
| Battery cycling at 0.2 C.xlsx | Excel spreadsheet showing of capacity retention of NMC622 electrodes coated on Al and graphite electrodes coated on Cu after 100 cycles at 0.2 C. | 24th Aug 2022 |
| Battery cycling at 1 C.xlsx | Excel spreadsheet showing of capacity retention of NMC622 electrodes coated on Al and graphite electrodes coated on Cu after 100 cycles at 1C. | 2nd Dec 2022 |

**Publications**: Research data supporting the publication "Direct Reuse of Aluminium and Copper Current Collectors from Spent Lithium-ion Batteries"