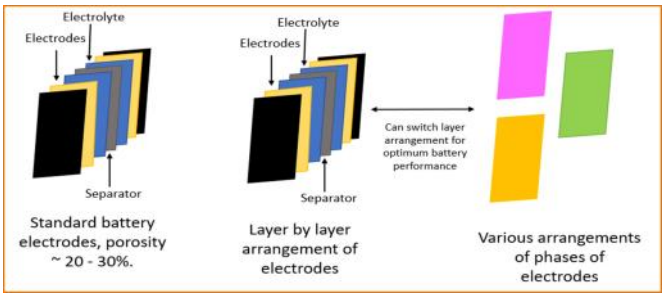
PROJECT NUMBER

17149

Methodology and software for electrode design and optimisation

Software electrode design enhances efficiency and performance in various electrochemical applications through optimisation and simulation.

Applications: Battery, Automotive, Aerospace



Features	Benefits
Designs the optimal fraction and arrangement of the different electrode materials	Maximises electrode performance with greater power density, longer battery life and higher energy density
Layer-by-layer spray deposition of the four phases of electrodes	Greater control of the distribution of constituents through thickness control of the phase
Graded electrodes	Large improvements in energy storage and the energy power balance of batteries
Different possible arrangements of electrodes to optimise battery for a specific industry	Application areas include lightweight batteries for aircraft and batteries with high cycle life for cars
Compatible in a horizontal patch design	Can be manufactured using existing infrastructure

Features	Benefits
Reduces the need for trial-and-error approach for electrode structure	Less time consuming, cost efficient

Patented and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.