

Showcasing research by Professor Dan Tsang *et al.* from The Hong Kong Polytechnic University, Hong Kong, China.

Low-carbon recycling of spent lithium iron phosphate batteries *via* a hydro-oxygen repair route

This approach involved disassembly of retired batteries, followed by separation of cathode electrode and selective extraction of lithium by hydro-oxygen species. The extracted lithium was used in crystal reconstruction to restore the batteries as new ones that can be reused in electric vehicles. This approach can promote low-carbon and environmentally friendly recycling of retired lithium iron phosphate batteries globally, contributing to sustainable future and reducing carbon emissions.



