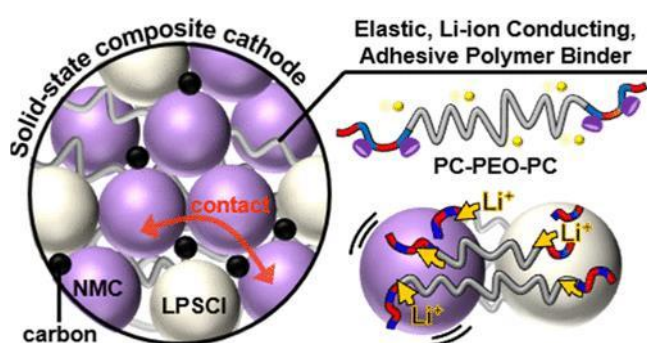


Block copolymer electrolytes for solid-state batteries

Oxford scientists have developed novel block copolymers electrolytes with exceptional performance for solid state battery composite cathodes.

Applications: Solid State Battery, Electrolytes, Cathodes, Polymers



Features

Designed with a specific combination of electrochemical, mechanical, and chemical properties

Developed with significantly improved elastomeric mechanical and adhesion properties within cathode composite

Benefits

Overcomes the challenges limiting practical all-solid-state batteries; Polymers demonstrate excellent ambient ionic conductivity, lithium-ion transport, oxidative stability, and elastomeric/plastomer properties

Maintains physical particle-particle contact of the solid components without applying unpractical high pressures; Overcomes composite cathodes battery longevity concerns associated with active particle volume changes occurring on charge/discharge

Features	Benefits
Developed for solid state battery capacity requirements	Greater capacity retention than equivalent cells featuring commercial polyelectrolytes; Better performance than current PFAs polymer binders

Patented and Available for

- Co-development
- Consulting
- Licensing

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

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