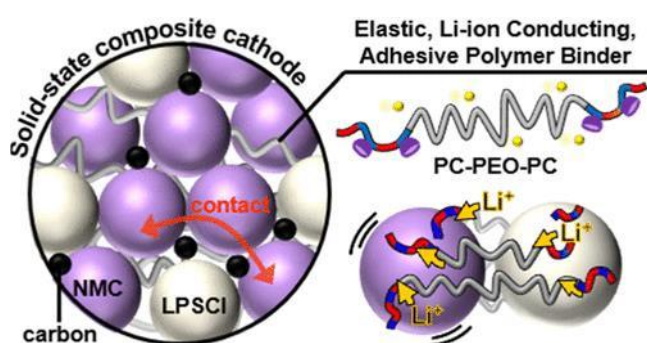


Block copolymer electrolytes for solid-state batteries

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	Benefits
Designed with a specific combination of electrochemical, mechanical, and chemical properties	Overcomes the challenges limiting practical all-solid-state batteries; Polymers demonstrate excellent ambient ionic conductivity, lithium-ion transport, oxidative stability, and elastomeric/plastomer properties
Developed with significantly improved elastomeric mechanical and adhesion properties within cathode composite	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.

The above information is provided 'as is' without conditions or warranties. Oxford University Innovation makes no representation and gives no warranty that it is the owner of the intellectual property rights in the technology described. © Oxford University Innovation Ltd 2026, Buxton Court, 3 West Way, Oxford, OX2 0JB.