# The SOLIMEC consortium: cathode-electrolyte interfaces in ASSBs

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The SOLIMEC project was funded in the M-ERA.NET 2021 call with the purpose of enhancing the mechanical stability of interfaces in solid-state Li-ion batteries for energy-intensive applications. Since then, its six partners (spread across four European countries) have devoted significant scientific efforts into understanding and engineering the cathode materials when combined with solid-state electrolytes. The focus: tackling the interface in between cathodes and solid electrolytes to prevent contact losses and hence improve performance while prolonging its lifetime.

In this poster, the key achievements made in the SOLIMEC project will be presented, including the progress in cathode optimization research for minimizing strain in solid-state batteries upon cycling at both particle and cell level. Promising new processing methods, coupled with advanced characterizations, have been the basis of those innovative cathodes might enable not only a generation of optimized Li-ion batteries, but also forward the development of functional and durable All Solid-State Batteries. The work presented will cover the drawbacks of currently used cathode materials and our proposed ways-forward, with special insight on ongoing research projects.