Team-based research R&Ds Theme 2, Development of Batteries with Enhanced Safety

R&D Project Title: Developments of Safety & Long-Life Oxide-Based Solid State Batteries

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R&D Team: Tohoku University, AIST, Doshisha University, NIMS, Tokyo University of Science, JFCC, Nagoya University, Mie University, Shinshu University, Kyushu University, University of Hyogo, Gakushuin University, CRIEPI



Summary:

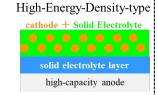
This research aims to develop safety and long-life oxide-based solid-state batteries (SSBs). The target SSBs are "sintered-type" SSBs for small- and medium-size devices such as stationary use, "non-sintered-type" SSBs for large-size devices such as electric vehicle, and "high- energy-density-type" SSBs for the next generation. The three groups, Fundamental Research Gr. (Leader: Prof. Amezawa, Tohoku Univ.), Solid Electrolyte Gr. (Leader; Prof. Iriyama, Nagoya Univ.), and Device Gr. (Leader: Dr. Okumura, AIST), collaborate closely beyond the academy and industrial research and for commercialization, discovery of advanced solid electrolytes, and deeper understanding of fundamental researches.

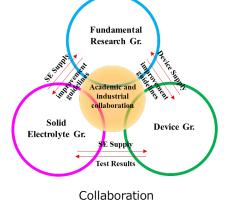
Sintered-type

Source: CRIEPI (image)

Non-Sintered-type cathodelayer solid electrolytelayer anodelayer 100 µm

Source : AIST (image)





with "Materialize (JSPS)" with and companies for commercialization

with another GteX teams for discovery of advanced solid electrolytes

with oversea research institutes for deeper understanding of fundamental research