## Realization of a low carbon society through game changing technologies

Development of Elemental Technologies for Anion Secondary Battery Aimed at Social Implementation

**Project Leader :** Tetsuya TSUDA Assoc. Prof., Graduate School of Engineering, Osaka University

R&D Team : National Institute for Materials Science (NIMS)

## **Purpose :**

Development of elemental technologies for anion secondary batteries with several advantages, e.g., lowcost, high-energy density, favorable cyclability etc.

## **Outline :**

- Anion secondary batteries with guaranteed futures will be created by using low-cost and high volumetric capacity multivalent metal anodes without any side reactions.
- Rich abundance elements can be employed for anion secondary battery components.
- Problem: No appropriate cathode with both high capacity and favorable cyclability
- Solution: Designing novel cathode active materials and electrolytes

http://www.chem.eng.osaka-u.ac.jp/~elechem/



Schematic illustration for anion secondary battery.

