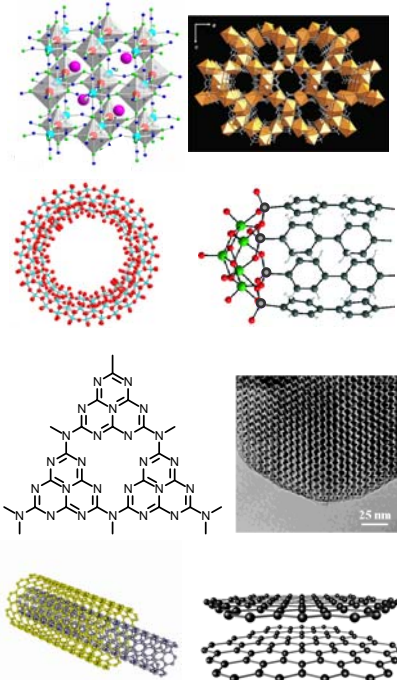


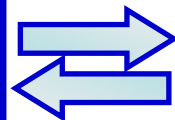
Storage Battery System Development Based on Revolutionary Materials Development

Revolutionary Materials Development



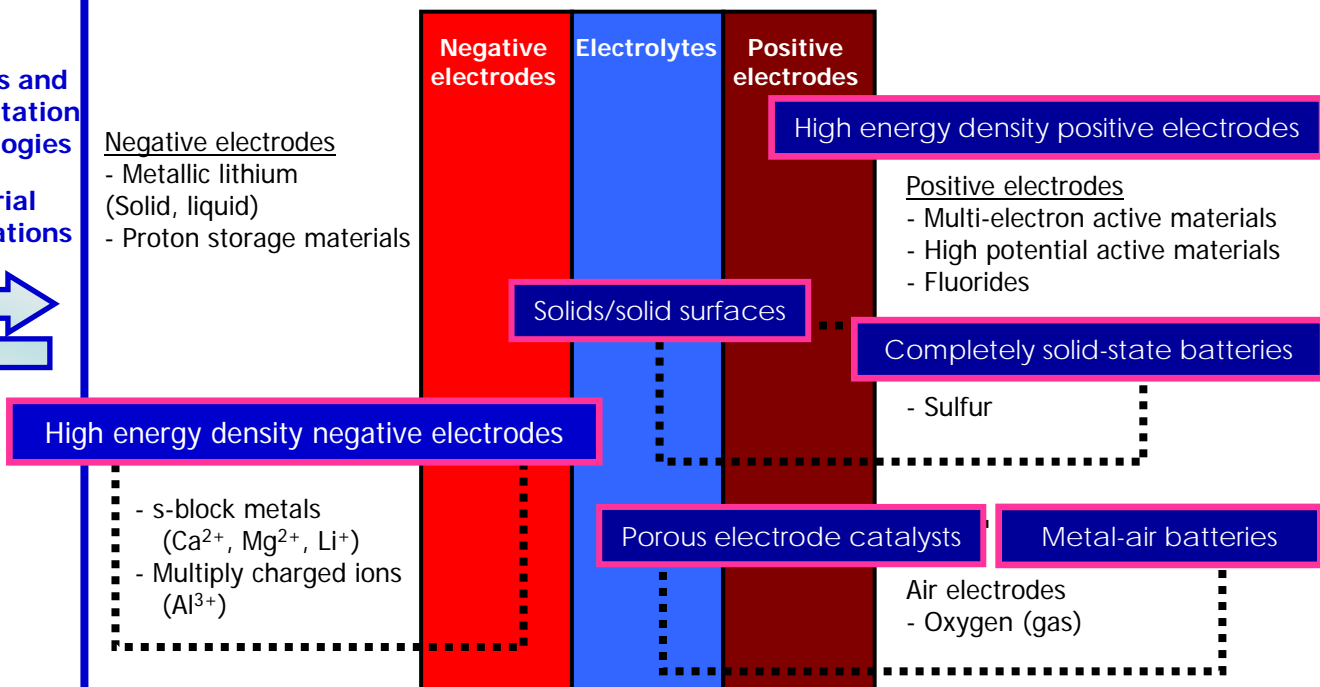
Analysis and Interpretation Technologies

Material computations



New Battery Systems

High ionic conductivity electrolytes (Li^+ , H^+ , Mg^{2+} , Ca^{2+} , Al^{3+})



(i) Rationally designing and synthesizing materials on the atomic and molecular level

All battery materials such as active materials, electronics, electrolytes, separators, binders and interfaces, etc.

(ii) Developing new-concept storage batteries

Charge carriers other than lithium, high energy density electrodes, completely solid-state batteries and metal-air batteries

(iii) Developing high level analysis and interpretation technologies, developing in situ observation methods

Electrochemical measurements on the picosecond level, TEM, synchrotron radiation XPS

(iv) Developing material computation and simulation technologies

Predicting material characteristics and developing methods of calculating the dynamic behavior of ions and electrons and developing simulation technologies