Evaluation / Testing of Materials & Batteries

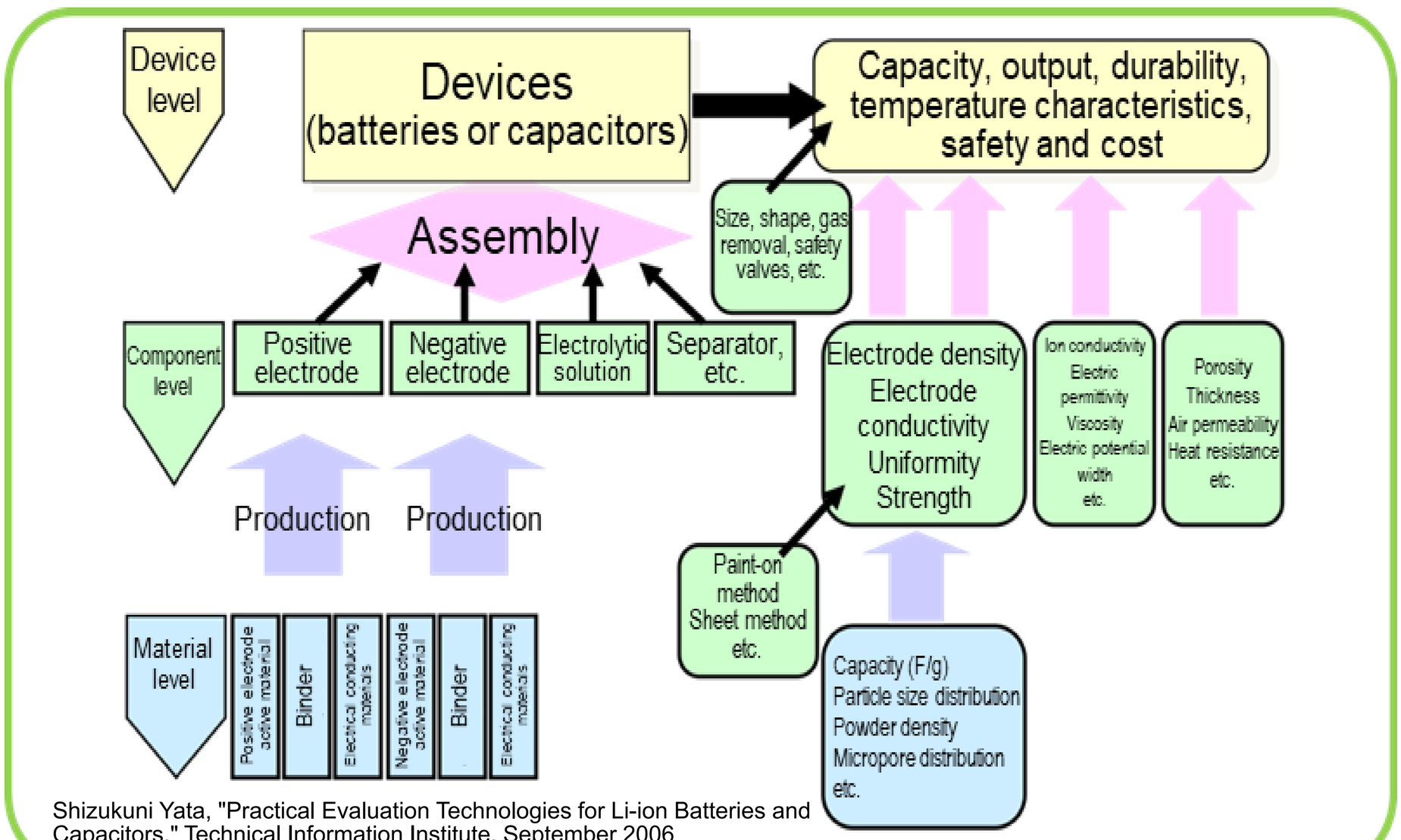
"Desired Evaluation," "Realistic Evaluation," and "Useful Evaluation"

What are the "material" characteristics required for "devices"?
What are electrodes that bring out the characteristics of materials?
What are the "material" and "electrode" factors that influence the "device" performance?

Evaluation Pyramid

For battery-related evaluation, it is important to analyze comprehensively and judge evaluation data at each level.

Energy storage device evaluation items include initial characteristics such as capacity, internal resistance, output, and temperature characteristics, as well as durability and safety such as cycle characteristics and storage characteristics. In the properties of electrodes, electrolytes, separators, etc. (member level), positive electrode materials, and negative electrode materials (material level) are intertwined in a combined and multi-layer manner, ※ it is essential to comprehensively analyze and judge the evaluation data at every level.



Shizukuni Yata, "Practical Evaluation Technologies for Li-ion Batteries and Capacitors," Technical Information Institute, September 2006

Battery Materials, Components, and Device-related Evaluation and Analyses

Advantages of KRI evaluation

Analyses based on 30 years of accumulated data

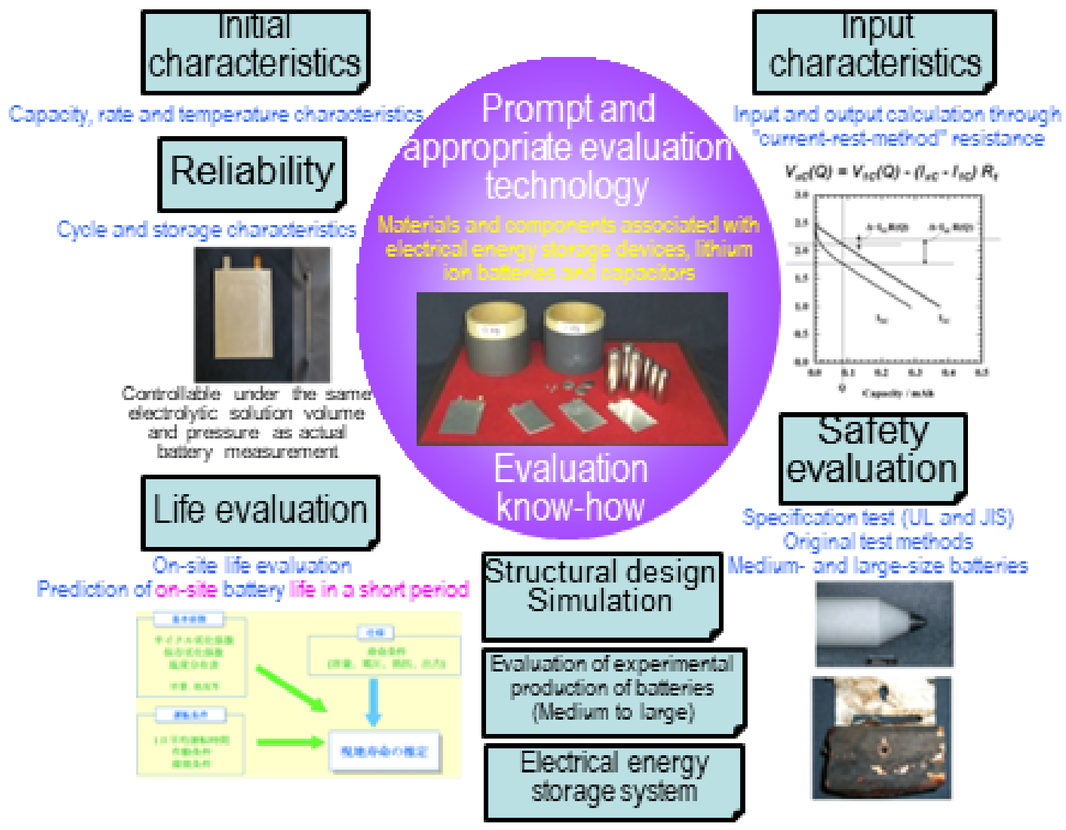
Clarifying strengths and challenges

Benchmarking and positioning

Supporting R&D at over 300 companies

Planning and manufacturing are also important in anticipated intense R&D competition, but it is that prompt and accurate evaluation techniques and the presence or absence of evaluation know-how will determine whether to win or lose. ※

※ Shizukuni Yata, "Practical Evaluation Technologies for Li-ion Batteries and Capacitors," Technical Information Institute, September 2006



Shizukuni Yata, "Practical Evaluation Technologies for Li-ion Batteries and Capacitors," Technical Information Institute, September 2006

KRI Battery R&D Team, tel: +81-75-315-9259, mail: kri-energy@ml.kri-inc.jp