

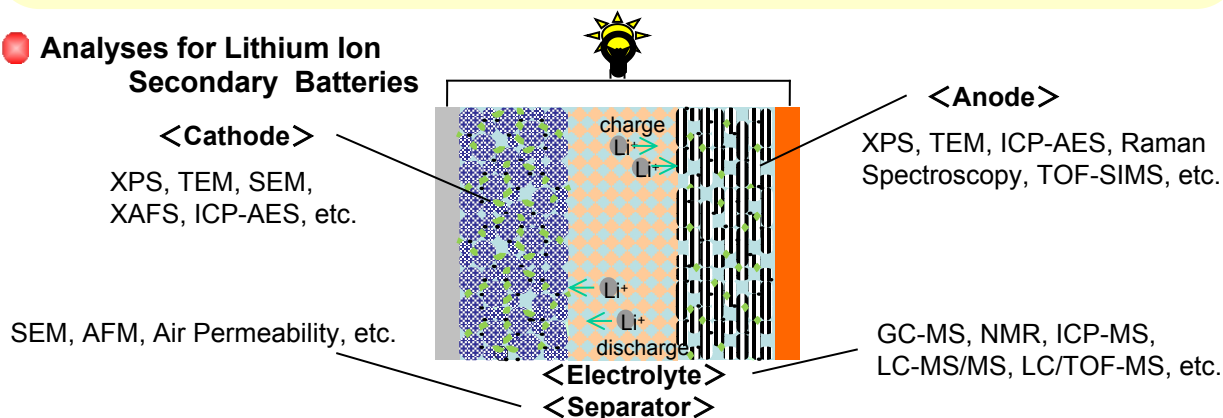
Analysis of Lithium Ion Secondary Batteries

Summary

Lithium ion secondary batteries have been already used in various fields like electronics, automobile, storage etc. At the same time, the next-generation batteries which are expected to have higher output, bigger capacity, smaller size and better safety are being developed.

MC-ANAC can strongly support your development and study through our high level, well-experienced and unique analytical technologies for Lithium Ion batteries and its components.

Analyses for Lithium Ion Secondary Batteries



Parts and Major analytical Methods

Component		Item	Analysis method
Electrode	Active materials	Composition of Elements	ICP-AES, XRF
		Crystal Structure	Raman Spectroscopy, XRD, TEM
		Morphology	TEM, SEM
		State Analysis	XPS, TEM-EELS, ESR, XAFS
		Analysis of SEI	XPS, TOF-SIMS, LC-MS/MS, NMR
		Physical Property	Specific Surface Area, Pore Distribution
	Binders	Qualitative Analysis	Pyrolysis GC/MS
	Addition Content	TG-DTA	
	Conductive auxiliary agents	Crystallinity, Distribution	Raman Spectroscopy
Separator		Morphology	SEM, AFM
		Composition	FT-IR, DSC
		Physical Property	Specific Surface Area, Air Permeability
Electrolyte		Composition	NMR, GC-MS, GC, IC
		Additives	GC-MS, GC
		Ion Components	IC, NMR
		Denatured Materials	NMR, GC-MS, LC-MS/MS
		Inorganic Components	ICP-AES, ICP-MS

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