Field/Category	Technology	Product name/ Series name	Function/Role
 Battery	X-ray diffraction	SmartLab, MiniFlex, MiniFlex XpC	Demand for lithium-ion batteries to power mobile devices and EVs is rising. Extending the working life of lithium-ion batteries requires direct observation of battery status during charging and discharging. X-ray analysis makes it possible to confirm changes during charging and discharging without opening the battery, enabling more accurate analyisis.
	X-ray diffraction	ZSX Primus series, NEX series, Niton series	Managing the characteristics of lithium-ion batteries (LIBs) and other batteries requires control of batteries' composition, particularly of impurities. Using X-ray fluorescence spectrometry makes examination of elements quick and simple.
	CT	nano3DX, CT Lab series	LIBs, which are currently our mainstay batteries, mainly consist of a wrapped layered structure of positive electrodes, negative electrodes and separators. X-ray computed tomography (XCT) is used to inspect these products to ensure that there are no wrapping errors (slippage of wrapped layers, etc.) or impurities in the materials. These inspections are conducted with utmost care, as wrapping errors and impurities can result in damage to the batteries or, at worst, major accidents such as explosion and burning of the batteries.
	X-ray diffraction	Niton series	Recycling of batteries has become especially active in recent years, to ensure effective use of precious resources. Handheld X-ray fluorescence spectrometry equipment enables on-the-spot inspection of the elements contained in recycled products.