Operand measurement of battery cell using new SmartLab

Takahiro Kuzumaki, Yuji Shiramata, Keigo Nagao Rigaku Corporation, 3-9-12, Matsubaracho, Akishimashi, Tokyo 196-8666, Japan kuzumaki@rigaku.co.jp

The Rigaku's SmartLab is the state of the art X-ray diffractometer which can be equipped with a multilayer mirror and a high-efficiency detector for Ag and Mo radiation. By using the new mirror and the detector, high- intensity and high-resolution data can be obtained in a short time even for samples such as a pouch cell that are difficult to penetrate by using Cu and Co radiation. Furthermore, it is possible to confirm in detail the change of the crystal phases and crystal structure during the charge-discharge process of the pouch cell by using the charge-discharge device. The results of the operand measurement of the positive electrode material of an all-solid-state battery and the negative electrode material of a regular secondary battery by the SmartLab system will be presented at the poster session.