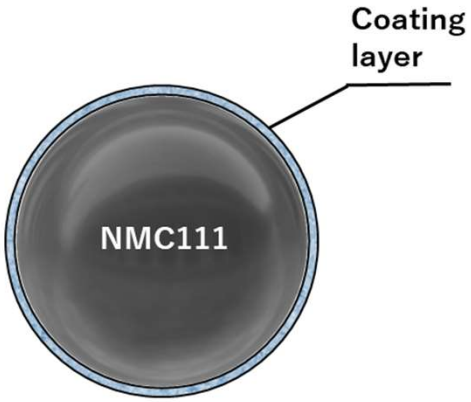
RIKEN KEIKI

Preparation of thick-film electrodes by aerosol deposition for all-solid-state batteries



The image of the coated cathode material for all-state-battery

【Work function analysis of electrode materials by AC-3 】

Prof. Iriyama and co-workers measured the work function of all-solid-state battery electrode materials with AC-3 and reported their study on Journal of Power Sources[1].

The all-state-battery is dragging many attractions nowadays due to its safety and performance since many countries are claiming the carbon neutral plan .

Prof. Iriyama and co-workers succeeded in the synthesis of Nb-O coated cathode material and fabrication of the thin film electrode. And by measuring the work function of those electrodes surfaces with AC-3, the mechanism of the coating layer enhancement was explained.

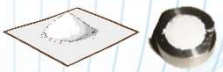
With this result, AC-3 is proved to be so useful that contribute to those novel researches for energy problems.

[1] Shinya Iwasaki, Tadashi Hamanaka, Tomohiro Yamakawa, William C. West, Kazuo Yamamoto, Munekazu Motoyama, Tsukasa Hirayama, Yasutoshi Iriyama, Journal of Power Sources, 2014, 272, 1086-1090

Photoemission Yield Spectroscopy in Air : PYSA

Model : AC-3

Features



Sample tray for powder

○ **No need for vacuum, can measure in air**
→ Various types of samples available without any pre-treatment.

○ **Further range for more applications**
→ Measure ranges from 4.0 to 7.0 eV, capable for more materials.

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