



NIPPON SHOKUBAI announces developing novel zinc electrode "Zn electrode" and its material

NIPPON SHOKUBAI CO., LTD. [Tokyo Stock Exchange - TOKSE:4114.T] ("NIPPON SHOKUBAI") hereby announces that NIPPON SHOKUBAI has developed Zn electrode with anion-conducting layer by its own original technology. NIPPON SHOKUBAI has already started supplying prototype samples and is engaged in establishing a mass production process of the materials.

The battery using Zn electrode has a great advantage such as safety, low cost, and high energy density. However, the practical use of secondary battery with Zn electrode has been still limited, because a short circuit caused by a growth of Zn crystal (dendrite) has easily occurred during charge-discharge cycles. From this point of view, we have developed a novel Zn electrode with anion-conducting layer, namely the anion-conducting material is attached to the surface of Zn active material layer.

Our original Zn electrode can effectively suppress a growth of dendrite, and realizes a battery life about 10 times longer than the conventional one. We have confirmed that the battery using our Zn electrode can keep a good performance during 1,000 cycles of charge-discharge test (Our test result).

We expect that our Zn electrode will be applied to the advanced battery such as Ni-Zn and Zn-Air rechargeable batteries which are suitable for power source, automobile, stationary battery, energy storage system, and so on.

Our Zn electrode is exhibited at upcoming BATTERY JAPAN, to be held from Feb. 26 (Wed)-28 (Fri), 2014 at Tokyo Big Sight in Japan. The booth will be located at W6-45.

Contacts

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