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Errata: “A New Fast-Charging Power Source” [J. Electrochem. Soc. **117**, 131, (1970)]

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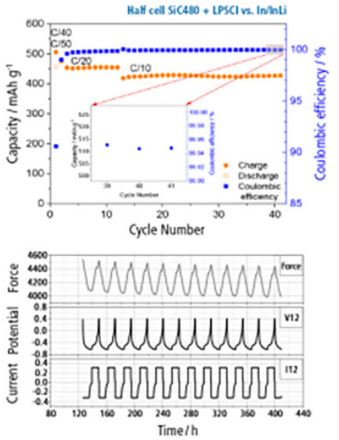
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and 10% Microthene binder, and an electrolyte consisting of a saturated solution of phenyl trimethyl ammonium hexafluorophosphate in propylene carbonate. The test cell block is shown in Fig. 1. The electrodes are placed in the slot and connections are made to the positive, negative, and reference electrodes. The jacks allow connection to an external recorder. Typical discharges of cells of this type are shown in Fig. 2 and 3. Figure 2 is a C/6 discharge (10 mA or 2 mA/cm^2) in which the cell delivered 41% of its theoretical capacity at an average voltage of 1.66V. Figure 3 is a discharge at the 150 hr rate (0.4 mA or 0.08 mA/cm^2) in which the cell delivered 39% of its theoretical capacity. The average cell voltage for the entire discharge was 1.6V.

Later analysis showed the material to be about 50% HgF_2 and 50% HgO. Based on the HgF_2 content, discharge showed about 80% utilization of theoretical capacity. Qualitatively, self-discharge occurs to a significant extent over a 2-week period.

Conclusions

The goal of this program was to prepare a mercuric fluoride electrode, dischargeable in a nonaqueous medium.

The work described in this communication indicates that a HgF_2 primary electrode can be prepared which yields a ramped shape voltage characteristic averaging 1.6V at discharge rates of C/6 or lower, and is about 80% efficient based on a two-electron change after correcting for the HgF_2 content. It has also been found that the electrode polarization is, to a large measure, electrolyte dependent. Also, the addition of silver to the electrode markedly increases the voltage level on discharge. We believe this is due to amalgamation of the Hg as it forms, more so than to an increase of conductivity.

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Any discussion of this paper will appear in a Discussion Section to be published in the December 1970 JOURNAL.

REFERENCE

1. A. E. Lyall and H. N. Seiger, "Nonaqueous Lithium/Nickel Halide Batteries"; Proceedings First IECEC Conference, Los Angeles (1966).

Errata

In the paper "A New Fast-Charging Power Source" by P. Bro and N. Marincic which appeared on pp. 131-134 of the January 1970 issue of the JOURNAL, Vol. 117, No. 1, the charging rates were printed as °C. In each case, these should be read without the degree sign.

In the paper "A Calorimetric Study of the Electroless Deposition of Nickel" by J.-P. Randin and H. E. Hintermann which was published on pp. 160-167 of the February 1970 issue of the JOURNAL, Vol. 117, No. 2, in reactions [9], [11], and [12], p. 163, the coefficient $\left(\frac{b}{2a}/a\right)$ should be read $\left(\frac{b-2a}{a}\right)$.