Conclusions

Rechargeable thin-film lithium batteries have high specific energies and energy densities, the ability to undergo thousands of charge-discharge cycles, and they can be fabricated into a variety of sizes and shapes on virtually any type of substrate. Because of the all solid state construction, thin-film batteries can operate over a wide temperature range limited at the upper end by the melting point of Li. The current density and the useful power produced by thin film batteries is limited by electrolyte-cathode interface resistance.

Acknowledgments

The authors wish to thank Mr. Steve Jones of Eveready Battery Co. for providing several of the TiS_2 cathodes and for the long cycling of a Li-TiS_2 cell with the Lipon electrolyte. We also thank Dr. F. Shokoohi of Belcore for supplying a thin-film of $LiMn_2O_4$ that we used in fabricating the Li-$Li_xMn_2O_4$ battery. Portions of the research were sponsored by the Division of Materials Sciences, U.S. Department of Energy, under contract DE-AC05-84OR21400 with Martin Marietta Energy Systems, Inc.

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