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## BIBLIOGRAPHY OF CONVECTIVE TRANSPORT CORRELATIONS

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The objectives are to search scientific and technical literature for references on experimentally established convective mass transfer and heat transfer correlations and to abstract, index, review, and publish as a bibliography, essential information useful for detailed analysis of convective transport phenomena in energy storage systems.

A preliminary search of prominent electrochemical and chemical engineering journals since 1970 has been made. Seventy publications were identified in addition to those recorded in previous surveys of mass transfer correlations (e.g., J. R. Selman and C. W. Tobias, *Adv. Chem. Eng.*, 10 (1978) 211). A start has been made with a computer search covering a wide spectrum of journals, using the Lockheed DIALOG online bibliographic retrieval systems. The information in the publications collected thus far has been recorded on a disk file using the following nine-digit classification code: (1) flow containment (9 categories); (2) flow regime and phase (10 categories); (3) flow geometry (9 categories); (4) type of convection (10 categories); (5) electrode movement (6 categories); (6) electrode geometry, if single element (9 categories); (7) electrode geometry, if multiple element (6 categories); (8) reactant (10 categories); and (9) supporting electrolyte (8 categories).

The MIDASFILE system of Prime, Inc., has been adopted for index-sequential processing. Initial difficulties in using this very efficient retrieval system have been resolved, and filing preliminary data has been completed. Preliminary contacts have been made to establish a panel of experts to advise on search procedures and to review the first draft report. Those contacted expressed a willingness to participate, but on a correspondence basis rather than as traveling consultants.

A first draft report will be completed by December 1, 1982. This will contain all available mass-transfer correlations and an initial selection of heat-transfer correlations. A review of the search procedures and the first draft report will be requested from the review panel in December 1982. A second draft will be completed by August 1983.