

### III. SOLID STATE PHYSICS

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#### A. GENERALIZED THERMODYNAMICS OF SOLIDS

Some time ago the senior author advanced arguments in favor of reconsidering the fundamental assumptions of the quantum mechanics of solids (1). Since that time, certain progress has been achieved in this direction. However, most of the results obtained are not easily reported in separate publications, and it has been decided to prepare a comprehensive review paper integrating present work with previously published results on the theories of phase transitions (2) and superconductivity (3). The preparation of this review has been started.

L. Tisza, T. D. Schultz

#### References

1. L. Tisza: Quarterly Progress Report, Research Laboratory of Electronics, M.I.T. Jan. 15, 1952, pp. 12-13
2. R. Smoluchowski, J. E. Mayer, W. A. Weyl: Phase Transformations in Solids, John Wiley, New York, 1951. See Chap. 1, "On the General Theory of Phase Transitions," by L. Tisza; also published as Technical Report No. 127, Research Laboratory of Electronics, M.I.T. 1949
3. "Low Temperature Physics," United States Department of Commerce, National Bureau of Standards, Circular 519, Oct. 1952. See Chap. 3, "On the Nature of the Superconducting Transition"