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# A COMPILATION OF THE MATERIALS GATHERED AND REPORTS ISSUED DURING THE SIX WEEKS STUDY OF THE RECOVERY PHASE OF THE CERAMICS PROJECT BY GROUP 18

MOUND DECLASSIFICATION REVIEW
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January 20, 1954

The purpose of this report is to gather into one list the information, sources of information, and reports compiled in the six weeks study of the recovery phase of the Ceramic Project. This list should be useful not only as a minor history of the six weeks study, but also as a general reference file on the physical properties of the isotopes of hydrogen.

The list is divided into sections with the following headings: Bibliographies, Thermal Diffusion, Electrolysis, Cryogenics, Physical Properties, and Miscellaneous (trip reports, letters, etc.). Copies of most of the material referred to in the list may be found in the classified safes in rooms E-101 and E-102 in the Electronics Building. Two items in the list under the Miscellaneous section should receive special mention. Item number 14 refers to a compilation of tables and graphs of physical properties, of the six molecular forms of hydrogen and calculations on electrolysis and distillation, prepared by Group 18 prior to the meeting at the New York Office of the A.E.C. on December 23, 1953. Item 15 refers to the final report to E. C. McCarthy summarizing the six weeks study of the following problems.

Restricted Data
This document contains restricted data as defined in the Atomic Energy Act of 1946. Its transmittal or the disclosure of its contents in any manner to an unauthorized person is prohibited.

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PROBLEM 1

Recommend one of the following methods of hydrogen-isotope separation, thermal diffusion, electrolysis, and low temperature distillation, to be used in the initial phase of the recovery program of the Ceramic Project.

PROBLEM 2

Justify the establishment at Mound Laboratory of three development laboratories to obtain engineering design data pertinent to the three methods listed in problem 1. The design data is needed so that the three methods may be compared and the best method selected for the recovery plant required in the latter phase of the Ceramic Project.

NOTE: File numbers referred to in the list are MLM Central Files numbers.

mg

J. R. Parks

Copy 1 - E. C. McCarthy
2 - J. R. Parks
3 - Central Files
4 - Central Files

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