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## ORNL/SUB-77/14218/1

A PROGRAM TO EVALUATE
THE POTENTIAL OF THE
SYNTHESIS OF CHEMICALS FROM COAL
AS AN ERDA RESEARCH PROGRAM
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SEPTEMBER 1977

# SUBMITTED TO

OAK RIDGE NATIONAL LABORATORY
UNION CARBIDE NUCLEAR DIVISION
AND
FOSSIL ENERGY OFFICE OF PROGRAM
PLANNING AND ANALYSIS

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION



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ORNL/Sub-77/14218/1

A PROGRAM TO EVALUATE THE
POTENTIAL OF THE SYNTHESIS OF
CHEMICALS FROM COAL AND OIL
SHALE AS AN ERDA RESEARCH PROGRAM

FINAL REPORT

September 1977

Work performed by:

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Under Purchase Order No. 19X-14218V

Work performed for:

Oak Ridge National Laboratory
Oak Ridge, TN 37830
Operated by
Union Carbide Corporation
for the
Energy Research and Development Administration

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### ABSTRACT

The purpose of this project is to assess the desirability of facilitating the production of chemical feedstocks from coal and oil shale resources, and to provide suggestions for future ERDA research programs based on the results found. Program suggestions are based on a review of factors critical to the use of coal and oil shale for chemical production and the status of current ERDA program efforts. The approach used in the study consists of the following steps:

- Review of petrochemical feedstock demand and fuel supply demand projections.
- Determination of how coal and oil shale technologies could relate to the processing routes for chemical feedstocks.
- Identification of factors critical to the utilization of coal and oil shale derived petrochemical feedstocks.
- Review of ERDA programs potentially related to producing chemicals from coal and oil shale.
- Suggestions for future ERDA research programs.

The suggestions made for ERDA research programs were in the areas of:

- Catalyst Development
- Processing Techniques
- Characterization of Liquids
- Economics
- Environment, Safety, and Health

Catalyst development is considered to be the most important technological development need for the near term.

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