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16. Abstract (Limit: 200 words) This report discusses the current state of the art for the major processing operations which have been developed for the conversion of coal to clean liquid or solid fuels. These processing operations include (1) aqueous leaching processes, (2) solvent refining processes, (3) catalytic hydrogenation processes, (4) Fischer-Tropsch processes and related syntheses, and (5) pyrolytic or carbonization processes. Many of the specific processes within each of the major processing operations are discussed in this study. Data are presented for capital and operating costs of coal liquefaction and chemical refining plants. Flow diagrams are included for many of the specific processes described. Based on this discussion of the current state of the art in the major coal liquefaction processing operations, research and development needs for each of these operations are presented.		13. Type of Report & Period Covered 14.	
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The R&D Activities described in this report were supported by the Battelle Energy Program. Questions regarding this report or the program as a whole should be directed to the Director, Battelle Energy Program, 505 King Avenue, Columbus, Ohio 43201.

Additional activities of the Battelle Energy Program include publication of Energy Perspectives—a monthly newsletter covering various energy-related topics, and operation of the Energy Information Center—devoted to collecting and analyzing the world's energy publications. Inquiries pertaining to these activities are invited.

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LIQUEFACTION AND CHEMICAL REFINING OF COAL

A Battelle Energy Program Report

July, 1974

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