

All of the work carried out thus far has been with commercially available packaging films. In view of the fact that there seems to be no correlation between the chemical nature of a film and its separative properties, it is almost certain that the optimum film has not been found for any given gas separation. Major improvements may thus be found in film selectivities and permeabilities which would vitally affect the feasibility of certain gas separations.

#### Technical Reports and Foreign Documents

##### Synthetic Liquid Fuels Abstracts

The current literature has been thoroughly covered and abstracted; German patent references in the foreign document files have been searched and those of interest abstracted. About 1,000 copies of each issue of the Abstracts have been distributed. Indexes of all abstracts issued since October 1944 have been made, thus opening up for easy inspection all of the synthetic fuels literature since that date.

##### Bibliographies

The review and compilation of the literature on the pressure hydrogenation of liquid and solid carbonaceous materials have been completed. This bibliography covers the literature to January 1, 1949, and the patents to May 1, 1949, and contains more than 6,000 abstracts. Comprehensive subject and patent number indexes are nearing completion.

The Fischer-Tropsch bibliography is still in the formative stage; the card index is being completed, and it is anticipated that this bibliography will contain about 5,000 abstracts.

A bibliography of Bureau of Mines investigations on the production of synthetic liquid fuels has also been completed.

##### Foreign Documents

Work has been continued in collecting, arranging, classifying, and indexing the foreign documents from German sources containing information of interest on synthetic liquid fuels (see figs. 50 and 51). Individual subject indexes of 279 TOM reels are being consolidated into a single index. Enlargement prints selected from the TOM reels and printed CIOS, BIOS, and PLAC reports are available as well as translations of documents from various sources. Documents other than TOM reels are being indexed in considerable detail, and an attempt will be made to correlate this index with the TOM-reel index. The document index now covers more than 1,500 separate documents. It is anticipated that, upon completion, this index will contain a reference to every document or report from German sources containing specific information of interest in connection with synthetic liquid fuels.



Figure 50. - Foreign documents section - print files.



Figure 51. - Foreign documents section - card index.