

N

NEWMAN, L. L., AND PIPILEN, A. P.
Hydrocarbonization of Coal for
High B.t.u. Gas . . . Part 1. Gas
Age, vol. 119, No. 10, May 16,
1957, pp. 16-21.

_____. Hydrocarbonization of Coal for
High B.t.u. Gas . . . Part 2. Gas
Age, vol. 119, No. 11, May 30, 1957,
pp. 18-20, 44.

O

ORCHIN, MILTON. Hydrogenation of
Anthracene by Tetralin. Jour. Am.
Chem. Soc., vol. 66, 1944, pp.
535-538.

_____. Aromatic Cyclodehydrogenation.
II. A New Synthesis of Fluorene.
Jour. Am. Chem. Soc., vol. 67, No.
3, March 1945, p. 499.

_____. Aromatic Cyclodehydrogenation.
III. Experiments With 2-Ethylbi-
phenyl. Jour. Am. Chem. Soc., vol.
68, No. 4, April 1946, pp. 571-572.

_____. Synthesis of Fluorene and Its
Derivatives. U. S. Patent
2,414,118, Jan. 14, 1947.

_____. Aromatic Cyclodehydrogenation.
VI. Synthesis of Ring Oxygen Com-
pounds. Jour. Am. Chem. Soc., vol.
70, No. 2, February 1948, pp.
495-497.

_____. Solvation and Depolymerization
of Coal. U. S. Patent 2,476,999,
July 26, 1949.

_____. Synthesis of Perylene. U. S.
Patent 2,478,205, Aug. 9, 1949.

_____. Hydrogenation of Organic Com-
pounds With Synthesis Gas. Chap.
in Advances in Catalysis and Re-
lated Subjects, ed. by W. G.

Frankenburg, V. I. Komarewsky, and
E. K. Rideal. Academic Press, Inc.,
New York, N. Y., vol. 5, 1953,
pp. 385-415.

See also Feldman, J.; Friedel,
R. A.; Golumbic, Calvin; Kaplan,
E. H.; Woolfolk, Elkin Oscar.

ORCHIN, M., AND FELDMAN, J. The Iso-
lation of Coronene From a Coal-
Hydrogenation Oil. Jour. Org.
Chem., vol. 18, No. 5, May 1953,
pp. 609-613.

ORCHIN, MILTON, AND FRIEDEL, R. A.
Aromatic Cyclodehydrogenation. IV.
Experiments in the Dinaphthyl Series.
Jour. Am. Chem. Soc., vol. 68, No.
4, April 1946, pp. 573-574.

_____. Structure of the Benzfluorenes
and Benzfluorenones. Jour. Am.
Chem. Soc., vol. 71, No. 9,
September 1949, pp. 3002-3005.

ORCHIN, MILTON, GOLDBACH, G. L.,
WOLAK, MARGARET, AND STORCH, H. H.
Coal Hydrogenation. The Effect of
Variations in the Coal-to-Vehicle
Ratio. Bureau of Mines Rept. of
Investigations 4499, 1949, 10 pp.

ORCHIN, MILTON, AND GOLUMBIC, CALVIN.
Partition Studies on Phenols. III.
Steric Effects. Jour. Am. Chem.
Soc., vol. 71, No. 12, December
1949, pp. 4151-4152.

ORCHIN, MILTON, AND REGGEL, LESLIE.
Aromatic Cyclodehydrogenation. V.
A Synthesis of Fluoranthene. Jour.
Am. Chem. Soc., vol. 69, No. 3,
March 1947, pp. 505-509.

_____. Aromatic Cyclodehydrogenation.
VII. Rearrangements in the Phenyl-
naphthalene Series. Jour. Am. Chem.
Soc., vol. 70, No. 3, March 1948,
pp. 1245-1247.

- ORCHIN, MILTON, AND REGGEL, LESLIE.
Synthesis of Fluoranthene and Its Derivatives. U. S. Patent 2,503,292, Apr. 11, 1950.
- _____. Synthesis of Benz[j]fluoranthene and Benz[k]fluoranthene. *Jour. Am. Chem. Soc.*, vol. 73, No. 1, January 1951, pp. 436-442.
- _____. Aromatic Cyclodehydrogenation: X. Studies on Ring Oxygen Compounds. Dinaphtho[1,2,1',2']furan. *Jour. Am. Chem. Soc.*, vol. 73, No. 4, April 1951, pp. 1877-1878 (note).
- _____. A Synthesis of Fluoranthene by Cyclodehydration. *Jour. Am. Chem. Soc.*, vol. 73, No. 6, June 1951, pp. 2955-2956.
- ORCHIN, MILTON, REGGEL, LESLIE, AND FRIEDEL, R. A. Aromatic Cyclodehydrogenation. IX. Further Studies on Ring Oxygen Compounds. *Jour. Am. Chem. Soc.*, vol. 71, No. 8, August 1949, pp. 2743-2746.
- _____. Aromatic Cyclodehydrogenation. XI. Experiments With Dimesityl. *Jour. Am. Chem. Soc.*, vol. 74, No. 4, Feb. 20, 1952, pp. 1094-1095 (note).
- ORCHIN, MILTON, REGGEL, LESLIE, FRIEDEL, R. A., AND WOOLFOLK, E. O. Aromatic Cyclodehydrogenation. Bureau of Mines Tech. Paper 708, 1948, 40 pp.
- ORCHIN, MILTON, REGGEL, LESLIE, AND WOOLFOLK, E. O. Molecular Complexes With 2,4,7-Trinitrofluorenone. II. *Jour. Am. Chem. Soc.*, vol. 69, No. 5, May 1947, pp. 1225-1227.
- ORCHIN, MILTON, AND STORCH, H. H. Solvation and Hydrogenation of Coal. *Ind. Eng. Chem.*, vol. 40, No. 8, August 1948, pp. 1385-1389.
- _____. Hydrogenolysis of Phenols in Middle Oils From Coal Hydrogenation. *Jour. Soc. Chem. Ind.* (London), vol. 69, No. 4, April 1950, pp. 121-122.
- ORCHIN, MILTON, AND WENDER, IRVING. Apparatus for Measuring Gas Absorption or Evolution During Organic Reactions. Catalytic Hydrogenation, Dehydrogenation, and Zerewitinoff Determination. *Anal. Chem.*, vol. 21, No. 7, July 1949, pp. 875-876.
- ORCHIN, MILTON, AND WOOLFOLK, E. O. Aromatic Cyclodehydrogenation. I. 4-Methylfluorene From 2,2'-Dimethylbiphenyl. *Jour. Am. Chem. Soc.*, vol. 67, No. 1, January 1945, pp. 122-124.
- _____. Molecular Complexes With 2,4,7-Trinitrofluorenone. *Jour. Am. Chem. Soc.*, vol. 68, No. 9, September 1946, pp. 1727-1729; *Chem. Abs.*, vol. 40, Nov. 20, 1946, p. 7182.
- _____. Synthesis of Di-aryl Cyclic Ethers. U. S. Patent 2,566,357, Sept. 4, 1951.
- ORCHIN, MILTON, WOOLFOLK, E. O., AND REGGEL, LESLIE. Aromatic Cyclodehydrogenation. VIII. Experiments With 2-Benzoyl-5,6,7,8-Tetrahydronaphthalene. *Jour. Am. Chem. Soc.*, vol. 71, No. 3, March 1949, pp. 1126-1127.

P

- PANTAGES, P. See Feldman, J.
- PEEBLES, W. C. See Hofer, Lawrence J.I.
- PELIPETZ, M. G. See Clark, E. L.; Savich, T. R.; Storch, H. H.; Wolfson, M. L.; Weller, S.
- PELIPETZ, M. G., FRANK, LOUIS V., GINSBERG, HENRY H., WOLFSON, M. L.,

- AND CLARK, E. L. Testing of Reproduced Vapor-Phase Catalysts. Chem. Eng. Prog., vol. 50, No. 12, December 1954, pp. 626, 627, 628.
- PELIPETZ, M. G., KUHN, E. M., FRIEDMAN, SAM, AND STORCH, H. H. Effect of Catalysts on the Hydrogenolysis of Coal. Ind. Eng. Chem., vol. 40, No. 7, July 1948, pp. 1259-1264.
- . Studies of the Kinetics of Coal Hydrogenation. Bureau of Mines Rept. of Investigations 4546, 1949, 9 pp.
- PELIPETZ, M. G., SALMON, JAMES R., BAYER, JAMES, AND CLARK, E. L. Catalyst-Pressure Relationship in Hydrogenolysis of Coal. Ind. Eng. Chem., vol. 45, No. 4, April 1953, pp. 806-809.
- . Uncatalyzed Coal Hydrogenolysis. Ind. Eng. Chem., vol. 47, No. 10, October 1955, pp. 2101-2103.
- PELIPETZ, M. G., WELLER, S., AND CLARK, E. L. Hydrogenation and Pyrolysis of Anthraxylon From Bituminous Coal. Fuel, vol. 29, No. 9, September 1950, pp. 208-211.
- PELIPETZ, M. G., WOLFSON, M. L., GINSBERG, H., AND CLARK, E. L. High-Pressure Hydrogenation of Crude Shale Oil. Chem. Eng. Prog., vol. 48, 1952, pp. 353-356.
- PIERCE, LOIS. See Friedel, R. A.
- PIPILEN, A. P. See Newman, L. L.
- R
- REGGEL, LESLIE. See Friedel, R. A.; Orchin, Milton.
- REMMERT, HERMAN A., SKINNER, L. C., AND DONOVAN, J. T. Coal and Coal-Paste Preparation and Transfer Problems for Hydrogenation Service. Abs. in Mech. Eng., vol. 74, No. 11, November 1952, pp. 927-928 (ASME Paper 52-F-26, mimeo.).
- ROSE, H. J. See Lowry, H. H.
- S
- SALMON, JAMES R. See Pelipetz, M. G.
- SANDAKER, JOHN H. See Markovits, J. A.
- SANDAKER, J. H., MARKOVITS, J. A., AND BREDTSCHNEIDER, K. B. High-Pressure (10,300 p.s.i.) Piping, Flanged Joints, Fittings, and Valves for Coal-Hydrogenation Service. Trans. ASME, vol. 72, No. 4, May 1950, pp. 365-372.
- SAVICH, T. R., PELIPETZ, M. G., BUDY, W. A., CLARK, E. L., AND STORCH, H. H. Stripping of Coal-Hydrogenation Heavy-Oil Slurry. Ind. Eng. Chem., vol. 41, No. 5, May 1949, pp. 968-971.
- SCHAPPERT, H. See Laughrey, P. W.; Skinner, L. C.
- SCHLESINGER, M. D. See Hiteshue, R. W.
- SHULTZ, J. L. See Friedel, R. A.
- SKILLERN, JOHN A. See Balcerzak, C. E.
- SKINNER, L. C. Progress in Coal Hydrogenation. Chap. in Gasification and Liquefaction of Coal. Pub. by AIME, New York, Maple Press Co., York, Pa., 1953, pp. 1-14.
- See also Hirst, L. L.; Remmert, Herman A.

- SKINNER, L. C., DONATH, E. E.,
SCHAPPERT, H., AND FRESE, E.
Residual-Oil Hydrogenation.
Petrol. Refiner, vol. 29, No. 7,
July 1950, pp. 83-87.
- SKINNER, L. C., DRESSLER, R. G.,
CHAFFEE, C. C., MILLER, S. G., AND
HIRST, L. L. Thermal Efficiency of
Coal Hydrogenation. Ind. Eng.
Chem., vol. 41, No. 1, January
1949, pp. 87-95.
- STORCH, H. H. (Leader of discussion.)
Hydrogenation of Coal. Round Table
Discussion, American Chemical Society
106th Meeting, Pittsburgh,
Pa., Division of Gas and Fuel
Chemistry. Ind. Eng. Chem., ind.
ed., vol. 36, 1944, pp. 291-298.
- _____. Hydrogenation of Coal and Tar.
Chap. 38, Chemistry of Coal Util-
ization (ed. by H. H. Lowry). John
Wiley & Sons, Inc., New York,
N. Y., 1945, vol. II, pp. 1750-
1796.
- _____. The Hydrogenation of Coal. A
Discussion on American Researches.
Petroleum, vol. 8, No. 5, May
1945, p. 98.
- See also Clark, E. L.; Elliott,
Martin A.; Fieldner, A. C.;
Golumbic, Calvin; Kaplan, E. H.;
Orchin, Milton; Pelipetz, M. G.;
Savich, T. R.; Weller, S.;
Woolfolk, E. O.
- STORCH, H. H., AND HIRST, L. L. Coal
Liquefaction by Hydrogenation.
U. S. Patent 2,464,271, Mar. 15,
1949.
- STORCH, H. H., AND PELIPETZ, M. C.
Hydrogenation Liquefaction of Coal
Employing Zinc Catalysts. U. S.
Patent 2,606,142, Aug. 5, 1952.
- W
- WELLER, S. Hydrogenation. Encyclope-
dia of Chemical Technology, ed.
by R. E. Kirk and D. F. Othmer.
Interscience Encyclopedia, Inc.,
New York, N. Y., vol. 7, 1951,
pp. 692-710.
- See also Clark, E. L.; Golumbic,
C.; Pelipetz, M. G.
- WELLER, S., CLARK, E. L., AND
PELIPETZ, M. G. Coal-Hydrogena-
tion Catalysts: Mechanism of Coal
Hydrogenation. Ind. Eng. Chem.,
vol. 42, No. 2, February 1950,
pp. 334-336.
- WELLER, S., AND PELIPETZ, M. G.
Catalysis in Liquid-Phase Coal
Hydrogenation. Proc. 3d World
Petrol. Cong., The Hague,
Netherlands, sec. 4, 1951, pp.
91-97.
- _____. Coal-Hydrogenation Catalysts,
Studies of Catalyst Distribution.
Ind. Eng. Chem., vol. 43, No. 5,
May 1951, pp. 1243-1246.
- WELLER, S., PELIPETZ, M. G., AND
FRIEDMAN, Sam. Kinetics of Coal
Hydrogenation - Conversion of
Asphalt. Ind. Eng. Chem., vol. 43,
No. 7, July 1951, pp. 1572-1575.
- _____. Kinetics of Coal Hydrogenation -
Conversion of Anthraxylon. Ind. Eng.
Chem., vol. 43, No. 7, July 1951,
pp. 1575-1579; ADI Documents 3117
and 3118, Auxiliary Publications
Project, Library of Congress,
Washington 25, D. C.
- WELLER, S., PELIPETZ, M. G., FRIEDMAN,
SAM, AND STORCH, H. H. Coal-Hydro-
genation. Catalysts. I. Batch
Autoclave Tests. Ind. Eng. Chem.,
vol. 42, No. 2, February 1950,
pp. 330-334.

WELLER, SOL, PELIPETZ, M. G., KUHN, E. M., FRIEDMAN, SAM, AND CLARK, E. L. Hydrogenation of Coal in Batch Autoclaves With Coke-Oven Gas. *Ind. Eng. Chem.*, vol. 41, No. 5, May 1949, pp. 972-973.

WENDER, IRVING. See Orchin, Milton.

WHITEHOUSE, A. M. See Clark, E. L.

WHITEHOUSE, ALBERT M., GOLDEN, P. L., HITESHUE, R. W., AND CLARK, E. L. Bench-Scale Equipment for Reactions at High Pressure. *Chem. Eng. Prog.*, vol. 49, No. 9, September 1953, pp. 491-496.

WILEY, JOSEPH L., AND ANDERSON, HAZEL C. Bibliography of Pressure Hydrogenation (in Three Parts). I. Review and Compilation of the Literature on Pressure Hydrogenation of Liquid and Solid Carbonaceous Materials. Bureau of Mines Bull. 485, 1950, 306 pp. II. Patents. Bureau of Mines Bull. 485, 1951, 286 pp. III. Subject Index; Numerical Patent Index. Bureau of Mines Bull. 485, 1952, 54 pp.

WOLAK, MARGARET. See Orchin, Milton.

WOLFSON, M. L. See Pelipetz, M. G.

WOLFSON, M. L., PELIPETZ, M. G., DAMICK, ARTHUR D., AND CLARK, E. L. Vapor-Phase Hydrogenation of Light and Heavy Oils. *Ind. Eng. Chem.*, vol. 43, No. 2, February 1951, pp. 536-540.

WOOLFOLK, E. O. See Columbic, C.; Orchin, Milton.

WOOLFOLK, ELKIN OSCAR, COLUMBIC, CALVIN, FRIEDEL, R. A., ORCHIN, M., AND STORCH, H. H. Characterization of Tar Acids From Coal-Hydrogenation Oils. Bureau of Mines Bull. 487, 1950, 56 pp.

WOOLFOLK, E. O., ORCHIN, M., AND DULL, M. F. Phenols in Oil Obtained From Hydrogenation of Coal - Separation and Identification. *Ind. Eng. Chem.*, vol. 42, No. 3, March 1950, pp. 552-556.

WOOLFOLK, E. O., ORCHIN, MILTON, AND STORCH, H. H. Notes on the Constitution of Heavy Oil From the Hydrogenation of Bituminous Coal. *Fuel*, vol. 26, No. 3, May-June 1947, pp. 78-79.

Fischer-Tropsch Synthesis (Including the Oxo Synthesis, Isosynthesis, and Related Topics)

A

ABELSON, M. See Shultz, J. F.

ADAMS, N. G. See Ward, Cecil C.

ANDERSON, R. B. Iron Nitrides as Fischer-Tropsch Catalysts. Chap. in *Advances in Catalysis and Related Subjects*, ed. by W. G. Frankenburg, V. I. Komarewsky, and E. K. Rideal. Academic Press, Inc., New York, N. Y., vol. 5, 1953, pp. 355-384.

_____. The Thermodynamics of the Hydrogenation of Carbon Monoxide and Related Reactions. Chap. 1 in *Catalysis*, ed. by P. H. Emmett. Reinhold Pub. Corp., New York, N. Y., vol. 4, 1956, pp. 1-27.

_____. Catalysts for the Fischer-Tropsch Synthesis. Chap. 2 in *Catalysis*, ed. by P. H. Emmett. Reinhold Pub. Corp., New York, N. Y., vol. 4, 1956, pp. 29-255.

- ANDERSON, R. B. Kinetics and Reaction Mechanisms of the Fischer-Tropsch Synthesis. Chap. 3 in Catalysis, ed. by P. H. Emmett. Reinhold Pub. Corp., New York, N. Y., vol. 4, 1956, pp. 257-371.
- See also Friedel, R. A.; Hall, W. K.; Hofer, L. J. E.; McCartney, J. T.; Shultz, J. F.; Stein, K. C.; Storch, H. H.; Weller, Sol.
- ANDERSON, R. B., FELDMAN, J., AND STORCH, H. H. Synthesis of Alcohols by Hydrogenation of Carbon Monoxide. *Ind. Eng. Chem.*, vol. 44, No. 10, October 1952, pp. 2418-2424.
- ANDERSON, R. B., FRIEDEL, R. A., AND STORCH, H. H. Fischer-Tropsch Reaction Mechanism Involving Stepwise Growth of Carbon Chain. *Jour. Chem. Phys.*, vol. 19, No. 3, March 1951, pp. 313-319.
- ANDERSON, R. B., AND HALL, W. K. Surface Areas of Cobalt Fischer-Tropsch Catalysts. Abs., 11th meeting, Am. Chem. Soc., 1947, p. 2E.
- ANDERSON, R. B., HALL, W. K., HEWLETT, HARLAN, AND SELIGMAN, BERNARD. Studies of the Fischer-Tropsch Synthesis. II. Properties of Unreduced Cobalt Catalysts. *Jour. Am. Chem. Soc.*, vol. 69, No. 12, December 1947, pp. 3114-3119.
- ANDERSON, R. B., HALL, W. K., AND HOFER, L. J. E. Studies of the Fischer-Tropsch Synthesis. IV. Properties of Reduced Cobalt Catalysts. *Jour. Am. Chem. Soc.*, vol. 70, No. 7, July 1948, pp. 2465-2472.
- ANDERSON, R. B., HALL, W. K., KRIEG, ABRAHAM, AND SELIGMAN, BERNARD. Studies of the Fischer-Tropsch Synthesis. V. Activities and Surface Areas of Reduced and Carburized Cobalt Catalysts. *Jour. Am. Chem. Soc.*, vol. 71, No. 1, January 1949, pp. 183-188.
- ANDERSON, R. B., HOFER, L. J. E., COHN, E. M., AND SELIGMAN, BERNARD. Studies of the Fischer-Tropsch Synthesis. IX. Phase Changes of Iron Catalysts in the Synthesis. *Jour. Am. Chem. Soc.*, vol. 73, No. 3, March 1951, pp. 944-946.
- ANDERSON, R. B., KRIEG, ABRAHAM, FRIEDEL, R. A., AND MASON, L. S. Fischer-Tropsch Synthesis. VI. Differential Reaction Rate Studies With Cobalt Catalyst. *Ind. Eng. Chem.*, vol. 41, No. 10, October 1949, pp. 2189-2197.
- ANDERSON, R. B., KRIEG, ABRAHAM, SELIGMAN, BERNARD, AND O'NEILL, W. E. Fischer-Tropsch Synthesis. Tests of Cobalt Catalysts at Atmospheric Pressure. *Ind. Eng. Chem.*, vol. 39, No. 12, December 1947, pp. 1548-1554.
- ANDERSON, R. B., KRIEG, ABRAHAM, SELIGMAN, BERNARD, AND TARN, WILLIAM. Fischer-Tropsch Cobalt Catalysts. III. Influence of Type of Kieselguhrs. *Ind. Eng. Chem.*, vol. 40, No. 12, December 1948, pp. 2347-2350.
- ANDERSON, R. B., McCARTNEY, J. T., HALL, W. K., AND HOFER, L. J. E. Kieselguhrs - Suitability as Carriers in Catalysts. *Ind. Eng. Chem.*, vol. 39, No. 12, December 1947, pp. 1618-1628.
- ANDERSON, R. B., SELIGMAN, B., SHULTZ, J. F., KELLY, R., AND ELLIOTT, M. A. Fischer-Tropsch Synthesis. Some Important Variables of the Synthesis on Iron Catalysts. *Ind. Eng. Chem.*, vol. 44, No. 2, February 1952, pp. 391-397.

ANDERSON, R. B., AND SHULTZ, JOHN F.
Iron Nitride Catalysts in Carbon
Oxide Hydrogenations. U. S.
Patent 2,629,728, Feb. 24, 1953.

ANDERSON, R. B., SHULTZ, J. F.,
SELIGMAN, B., HALL, W. KEITH, AND
STORCH, H. H. Studies of the
Fischer-Tropsch Synthesis. VII.
Nitrides of Iron as Catalysts.
Jour. Am. Chem. Soc., vol. 72,
No. 8, August 1950, pp. 3502-3508.

ANDERSON, H. C., WILEY, J. L., AND
NEWELL, A. Bibliography of the
Fischer-Tropsch Synthesis and Re-
lated Processes (in Two Parts).
I. Review and Compilation of the
Literature on the Production of
Synthetic Liquid Fuels and Chemi-
cals by the Hydrogenation of Car-
bon Monoxide. Bureau of Mines Bull.
544, 1954, 532 pp. II. Patents.
Bureau of Mines Bull. 544, 1955,
965 pp.

ATWELL, H. V. See Leva, Max.

ATWELL, H. V., POWELL, A. R., AND
STORCH, H. H. United States Gov-
ernment Technical Oil Mission
Fischer-Tropsch Report I. TOM
Rept. 5, July 1945, 66 pp.; RAC
Rept. SnMC-1; PB 2051, 1945, 45 pp.

B

BATCHELDER, H. R. See Hirst, L. L.

BEAN, E. H. See Cohn, E. M.; Hofer,
L. J. E.

BENSON, H. E. See Crowell, J. H.;
Schlesinger, M. D.

BENSON, HOMER E., CROWELL, JOYCE H.,
FIELD, JOSEPH H., AND STORCH,
H. H. U. S. Bureau of Mines
Fischer-Tropsch Pilot-Plant
Studies of Oil-Circulation Proc-
esses. Proc. 3d World Petrol.

Cong. The Hague, Netherlands,
sec. 4, 1951, pp. 38-56.

BENSON, H. E., FIELD, J. H.,
BIENSTOCK, D., NAGEL, R. R.,
BRUNN, L. W., HAWK, C. O.,
CROWELL, J. H., AND STORCH, H. H.
Development of the Fischer-Tropsch
Oil-Recycle Process. Bureau of
Mines Bull. 568, 1957, 72 pp.

BENSON, H. E., FIELD, J. H.,
BIENSTOCK, DANIEL, AND STORCH,
H. H. Oil-Circulation Process for
Fischer-Tropsch Synthesis. I.
Fused Iron Oxide Catalysts. II.
Massive Iron Catalysts. Ind. Eng.
Chem., vol. 46, No. 11, November
1954, pp. 2278-2285.

BIENSTOCK, D. See Benson, H. E.

BIRCHER, J. R. See Dressler, R. G.

BRINKLEY, R. See Pichler, Helmut.

BRINKLEY, R., AND OPPENHEIMER, W.
Trans. of German Documents on
Mathematical Expressions for
Thermodynamic Relationships and
the Calculation of Yields in the
Fischer-Tropsch Synthesis. (Trans.
from TOM Reel 134, Navy #5811,
Items Ib-1, -2, -3, -4.) Bureau
of Mines, Office of Synthetic
Liquid Fuels, Res. & Dev. Div.,
Pittsburgh, Pa., February 1947,
78 pp.

BRUNN, L. W. See Benson, H. E.

C

COHN, E. M. The Isosynthesis. Chap. 5
in Catalysis, by P. H. Emmett.
Reinhold Pub. Corp., New York,
N. Y., vol. 4, 1956, pp. 443-472.

_____. Fischer-Tropsch Process. In
Encyclopedia of Chemistry, by
G. L. Clark, G. G. Hawley,

and W. A. Hamor. Reinhold Pub. Corp., New York, N. Y., 1957, pp. 397-398.

See also Anderson, R. B.; Hofer, L. J. E.; Manes, M. -

COHN, E. M., BEAN, E. H., MENTSER, M., HOFER, L. J. E., PONTELLO, A., PEEBLES, W. C., AND JACK, K. H. The Carburation of Iron Oxide With Carbon Monoxide: Modifications of Hägg Iron Carbide. Jour. Appl. Chem., vol. 5, August 1955, pp. 418-425.

COHN, E. M., AND HOFER, L. J. E. Mode of Transition From Hägg Iron Carbide to Cementite. Jour. Am. Chem. Soc., vol. 72, No. 10, October 1950, pp. 4662-4664.

_____. Preparation of Iron Carbides. U. S. Patent 2,535,042, Dec. 26, 1950.

_____. Some Thermal Reactions of the Higher Iron Carbides. Jour. Chem. Phys., vol. 21, No. 2, February 1953, pp. 354-359.

CROWELL, JOYCE H. See Benson, Homer E.; Schlesinger, M. D.

CROWELL, J. H., AND BENSON, H. E. Catalytic Conversion of Carbon Monoxide and Hydrogen to Hydrocarbons and Oxygenated Organic Compounds. U. S. Patent 2,617,816, Nov. 11, 1952.

CROWELL, J. H., BENSON, H. E., FIELD, J. H., AND STORCH, H. H. Fischer-Tropsch Oil-Circulation Processes. Ind. Eng. Chem., vol. 42, No. 11, November 1950, pp. 2376-2384.

D

DAMICK, A. D. See Manes, M.

DIETER, WESLEY E. See Hall, W. K.; Hofer, L. J. E.

DRESSLER, R. G. See Hirst, L. L.; Kastens, M. L.; Sandaker, J. H.; Tenney, R. F.

DRESSLER, R. G., AND BIRCHER, J. R. The Bureau of Mines Gas-Synthesis Demonstration Plant at Louisiana, Mo. Abs. in Mech. Eng., vol. 72, No. 12, December 1950, p. 1007 (ASME paper 50-PET-9, mimeo.).

_____. Method of Utilizing Aqueous-Organic Chemical Wastes From the Fischer-Tropsch Process. U. S. Patent 2,574,469, Nov. 13, 1951.

DUBS, T. A. See Shultz, J. F.

E

ELLIOTT, M. A. See Anderson, R. B.

ERGUN, S. See Wender, I.

F

FELDMAN, J. See Anderson, R. B.; Wender, I.

FIELD, JOSEPH H. See Benson, Homer H.; Crowell, J. H.

FRIEDEL, R. A. See Anderson, R. B.; Greenfield, H.; Sternberg, H. W.; Shufler, S. L.; Weller, Sol; Wender, I.

FRIEDEL, R. A., AND ANDERSON, R. B. Composition of Synthetic Liquid Fuels. I. Product Distribution and Analysis of C₅-C₈ Paraffin Isomers From Cobalt Catalyst. Jour. Am. Chem. Soc., vol. 72, No. 3, March 1950, pp. 1212-1215; correction, No. 5, May 1950, p. 2307 (letter to editor).

FRIEDEL, R. A., SHULTZ, J. L., AND SHARKEY, A. J., JR. Mass Spectra of Alcohols. *Anal. Chem.*, vol. 28, No. 6, June 1956, pp. 926-934.

FRIEDEL, R. A., WENDER, I., SHUFLER, S. L., AND STERNBERG, HEINZ W. Spectra and Structures of Cobalt Carbonyls. *Jour. Am. Chem. Soc.*, vol. 77, No. 15, Aug. 9, 1955, pp. 3951-3958.

FUNABASHI, W. See Kodama, S.

G

COLUMBIC, N. R. Review of Fischer-Tropsch and Related Processes for Synthetic Liquid Fuel Production. Bureau of Mines Inf. Circ. 7366, 1946, 24 pp.

See also Storch, H. H.

GREENFIELD, H. See Wender, I.

GREENFIELD, H., FRIEDEL, R. A., AND ORCHIN, M. Reduction of Simple Olefins With Sodium and Methanol in Liquid Ammonia. *Jour. Am. Chem. Soc.*, vol. 76, No. 5, Mar. 5, 1954, pp. 1258-1259.

GREENFIELD, H., STERNBERG, H. W., FRIEDEL, R. A., WOTIZ, J. H., MARKBY, R., AND WENDER, I. Acetylenic Dicobalt Hexacarbonyls. Organometallic Compounds Derived From Alkynes and Dicobalt Octacarbonyl. *Jour. Amer. Chem. Soc.*, vol. 78, Jan. 5, 1956, pp. 120-124.

GREENFIELD, H., WENDER, I., AND WOTIZ, J. H. The Reaction of Allenes With Dicobalt Octacarbonyl. *Jour. Org. Chem.*, vol. 21, No. 8, 1956, pp. 875-878.

GREENFIELD, H., WOTIZ, J. H., AND WENDER, I. Reactions of Acetylenic Compounds Under Hydroformylation

Conditions. *Jour. Org. Chem.*, vol. 22, 1957, pp. 542-546.

GRUMMER, MILTON. See Leva, Max.

GWYNN, B. H. See Wender, I.

H

HALL, W. K. See Anderson, R. B.; McCartney, J. T.; Shultz, J. F.

HALL, W. K., DIETER, WESLEY E., HOFER, L. J. E., AND ANDERSON, R. B. Preparation and Reactions of Carbonitrides on Iron. *Jour. Am. Chem. Soc.*, vol. 75, No. 6, Mar. 20, 1953, pp. 1442-1447.

HALL, W. K., TARN, WILLIAM H., AND ANDERSON, R. B. Studies of the Fischer-Tropsch Synthesis. VIII. Surface-Area and Pore-Volume Studies of Iron Catalysts. *Jour. Am. Chem. Soc.*, vol. 72, No. 12, December 1950, pp. 5436-5443.

_____. Studies of the Fischer-Tropsch Synthesis. XIII. Structural Changes of a Reduced Iron Catalyst on Reoxidation and on Formation of Interstitial Phases. *Jour. Phys. Chem.*, vol. 56, No. 6, June 18, 1952, pp. 688-691.

HASHIMOTO, G. See Kodama, S.

HAWK, C. O. See Benson, H. E.; Storch, H. H.

HAWK, CHARLES O., STERN, NORMA R., AND HOFER, LAWRENCE J. E. Catalyst for the Synthesis of Hydrocarbons. U. S. Patent 2,449,071, Sept. 14, 1948.

HEWLETT, HARLAN. See Anderson, R. B.

HIRAO, T. See Kodama, S.