

INDEX - MICROFILM REEL 203  
(Original designation LF - 125)

GENERAL SUBJECT

Hochdruckversuche Laboratories.

- I. LECTURES BY DR. PIER.
- II. REPORTS ON EXPERIMENTAL WORK ON HYDROGENATION  
IN THE SUMPFPHASE. FILES OF DR. PETERS.
- III. REPORTS ON EXPERIMENTAL WORK IN THE SUMPFPHASE  
FILES OF DR. PETERS.

Source of Documents: Griesheim Central I. G. Library

Folder Nos.: S33/I-C-9  
S33/I-D-6  
S33/I-D-7

Filmed by: J I O &

Date: 28 February 1946.

I - Hochdruckversuche Laboratories.  
Lectures by Dr. Pier. S33/I-G-9.

(Item)

1	Hydrogenation gasoline. Influence of crude material, catalyst and method of processing.	1 - 34
2	Competitor Michal.	35 - 40
3	Hydrogenation gasoline. Influence of crude material, catalyst and method of processing.	41 - 45
4	Solid-bed catalyst and gas phase.	46 - 54
5	Gas phase gasolines as dependent on the crude materials.	55 - 61
6	Solid-bed catalyst and gas phase.	62 - 69
7	Sumpf phase.	70 - 84
8	Hydrogenation gasoline. Influence of crude material, catalyst and method of processing.	85 - 100
9	Talk on hydrogenation delivered at Rom.	101 - 120
10	Hydrogenation gasoline. Influence of crude material, catalyst and method of processing.	121 - 129
11	The treatment of shale oil by hydrogenation.	130 - 156
12	Draft for the talk on shale oil.	157 - 162
13	Working of Scotch shale oil.	163 - 165
14	Pressure hydrogenation experiments with Scotch shale oil.	166 - 178
15	Lubricant from Scotch shale oil over catalysts 5058 and 6719 at different pressures.	179 - 184
16	Talk on hydrogenation delivered at Glasgow.	185 - 193
17	Sumpf phase.	194 - 202
18	Gas phase.	203 - 208
19	Requirements put to the fuels by the combustion engine and ways to their realization in Germany.	209 - 243

II. Hochdruckversuche Laboratories. Reports on experimental work on hydrogenation in the Sumpfphase. Files of Dr. Peters - S93/I-B-6.

(Item)

1	Processing a pitch mixture from Welheim (P 1487 of August 18, 1941) at 600 atm to heavy oil: excess in 10 litre furnace.	244 - 272
2	Processing a mineral-coal-tar mixture for Pöblitz at 600 atm to gasoline and heavy oil in 10 litre furnace.	273 - 298
3	Processing high temperature carbonisation tar "Carsten-Zentrum of the "Schlesag" (P 1376 from June 6, 1940) at 600 atm for excess heavy oil.	299 - 332
4	Comparing the various "Sumpfphase" systems as to the heat required and to the course of temperature.	333 - 336
5	Preliminary report on hydrogenation experiments with "Otto" tar and "Oheim" nutcoal.	337 - 338
6	The accuracy of elementary uncorrected balances on the 10 litre furnace.	339
7	Processing a mineral-coal-tar mixture for Poelitz at 600 atm for excess heavy oil in 10 liter furnace.	340 - 372
8	Processing a mixture of coke oven tar (Ruhr) (P 1416) topped up to 325° at 600 atm, for excess heavy oil in the 10 litre furnace.	373 - 406
9	Processing coke oven tar "Auguste Viktoria" (Ruhr) (P 1094 of July 11-39) topped up to 325° at 600 atm, for excess heavy oil in 10 litre furnace.	407 - 437
10	Processing coke oven tar "Auguste Viktoria" (Ruhr) topped up to 325° (P 1094 of July 11-1939) at 600 atm, to gasoline and middle oil.	438 - 476
11	Problems in processing "Rheinische Braunkohle" (soft coal).	477 - 478
12	Preheater coils of 10 litre furnace becoming incrustated.	479 - 485
13	Supplement: Processing of "Scholven" sludge in "Sumpf" phase at 600 atm in 1.5 liter furnace.	486 - 489
14	Testing Brück embers as catalyst carriers.	490 - 491

II. (Reports on experimental work  
on hydrogenation in the Sumpphase)- Cont'd.

FRAME NOS.

(Item)		FRAME NOS.
15	C-H-analyses of various products from chamber 804 Ludwigshafen charged with Upper Silesian coal for gasoline and middle oil (August 1941).	492
16	Processing Scholven coal (Zweckel coal) with iron catalysts and chlorine.	493 - 495
17	Applying very high thru-puts in processing Silesian coal for maximal excess of heavy oil.	496 - 499
18	Processing Silesian coal "K 1174" "Castellengo-Abwehr" to gasoline and middle oil at 600 atm in 10 litre furnace.	500 - 534
19	Experiments in 10 litre furnace on Sumpphase problems.	535
20	Processing Silesian coal "K 1180" from "Beuthengrube" for gasoline and middle oil at 600 atm in 10 litre furnace.	536 - 582
21	The effect of the age of coal on the quality of the fuel oil.	583 - 584
22	Processing "Scholven" sludge in Sumpphase at 600 atm in 1.5 litre furnace.	585 - 593
23	Experiments on processing crude oil residue from "Heide" at 600 atm to Diesel fuel.	594 - 597
24	Note re problem of conversion of $\text{Na}_2\text{CO}_3$ to $\text{Na}_2\text{S}$ when sulfurizing the "Bayermass" with pure $\text{H}_2\text{S}$ and $\text{H}_2\text{S}-\text{CO}$ mixtures.	598
25	Re: Hydrogenation of pitch.	599
26	Processing Silesian mineral coal 1160 (Preussengrube) to heavy oil excess at 600 atm in 10 litre furnace.	600 - 630
27	Middle oil concentrations in the mineral coal "Sumpphase" in different procedures of production.	631
28	Experiments on obtaining primary bitumen for the manufacture of electrode carbon (preliminary stage).	632 - 635
29	Experiments on heating coal paste.	636 - 653

II.	(Reports on experimental work on hydrogenation in the Sumpphase) - Cont'd.	<u>FRAME NOS.</u>
<u>(Item)</u>		
30	Processing Silesian coal "K 1174". "Castellengo- Abwehr" to excess heavy oil at 600 atm in a 10 liter furnace.	654 - 685
31	The influence of the content of middle oil in paste oil on the composition of the re-formed products when processing Silesian coal "K 1197" by varying procedures.	686 - 691
32	Processing Silesian coal from the "Heinitz" pit to heavy oil excess under extensive decomposition of the asphalts.	692 - 694
33	Processing hydrogenation residues rich in asphalts, by carbonising them mixed with coal to a loose charge	695 - 707
34	Re: Economising molybdenum in the Sumpphase.	708 - 710
35	Processing a mineral coal-tar mixture (Poelitz) in the 10 liter furnace over "Grude" iron-titanium catalyst.	711 - 713
36	Composition of gases from processing Silesian mineral coal and high-temperature tar from mineral coal at 600 atm. to heavy oil.	714 - 715
37	Processing "Boehlen" coal in the Sumpphase.	716 - 717
38	Experiments with mineral coal tar in the 10 litre furnace.	718 - 719
39	Heating fuels from various mineral coals.	720 - 724
40	Comparing the qualities of heating fuels obtained from heavy oils by various procedures.	725 - 727
41	Program for a conference with Mr. Josenhans at Lu on January 15, 16 and 17, 1941.	728 - 729
42	On the problem of substituting molybdenum in pro- cessing tar at Poelitz.	730 - 731
43	Processing of mineral coal for various yields of heavy oil excess.	732 - 737

II. (Reports on experimental work on  
hydrogenation in the Sumpphase) - Cont'd.  
(Item)

FRAME NOS.

44	Silesian mineral coal 1118 from the pit "Gräfin Johanna" of the "Grafl. Schaffgott'schen works Ltd.", processed for obtaining gasoline and middle oil at 600 atm. in the 10 litre furnace.	738 - 770
45	"Sudenten" tar ("Lurgi" tar from Brūx coal).	771 - 796
46	Chlorine contents of raw material provided for "Blechhammer" and of oils produced from these.	797 - 798
47	Processing coke oven tar pitch (admixture of chlorine)	799 - 801
48	Hydrogenating non-de-ashed Upper Silesian coal with chlorine.	802 - 806
49	Simultaneous hydrogenation of Silesian mineral coal and low temperature carbonization tar.	807 - 811
50	First figures on processing high temperature tar from carbonization of Upper Silesian mineral oil.	812 - 813
51	Status of experiments with Sudenten coal at 600 atm.	814 - 815
52	Status of experiments with Sudenten coal at 250 atm.	816 - 817
53	Fuel oil from stripper heavy oil. Examining stripper fractions.	818 - 820
54	Stage of experiments with "Bubiag" coal (K 197) at 600 atm. Experiments in 1.5 litre furnace with stirrer.	821 - 822
55	Hydrogenation of coal tar in Sumpphase at 600 atm. to gasoline and fuel oil.	823 - 832
56	Progress in hydrogenation of open-burning coal. Experiments with "Gelsenberg" coal (83.9% C in dry coal) in the 10 liter furnace with stirrer.	833 - 834

		<u>FRAME NOS.</u>
.III. Hochdruckversuche Laboratories.		
<u>Reports on experimental work in the Sumpphase.</u>		
Files of Dr. Peters. S33/I-D-7.		
(Item)		
1	Problems of starting (in the "Sumpf" phase). Evaluation of the 10 liter furnace experiments up to now.	835 - 846
2	Processing mineral coal to gasoline, middle oil and light heavy oil...	847 - 848
3	Centrifuging tars and sumpphase sludges from tars.	849 - 852
4	Sludge distillation. Report I.	853 - 868
5	Processing "Janina" coal to gasoline and middle oil at 250 atm with iron catalysts.	869 - 875
6	Heating fuel from "Janina" coal.	876
7	Processing "Janina" coal at 600 atm to excess heavy oil. (First preliminary report.)	877 - 879
8	Processing "Janina" coal at 600 atm to gasoline and middle oil. (Second preliminary report.)	880 - 887
9	Relation between analyses of coal and behaviour in hydrogenation...	888 - 890
10	On pre-heating cracking residues.	891 - 896
11	The question of incubation temperature.	897 - 898
12	Measuring the heat transfer from mineral coal paste.	899
13	Hydrogenation of "Janina" coal to gasoline and middle oil at 600 atm. First results.	900 - 904
14	Status of experiments on the 10 liter furnace.	905
15	Processing petroleum in straight passage.	906 - 907
16	Experiments in 1-liter furnace with sulfur as "Sumpphase" catalyst.	908 - 913
17	"Starting" in coal hydrogenation in the Sumpphase.	914 - 916
18	Processing "Myslowitz" coal at 600 atm to gasoline and middle oil.	917 - 918
19	Producing slightly hydrogenated coal from K 1197 at 300 atm.	919 - 928

III. (Reports on experimental work  
in the Sumofphase)- Cont'd.FRAME NOS.(Item)

20	Comparing sodium sulfide raw smelting with Sulfigran.	929 - 930
21	Catalyst experiments in 1.5 liter furnace for processing "Bruex" tar.	931 - 936
22	Admixture of sodium-sulfide in mineral coal hydrogenation. Older experiments with K 1090 (Gelsenberg) in 10-liter furnace.	937 - 964
23	Processing mineral coal together with mineral coal extract.	965 - 966
24	Processing mineral coal high temperature tar with mineral coal admixed.	967 - 989
25	Processing mixtures of "Böhlen" tar and petroleum (August 1939).	990 - 1007
26	Report on experiments: Processing of Panuco-oil in 10 liter furnace.	1008 - 1028
27	Processing "Böhlen" tar at 250 atm. in 10 liter furnace. (August 1939)	1029 - 1043
28	Report on experiments: Processing German petroleum in 10 liter furnace.	1044 - 1077
29	Processing mineral coal and carbonization tar to briquet binder and asphalt-free oil.	1078 - 1121
30	Processing "Zweckelcoal" (K 1216) to gasoline and middle oil at 600 and 250 atm and to heavy oil excess at 600 atm in 10 liter furnace. Experimental report.	1122 - 1163
31	Extractive hydrogenation of mineral coal.	1164 - 1231
32	Processing Silesian coal (K 1197) together with Silesian mineral coal-tar mixture to a slight heavy oil excess at 600 atm in the 10 liter furnace.	1232 - 1254
33	On "caviar" formation: Experiments with "Rhine" soft coal in 10 liter furnace.	1255 - 1260
34	Experimental report: Processing a mixture of Silesian mineral coal tars at 600 atm to heavy oil excess in the 10 liter furnace.	1261 - 1283

III. (Reports on experimental work  
in the Sump phase) - Cont'd.FRAME NOS.

(Item)

35	First figures on processing primary bitumen by hydrogenation.	1284 - 1286
36	Re: Processing hydrogenation coal "Scholven" K 1101 of September 30, 1938, at 250 atm with chlorine, in various forms of admixture and with "Snox" for obtaining gasoline and middle oil. Report on experiments in the 10 liter furnace.	1287 - 1330
37	Extractive hydrogenation in 10 liter furnace.	1331 - 1335
38	Preventing crusts and blockings of coal furnaces at Scholven.	1336
39	Experiments on "Caviar" formation in the rotary autoclave.	1337 - 1338
40	Experiments with Rhine brown coal in 1 liter furnace. Note No. 3: Neutralisation of coal and its tendency to deposit.	1339 - 1340
41	Joint processing of Upper Silesian coal and rinsing gas tar to briquet binding agents and to heating fuel.	1341 - 1345
42	Experimental report: Joint processing of Silesian coal (K 1197) and high temperature carbonisation tar from Silesian coal (P 1376) for obtaining slight excess heavy oil at 600 atm in 10 liter furnace.	1346 - 1373
43	The status of experiments with Rhine brown coal.	1374 - 1375
44	Experiments with Rhine brown coal in 1 liter furnace. Preliminary notes on "caviar" formation.	1376
45	Supplement to report 20 4721 of July 16-42: Preliminary report on hydrogenation experiments with B.T.-tar from "Oheim" nut coal.	1377