

INDEX - MICROFILM REEL 254
(Original designation BM-40)

Index to microfilm of Dr. Pier's files.

XXVI. Vapor phase - hydrogenation.

20	Basis for evaluation of aromatization research.	1-4
21	Troubles in vapor phase stalls.	5-7
22	.45 atm. aromatization with deteriorating activity.	8-11
23	Saturation with 7846 catalyst.	12
24	<u>H₂S addition in vapor phase.</u>	13-16

T.O.M. Reel 254

<u>ITEM NO.</u>		<u>FRAMES</u>
25	Semitechnical work on saturation of bituminous coal hydrogenation middle oil and gasoline over 7846W250.	17-39
26	The activity peak with 5058.	40
27	Data (descriptive) on different catalysts.	41-47
28	Catalytic behavior of the system silicic acid-alumina-iron during hydrocarbonization conversion reactions.	48-49
29	Research results with tungsten catalysts.	50-52
30	Splitting catalyst for catalytic high pressure hydrogenation.	53-54
31	ANIC catalysts.	55-56
32	Gasoline quality for the Japanese plant.	57-59
33	About catalyst 7846W250.	60-65
34	Aromatization at 250 atm. with alumina-fuller's earth catalyst 8688.	66-73
35	Operations with 7846 and 5058 catalysts.	74-79
36	Effect of oil partial pressure, thruput and contact time on the results of saturation with 7846.	80-91
37	New splitting catalysts.	92-103
38	Translations from Russians - "Recovery of high octane gasoline by hydrogenation."	104-130
39	Influence of sulfur with fuller's earth-iron fluoride catalysts.	131-134
40	Production of hydrocarbon gases by hydrogenation.	135-138

T.O.M. Reel 254

<u>ITEM NO.</u>		<u>FRAMES</u>
41	Crystal structure and X-ray investigations of tungsten sulfide structure.	139-140
42	Reactions which do not alter the carbon skeleton.	141
43	WS ₂ as technical catalyst and chemical compound (physical data).	142-144
44	Electron-diffraction relations of WS ₂ .	145-146
45	On the question of the existence of an amorphous intermediate state in the production of WS ₂ catalyst from ammonia-sulfo-tungstate.	147-148
46	Historical development of catalysts (chronology).	149-151
47	Use of Mo and W sulfides as catalysts for pressure hydrogenation.	152-160
48	Influence of added nitrogen compounds on the results when splitting petroleum gas oil over 6434. II.	161-162
49	Testing new saturation catalysts.	163-166
50	Testing of composite samples of 5058, 8376, 6434.	167-169
51	The temperature-dependence of reactions which occur in the hydrogenation of bituminous coal liquefaction middle oil over 5058, 7846 and 8376 (7846W250).	170-185
52	Exchange of experience on saturation catalyst 8376.	186-206
53	Processing crude oil by pressure distillation and cracking at 50 atm.	207-209

T.O.M. Reel 254

<u>ITEM NO.</u>		<u>FRAMES</u>
54	fungsten carbide as a hydrogenation catalyst.	210-212
55	Saturation of Leuna gasoline and middle oil with the new 7846 catalyst. Research in 200 cc. converter.	213-225
56	Use of 8376 (7846W250) for various products.	226-242
57	Position taken on the fluoride-patent of the ANIC catalyst.	243-245
58	Catalytic cracking at low pressure and in presence of H ₂ at 45 atm.	246-252
59	Politz problem of common processing of petroleum residues and bituminous coal tar-a-middle oil in the gas phase.	253-268
60	Production of low endpoint (100°C.) gasoline (due to scarcity of iso-octane).	269-274
61	Aromatization of middle oil from bituminous coal liquid phase.	275-277
62	600 atmospheres aromatization.	278-280
63	Further research in the domain of alumina-Mo-Ni catalysts.	281-288
64	Research to refine heavy benzol with alumina-Mo-Ni catalyst in 1 liter converter.	289-297
65	Splitting Fischer-Tropsch high molecular weight paraffins over 5058 and 8376 at 250 atm.	298-302
66	Effect of temperature on yield with various concentrations of saturation catalysts.	303-304

T.O.M. Reel 254

<u>ITEM NO.</u>		<u>FRAMES</u>
67	Reducing tungstic acid.	305-306
68	How to make 6434 catalyst.	307-308
69	Splitting and DHD treatment of bituminous coal middle oil over saturation catalyst 7846W250.	309-326
70	Splitting and isomerization of iso-octane and N-heptane over 5058.	327
71	Action of sulfur in high pressure hydrogenation.	328-329
72	Analytical evaluation of WS ₂ catalyst.	330-332
73	Leuna discussion of catalysts.	333-338
74	Comparison of splitting of natural fuller's earth and synthetic silicates at 250 and 600 atm.	339-348
75	Aromatization of dephenolized middle oil (Scholven) over 7019.	349-356
76	Tests of feed stocks of different origin for 7019.	357-358
77	Comparison between natural fuller's earth (6109) and synthetic aluminum silicate (6752) at 600 atm.	359-363
78	Influence of temperature and thruput in the one step 600 atm. aromatization of bituminous coal liquefaction middle oil with fuller's earth catalyst.	364-371
79	Calculations on the question of 300 vs. 700 atm.	372-374
80	High load gasoline from bituminous coal using DHD as final step.	375

T.O.M. Reel 254

<u>ITEM NO.</u>		<u>FRAMES</u>
81	Crystal structure of WS ₂ catalyst.	376-381
82	Effect of recycle rate on 250 atm. aromatization of middle oil from bituminous coal liquefaction over alumina-fuller's earth catalyst 8688.	382-390
83	Aromatization at 250 atm. with alumina-fuller's earth catalyst of the 8688 type.	391-404
84	Splitting catalysts from iron sulfide on fuller's earth.	405-409
85	Variation of knock rating with different distillation fractions in 250 atm. splitting over 6434 catalyst.	410-417
86	The ANIC fluoride catalyst compared with 6434.	418-423
87	Discussion on ANIC catalyst operations.	424-426
88	Comparison of 6434 and 6752 in aromatization processes.	427-432
89	Activity of various alumina-W-Ni catalysts for hydrogenation.	433-438
90	2-stage 300 atm. gas phase gasoline from various raw materials and with various saturation catalysts.	439-445
91	Sulfur addition in splitting over 6434.	446-448
92	Action of W, V, Ni, Co, and Fe as active components on alumina saturation catalysts.	449-457
93	Influence of the carrier on the results of 6434 splitting.	458-461

T.O.M. Reel 254

<u>ITEM NO.</u>		<u>FRAMES</u>
94	Heavy oil splitting over fixed catalysts at 250-600 atm.	462-473
95	Hydrogenation of crude wax.	474-475
96	Catalyst test for the MoO ₂ operation of Ludwigshafen.	476-477
97	Reasons for differences in quality of residue gasoline from aromatization.	478-487
	XXVII. Various organic processes.	
1	Hydrogenative splitting of natural rubber and buna.	489-490
2	Synthesis of branched hydrocarbons (tri-alkylcarbinol).	491-493
3	Processes for high test pure hydrocarbons.	494-496
4	Process for condensation products.	497-503
5	Polybutylene rubber.	504-511
6	Making alcohol from Michael Process products.	512-515
7	WS ₂ for perhydrogenation of polynuclear aromatics.	516-525
8	Literature survey on treatment of various hydrocarbons with hydrogen.	526-529
9	Ketone and hydrocarbon synthesis using AlCl ₃ and CaCl ₃ .	530-532
10	Hydrogenation of isobutyron over catalyst 7878.	533-537