

Index to Microfilm of Dr. Pier's Files

TOM 256 A and B

<u>T-Nos.</u>	<u>Frames</u>	<u>Translation Frame</u>
---------------	---------------	--------------------------

III Analysis

Characteristics of Coal Ash	266	1-3	3a-3b
Determination of Paste Concentration with the Brabend Plastograph	216	4-11	11a-11g

IV Asphalt and Wax Separation

Bettering wax production in Zeitz Asphalt Chemistry	379	12-14	14a-14c
	397	15-23	23a-23h

V Coke and Carbonization

Production of Electrode coke by pressure carbonization	339	24-26	26a-26c
Characteristic of bituminous coal low temperature carbonization	318	27-30	30a-30c
Increase in L.T.C. yield	303	31-43	43a-43j

VI Corrosion and Metallurgy

The nitrification of chrome steels in hydrogenation	315	44-47	47a-47b
Heat treatment and delivery specifications for N10 material			
Light oil corrosion	263	48-51	51a-51b
Intercrystalline corrosion of pipe lines	373	52-54	54a
	327	55	55a-55b

VII Cracking

Todays situation in pressure distillation research	375	56	56a
--	-----	----	-----

VIII D.H.D. Toluol, Hydroforming etc.

Processing DHD residue	396	57-58	58a-58b
Large apparatus and DHD plants	395	59-60	60a-60b
Quality and Yield of DHD gasoline from stall 801	394	61-66	66a-66d

IX Diesel Oil

Diesel Oil production in hydro plants	273	67-72	72a-72e
---------------------------------------	-----	-------	---------

X Economics

Cost of Silesian Coal aviation gasoline in Politz complete breakdown	430	73-85	85a-85l
Comparison of costs for DHD feed gasoline of different endpoints	440	86-91	91a-91g
DHD gasoline cost breakdown	441	92-93	93a-93b
Comparison of plant cost, quality of products and iron requirements of coal tar	442	94-96	96a-96c
Iron for repairs in hydro plants	447	97-99	99a-99d
DHD gasoline from Rumanian gasoline	455	100-101	101a-101c
Economy of bituminous coal hydrogenation	448	102-103	103a-103c
Economic data for hydrogenation	446	104-115	115a-115e
Specification and cost of DHD gasoline	456	116-120	120a-120d
Consumption data for 100,000 tc/annum auto gasoline 1944	249	121-122	122a-122c

	T-Nos	Frames	Translation Frames
X Economics			
Cost Evaluation. Gasoline from bituminous coal	250	123-149	149aa-149bb
Comparison of straight hydrogenation with carbonization and hydrogenation producing aviation gasoline and fuel oil	372	150-	150a-150b
Cost calculation for CV _{2b}	380	151-156	156a-156e
Cost estimation for Politz DHD	443	157-167	167a-167e
XI Fischer-Tropsch			
Important data for the foam method of conducting the Fischer Tropsch reaction	431	168-169	169a-169b
Operational troubles with the Schaumfahrweise (foam method)	432	170-173	173a-173g
Synthesis in the liquid phase	433	174-179	179a-179g
Gas circulation of foam process	434	180-183	183a-183e
Comparative product properties of gas and foam processes	436	184-195	195a-195m
Synthesis with iron catalysts	437	196-198	198a-198d
Settling of finely divided catalyst on the converter wall in the foam process	438	199-207	207a-207o
CO - H ₂ synthesis	417	208-221	221a-221m
Status of synthetic oil experiment	439	222-227	227a-227f
Gas circulation of foam process for synol	435	228-229	229a-229c
XII Fuel Evaluation			
Proposal for the use of synthetic fuel mixtures as standards in the overload motor testing	385	230-251	251a-251i
Physico-chemical conception of the overload curve	393	252-262	262a-262e
Use of high load aromatic fuels to replace B ₄	377	263-265	265a-265b
Comparison of hydrogenation and cracked gasoline from petroleum middle oils	374	266-275	275a-275j
Comparison of isopropyl benzol with other blending components, particularly triptane, for high test fuel mixtures.	378	276-277	277a-277b
Discussions of the knock limit curves (DVL injection process) with divided injection	376	278-280	280a-280b
XIII Gas Production			
Electrolytic hydrogen production	262	281	281a
XIV General			
Hydrogenation and carbonization quality of Ruhr coals	383	282-283	283a-283b
Problems of the Macromolecular Chemistry	390	284-286	286a-286b
Utilization of coal in the use of production and domestic motor fuels	312	287-294	294a-294f
IV Instrumentation			
Thermocouple measurements in high pressure converters	240	295-301	301a-301e
High pressure viscosimeter	311	302-307	307a-307b

	T-Nos.	Frame	Translation Frame
XVI Liquid Phase - Hydrogenation			
Data on H.O.L.D.	427	308-309	309a-309b
Experience with paste exchange	426	310-312	312a-312d
Filtration speed of bituminous hydrogenation products	425	313-316	316a-316f
Production of slightly hydrogenated coal	428	317-323	323a-323i
Comparison of liquid phase operations Politz, Gelsenberg	352	324-328	328a-328e
Comparison between acid and alkaline HOLD, and influence of paste throughput on conversion	351	329-337	337a-337h
Regeneration of coal paste (heat exchange) by dilution with middle oil	349	338-342	342a-342d
Pretreatment of bituminous coal for hydrogenation	348	343-344	344a-
The limits of solids and asphalts with low H ₂ supply in the liquid phase	346	345-348	348a-348d
Substituting cooling oil for cooling gas	343	349-350	350a
Deashing experiments with Brux tar	337	351-352	352a
Operating experience at Politz	331	353-354	354a-354b
Binders and their composition	330	355-362	362a-362g
Filtration of letdown	329	363-369	369a-369f
Hy-gas yields in liquid phase	320	370-371	371a-371b
Calculation of pressure drop in liquid and vapor phase	319	372-374	374a-374c
Calorific efficiency of bituminous coal hydrogenation to gasoline and fuel oil	309	375-379	379a-379b
Filtration of coal extract at Welheim	301	380-385	385a-385d
Coal refining process	278	386-390	390a-390f
Experience with cold paste injection	275	391-404	404a-404k
Coal balances after February 1944	272	405-409	409a-409e
Filtration of letdown	271	410-413	413a-413c
Liquid phase catalysts	265	414-425	425a-425h
Recovery of phenols in hydrogenation	253	426-452	452a-452t
Hydrogenation of HOLD	269	453-454	454a
H ₂ consumption, loss and recovery in Nordstern	258	455-475	475a-475o
Incubation temperature	257	476-477	477a-477b
Solubility of 700 atm gas in liquid phase	260	478-485	485a-485c
Liquid phase operations at Politz	252	486-490	490a-490e
Cavlier formation theory	255	491-495	495a-495d
Letdown heat exchange	226	496-523	523a-523o
Centrifuging of Tars, liquid phase letdowns	241	524-528	528a-528d
Experiences with preheaters	210	529-530	530a-530e
Velocities in high pressure converters	358	531-535	535a-535c
Sulfur situation in hydro plants	357	536-562	562a-562m
Bituminous coal hydrogenation to aviation gasoline with hydrogenation of tar obtained	387	563-578	578a-578n
Gas hydrates	386	579-592	592a-592g
Saving Mo in liquid phase	354	593-595	595a-595b
Results of hydrogenation of upper Silesian coal in rotating autoclaves	381	596-598	598a-598b
Topping of HOLD and Centrifuge Residue	360	599-610	610a-610e
Production of briquettes using HOLD residue as binder	361	611-621	621a-621l
Liquid phase operation discussion	365	622-625	625a-625c
Comparison of pitches and asphalts	366	626	626a
Equilibria for reduction of NH ₄ HSO ₄ and CaSO ₄ in the liquid phase converter	389	627-628	628a-628b
Preheater outlet temperatures	362	629-630	630a-630b
Temperature - contact time diagram	234	631-636	636a-636d

<u>T-Nos</u>	<u>Frames</u>	<u>Translatio Frame</u>
238	637-642	642a-642f
242	643-646	646a-646d
294	647-653	653a-653e
300	654-673	673a
313	674-712	712a-712r

XVI Liquid Phase - Hydrogenation

Temperature changes in coal stall	238	637-642	642a-642f
Temperature measurement in preheater outlets	242	643-646	646a-646d
Accuracy of material balance in 10 liter converter runs	294	647-653	653a-653e
Experimental mixing of paste	300	654-673	673a
Three papers on gas hydrates	313	674-712	712a-712e

XIX. Mechanical Data

Bellows lenses	326	713-714	714a
Turbo-compressors in hydro plants	325	715-729	729a-729m
Recoil of high pressure line due to a break	304	730-732	732a-732c
Inner insulation of high pressure converters	230	733-737	737a-737c
Wear - resisting return bends	233	738-742	742a-742d
Temperature of bolts and flanges in relation to product temperature	229	743-744	744a-744b
Test of 120 mm flange at 325 atm	228	745-748	748a-748d
Experiences with bellows lenses	245	749-750	750a-750c
C heck-valves with drop-shaped disk	244	751-752	752a-752b
Report on using smaller number of plates in the laval centrifuge	382	753-755	755a-755c
Three papers on hardened plungers and piston rods	232	756-760	760a-760d
Leaky paste pump valves	237	761-769	769a-769i
Hot tightening up of a stall	243	770-771	771a-771b
Flow resistance in tubular converter	290	772-775	775a-775d

XXI Physical Data and Phenomena, Etc.

Aromatics - naphthalene equilibria	370	776-779	779a-779d
Isomeric aromatic hydrocarbons	267	780-784	784a-784d
Theory of formation of higher hydrocarbons from CH_4 in presence of sulfur and sulfur compounds	391	785-790	790a-790e

XXII Properties of Materials

Quality of hydrogenation coal	344	791-795	795a-795d
Quality data of auto gasoline from various raw materials	388	796-801	801a-801d
Vapor pressure and C ₅ content for mixtures of light and aromatic gasoline	368	802-804	804a-804c
Properties of hydro products from different raw material	324	805-815	815a-815h
Properties and breaking down of asphalts	398	816-819	819a-819e

XXIII: Safety

Steps taken as a result of the accidents at Politz	340	820-821	821a-821b
Emergency expansion in hydrogenation stalls	307	822-828	828a-828g
Experiences with runaway converters	239	829-840	840a-840r
Safety in construction of hydrogenation stalls	235	841-851	851a-851d
Precautions against explosions in air separation plants	268	852-863	863a-863l

XXVI Vapor Phase Hydrogenation

Gasification in aromatization	338	864-866	866a-866c
Influence of size and density of 5058 tablets on splitting and saturation	322	867-878	878a-878k
Butane and isobutane content of the gasification in splitting and aromatization over fullers' earth catalysts	308	879-880	880a-880b

	F-Nos.	Frames	Translation Frames
<u>XXVI Vapor Phase Hydrogenation</u>			
Preparation of tungsten sulfide catalysts	236	881-882	882a-882b
Washing gasoline, hy-gas, and LPG and flushing in liquid phase	246	883-885	885a-
Use of Mo and W catalysts for high pressure hydrogenation chromatology	359	886-893	893a-893f
Using 700 atm vapor phase for Blechhammer extension II	355	894-899	899a-899d
Aromatization of bituminous coal hydrogenation middle oil the acid constituents therefrom, and residual oil over alumina-fullers' earth catalyst of the 8688 type	363	904-908	908a-908c
Splitting of B products	384	900-903	909-915
700 vs 300 atm	367	916-919	915a-915k
Literature on WS ₂ catalyst	369	920-921	919a-919d
A numerical expression for splitting activity of catalysts	345	922-925	925a-925d
WS ₂ free splitting catalysts	347	926-933	933a-933f
Effect of nitrogen content on splitting properties. Two papers	353-1 353-2	934-936 937-947	936a-936d 947a-947j

XXVII Various Organic Processes

Phenol recovery with liquid NH ₃	342	948-949	949a
Laboratory experiments on coronen	314	950-955	955a-955e