

XI RESEARCH ACTIVITIES

Although it was stated that all collected laboratory records and reports had been moved to other (unknown) plants, and no evidence to the contrary was seen, a few miscellaneous documents were picked up which give some idea of the lines of research being followed at the Moers plant.

A document dated 15 Jan. 1942, signed by Dr. Grimme comprises the research program as of that date. The departmental documents from which this was compiled were also obtained and indicate that all of the work outlined was in progress and many of the items represented accomplishments rather than proposed future work. The outline submitted by Laboratory No. 1 has been translated in full since it was considerably condensed in Dr. Grimme's summary. Also a letter dated 27 September, 1943 from Dr. Grimme to Director Kost was found, summarizing the research accomplishments during the preceding year. Translations of this, and of the above mentioned 1942 documents, are attached as Appendix B, page 108.

A complete picture of the reported research activities can not be conveyed by any further condensation of the outlines in question, but it can be said that the following broad lines of research appear to hold a prominent place in the programs: -

1. Development of dehydrogenation catalyst, including new alumina supports.
2. Conversion of alcohols to ketones and production of resinous products from the ketones.
3. Production of aluminum alcoholates and derivatives for a variety of uses.
4. Production of acids and esters thereof from Fischer-Tropsch wax.
5. Production of glycols and derivatives thereof.
6. Fundamental studies of reactions of fatty acids with olefins.
7. Production of higher alcohols from olefins in benzin and kogasin.
8. Research on pyrotechnics and other assigned problems in connection with the war effort.

Other research and development activities were indicated by miscellaneous documents as follows:-

A letter dated 17 Jan. 1945 from the Reichsamt fur Wirtschaftsausbau, Berlin, discusses tests conducted at the Textile Engineering School, Krefeld, and directs further tests at I. G. relating to the suitability of di-aluminum-hydroxide, presumably made at Moers, for use as a "Druckverdickungsmittel" in textile dyeing.

A letter dated 15 Nov. 1944 from Markische Seifen Industrie, Witten-Ruhr, conveys a complaint from their branch factory at Lahr/Baden regarding poor color of "Kontakt-Paraffin" (wax) furnished by Rheinpreussen-Moers.

A letter dated 23 Jan. 1945, from Chemisch-technisches Laboratorium von Hch. Norrenberg, Irmenach bei Iraben-Trarbach, inquires about experimental data on Rheinpreussen's salve base "Symalin".

Correspondence in August 1944 with Krupp Treibstoffwerke Wanne-Eickel, explains that lack of manufacturing equipment at Moers makes it impossible for Rheinpreussen to furnish fatty acids to Schering A.G. Berlin, for use in insecticides.

Some correspondence and technical data on the preparation and uses of "Pantoxyl" were found, dated in 1941. This product appears to be an oxidized Fischer-Tropsch wax, useful as a thickening agent, emulsifying agent etc. Some data were also found relating to "Parestol" which appears to be a similar product.

Notes on a conference held at the Bergbauverein, 25 Nov. 1942 showed the following production of fatty acids from different Fischer-Tropsch plants.

Rheinpreussen	about 4000 Kg per month
Krupp	" 2000 " " "
Rauxel	" 1800 " " "
Essener Steinkohle	" 3000 " " "
Hoesch	" 10000 " " "
Ruhrchemie	Unknown

The high production at Hoesch was attributed to the use of pressure synthesis there. Methods of recovering soaps of these acids were discussed. Apparently the soaps are used mainly locally as detergents.