

Proposals of Moderate Interest at Present,
Not Warranting Laboratory Work at an Early Date

- B-1. Use the Oncor concept (core and shell) to carry a useful organic material (ex.g., silicones) as the shell. (3)
- B-2. Make an Oncor pigment combining fire retardant properties with anti-corrosion properties, for example, 25% antimony oxides, 25% zinc oxide, 50% silica. (5)
- B-3. Put the group of nitrites (prepared some years ago by L. M. Kebrich) on a silica or other core to augment the anti-corrosive properties of red lead; would be used in only small amounts. (7) ("Attractive")
- B-4. Make a lead silico-titanate-chromate. (8) ("Attractive".)
- B-5. Two-tone, very thick finishes derived from mixtures of coarse, varicolored pigment particles (TiO_2 -coated sea sand, carbon black-coated sea sand or sawdust, and phthalo-colored coated silica) bonded together with a material such as phenolformaldehyde resin. (11)
- B-6. Coat a very fine polymer particle with a solid material by the Oncor principle. (19)
- B-7. Establish free radical sites on pigments by radiation, ex.g., exposing TiO_2 to Co^{60} . (23)
- B-8. Improve the "softness" of our pigments through the deliberate introduction of some other (perhaps foreign) material prior to calcination, as in the case of Oncor 23A. (41)
- B-9. Investigate Oncors having a platy core or substrate. (43)
Similarly, investigate Oncors having a fibrous core or substrate. (44)

Investigate softer core materials in the Oncors, ex.g., hydrous silica cores. (58)

("Attractive as a group".)

B-10. Prepare Oncors for uses other than paints, ex.g., a lead arsenate Onco for insecticides, thereby extending chemically reactive materials. (45)

B-11. Using the reaction of $TiCl_4$ and aluminum as a point of departure, investigate the reactions of other metal salts and metal oxides (manganese dioxide and aluminum chloride, litharge, TiO_2 , zinc oxide, etc.) to make paints in situ, i.e., one-package systems produced at time of application, as by spray. (48)

Using a purely organic approach, investigate electro-chemical compounds, ex.g., the electrolysis of nitro aromatic compounds. (51)

Combine the concept of No. 51 with silicone polymers or polyimide polymers. (52)

Chemically react polymeric diazo compounds to produce or enhance pigmentary properties. (53)

B-12. Make complexes of transition metal salts with ethers or other groups to make organic or inorganic materials which may have color capabilities. (56)

B-13. Investigate lead compounds based on fluorophosphoric acids. (60)

B-14. Investigate the Onco concept in ceramics and flame spraying. (64)

Investigate the Onco concept in the glass industry. (65)

B-15. Investigate modified M50's (perhaps different crystal structure) as catalysts. (67)

B-16. Investigate clear lead salts - possibly from the reaction of lead pigments or litharge with glycerine or polyols - as a vinyl stabilizer. (68)

July 19, 1966

NL 000041459