

of styrenes produces 9, 10-dimethylantracene-dihydride. Toluene gives xylene, mesitylene, pseudocumene, ditolyethane, and 2, 7-dimethyl anthracene with some 2, 6-dimethyl and beta monomethyl anthracenes. Chlorbenzene produces p, p-dichlor diphenylethane and at least one higher compound as yet unidentified. Nitro benzene does not condense. The investigation is being continued.

*The structure of azoxy compounds:* OLIVER KAMM AND E. E. A. CAMPBELL.

*The purification and some physical properties of some aliphatic alcohols:* R. F. BRUNEL.

*The limit of esterification of certain aliphatic alcohols and acids:* R. F. BRUNEL AND ELSIE TOBIN. *Schiff bases and related compounds:* WILLIAM J. HALE.

*The oscillation theory of colors—hydrazobenzene and azobenzene:* GERALD L. WENDT, RUTH O'BRIEN AND F. W. SULLIVAN.

*The chemistry of the heptane solution: (I.) Introductory remarks; (II.) Physical constants of heptane:* EDWARD KREMER.

*The chemistry of the heptane solution: (III.) Purification of heptane; (IV.) Hydrohalogen solutions of heptane:* D. C. L. SHERK.

*Report on the production of synthetic organic chemicals in the research laboratory of the Eastman Kodak Company for the year 1918-19:* C. E. K. MEES.

*Perchlormethylmercaptan:* OREGON B. HELFRICH AND E. EMMET REID.

*Butyl alcohol as medium for saponification:* A. M. PARDEE, B. HASCHE AND E. EMMET REID.

*Halogen-substituted phenacyl bromides as reagents for the identification of acids:* W. L. JUDE-FIND AND E. EMMET REID.

*Molecular rearrangement in the acylation of certain aminophenols:* L. CHAS. RAIFORD. In the preparation of diacylated derivatives of certain ortho-aminophenols, in which the acyl radicals bound to oxygen and to nitrogen, respectively, are different, it has been found, upon examination of the products, that the heaviest of these radicals was always found attached to nitrogen, regardless of the order in which they were introduced, which indicates a rearrangement in one case. The acyl radicals so far employed are acetyl and benzoyl, and the bases tested are 2-aminophenol, 2-amino-4-methyl-6-bromophenol, and 2-amino-4, 6-dibromophenol. Apparently the presence of an acid-form-

ing substituent in the aminophenol does not change the course of the reaction.

*A more nearly rational system of units:* ELLIOTT Q. ADAMS.

*Certain metallic derivatives of hydroxy-anthraquinones:* M. L. CROSSLEY.

*Pyrogenic conversion of phenol to naphthalene:* M. L. CROSSLEY.

*Reduction of dihydroxythymoquinone by means of palladium-hydrogen:* NELLIE WAKEMAN. Dihydroxythymoquinone, in alcoholic or ethereal solution, reduced by hydrogen in the presence of finely divided palladium, loses its red color, the solution becoming colorless. Upon evaporation of the solvent, in contact with air, the color returns and red crystals of dihydroxythymoquinone result. Evaporated in an atmosphere of hydrogen, flaky white crystals are obtained. These, upon exposure to the air, change to red dihydroxythymoquinone. Reduced in the same way in acetic acid anhydride solution, dihydroxythymoquinone yields a tetra-acetyl derivative which is stable in the air, and separates in colorless prismatic crystals melting at 180°-182°.

*Congo red and some similar disazo-dyes:* W. R. ORNDORFF AND F. E. CARRUTH.

*Synthesis of anthracene from naphthalene:* C. W. COLVER AND W. A. NOYES.

*Positive iodine in derivatives of acetylene:* L. B. HOWELL AND W. A. NOYES.

*The attraction between organic substances and water, and the adsorption of organic substances:* W. D. HARKINS.

*Determination of the viscosity of pyroxylin solutions:* E. F. HIGGINS AND E. C. PITMAN. (By title.)

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(To be continued)

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