Abstracts from Other Journals

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Determination of the Iodine Value in Aqueous Emulsion. J. Fialkow. (*Z. anal. Chem.*, 1927, 70, 227-229.)—In the determination of the iodine value of a fat Margosches and Hinner (*Z. angew. Chem.*, 1924, 37, 202) add water to the mixture of the alcoholic solution of the fat and the iodine in order to further both hydrolysis of the iodine and formation of hypoiodous acid, and also to obtain a large surface of contact between the iodine solution and the fat by distributing the latter throughout the liquid in very fine drops. The author finds that these objects may be attained and the use of alcohol entirely avoided if the fat is emulsified by means of gum arabic. The fat (0.1 to 0.15 grm.) is rubbed in a small porcelain dish with about one-half of its weight of the powdered gum and 1 to 2 drops of water until a uniform emulsion is obtained. This is treated with 5 to 10 c.c. of water, which is added dropwise at first, the mass being constantly stirred during the addition. The turbid emulsion thus obtained is transferred to a flask with a ground stopper, the dish being carefully rinsed. The liquid is mixed with 20 c.c. of 0.2 *N* iodine solution (1 part 1; 1 part KI) and then with sufficient water to make the total volume 200 to 250 c.c., and after 5 minutes the whole is titrated with 0.1 *N* thiosulphate solution. The titre of the iodine solution is determined by a blank experiment similarly carried out. This procedure gives results in agreement with those furnished by Hübl's method, but is not readily applicable to the solid fats, which are difficult to emulsify.

Salts of Linolenic Hexabromide from Lumbang Oil. G. A. Imperial and A. P. West. (*Phil. J. Sc.*, 1926, 31, 441-449.) — Linolenic acid hexabromide was prepared in quantity from Philippine lumbang oil, which consists almost entirely of the glycerides of linolenic, linolic, and oleic acids. The prepared acid was analyzed by determining the bromine content, and salts were prepared from it by first converting the acid into the potassium salts, treating a methyl alcohol solution of the salt with an inorganic salt, such as barium bromide, and purifying the precipitated linolenic hexabromide salt. The barium, zinc and lead salts were thus prepared. The zinc salt gave the best melting point, decomposing sharply at 174° C. Linolenic hexabromide and its salts are not very soluble in ordinary organic solvents; about 10 grms. of the acid dissolves in 200 c.c. of benzyl alcohol at 100° C.; 5 grms. in 500 c.c. of warm isobutyl alcohol, and 21 grms. in 400 c.c. of warm xylene. The salts are still less soluble, but all are soluble (to the extent of 1 to 4 per cent.) in hot benzaldehyde and glacial acetic acid; the barium, zinc and lead salts in hot benzyl alcohol, the zinc salt also in nitrobenzene and pyridine, and the lead salt also in nitrobenzene, whilst the potassium salt is soluble in hot normal propyl alcohol.