TABLE I

Sample	Polarographically as TiO_2	Colorimetrically as TiO_2
1	0.062	0.062
2	0.062	0.062
3	0.130	0.132
4	0.187	0.187
5	0.250	0.250
6	0.312	0.312
7	0.365	0.365
8	0.431	0.431
9	0.063[a]	0.064
10	0.124[a]	0.125
11	0.187[a]	0.187

[a] Samples 9, 10, 11 were special pilot samples. These were made using 1,000 g. of soap, and C.P. Titanium Dioxide was added in the following ratio: .625 g., 1.25 g., and 1.875 g., respectively.

stant I serves two purposes. If the previously determined constant I and the factors m and t are known, it is possible to determine the concentration of the titanium without referring to a standard curve (2), and the I gives a means of correlating the diffusion currents, using different capillaries in the same electrolyte and at a known concentration when m and t are known (2).

Conclusion

Titanium dioxide can be determined in soaps polarographically by the method described above. It has been found that no maximum suppressor was necessary and that the diffusion current is directly proportional to the concentration and is well defined. The method is adaptable to soaps.

Acknowledgment

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Letter to the Editor

DEAR EDITOR:

In the paper "The Composition of Coffee Oil and Its Component Fatty Acids" (J. Am. Oil Chemists' Soc., *30*, 606, 1953) the statement was made that ". . . previous work on coffee oil is meager . . .".

The following references, dealing with oil of coffee grounds, contain much valuable data and interesting technological information:

R. INTONTI: Rendiconti dell'Ist. di Sanità Pubbl., March 1938.

M. TESTONI E G. BIMBI: La Chimica e l'Industria, *3*, 137 (1938).

G. B. MARTINENGHI: Oli Min., Grassi e Saponi, Col. e Vern., *18*(8), 113 (1938).

They may be of interest to your Journal readers.

GIOVANNI B. MARTINENGHI
PROFESSORE CORRISPONDENTE
DELL'ISTIT. NACIONAL DE OLEOS
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Milano, Italy
March 22, 1954

ABSTRACTS . . . . . R. A. Reiners, Editor

• Oils and Fats

Ralph W. Planck, Abstractor
Dorothy M. Rathmann, Abstractor

The autoxidation of fats and application of antioxidants. H. Janecke (Univ. Frankfurt a. M., Germany). *Arzneimittel-Forsch.* 3, 574-86, 632-9(1953). A review.

Seed fats of cucurbits. D. K. Chowdhury, M. M. Chakrabarty, and B. K. Mukherji (Univ. Coll. Sci. Technol., Calcutta). *Science and Culture* (India) 19, 163-4(1953). Analysis of seeds and oils of *Cucurbita maxima, Benincasa cerifa, Lagenaria vulgaris,* and *Citrullus vulgaris* shows respectively: % oil, 48, 48.3, 45.1, 68.4; iodine value, 98.3, 126.8, 126.5, 116.2; component fatty acids as % by weight of the oil are: linoleic, 43.7, 62.3, 64.0, 58.6; oleic, 26.4, 21.9, 18.2, 18.7; saturated, 29.9, 15.8, 17.8, 22.7. (*C. A.* 48, 3708)

Confirming the erucic acid detection in oil mixtures by the oxidation method. H. Hadorn, R. Jungkunz, and K. W. Biefer (Lab. Berbandes Schweizerische Konsumvereine, Basel, Switzerland). *Z. Lebensm.-Untersuch. u. -Forsch.* 97, 365-73(1953). For detection of cruciferous-seed oils (rape, mustard) in olive, peanut, and other oils, the method of Kaufmann and Fiedler (*C. A.* 33, 419), based on $KMnO_4$ oxidation and isolation and identification of dihydroxybehenic acid, was found unsuitable. With a few modifications, principally increase in the $KMnO_4$ excess, sufficient improvement was obtained so that 10% admixtures of rapeseed oil to olive or peanut oils were detectable. (*C. A.* 48, 2393)

The stability of safflower-seed oil. M. N. Rao and M. Swaminathan (Central Food Technol. Research Inst., Mysore, India). *Bull. Central Food Technol. Research Inst.* 2, 211(1953). The seeds were minced, steamed 1 hr., and the oil expressed at 1.25 tons/sq. in.; the yield was 25%. Stability by the active oxygen method was 14.5 hrs. Safflower-seed oil was less stable than peanut oil in holding tests. The high content of glycerides of linoleic acid accounts for the low stability. (*C. A.* 48, 2393)

Melting and solidification of milk fat. H. Mulder (Agr. Univ., Wageningen, Holland). *Neth. Milk Dairy J.* 7, 149-74(1953). The expansion of solidified cream with 35% fat upon heating from 0 to 51° in van Dam's dilatometer is greatest in the region of 10-20°. The amount of fat which melts at a given temperature varies according to the temperature at which the cream was solidified. The lower the temperature at which the butter fat was caused to solidify the lower is its melting point. The thermal expansion of the liquid and of the solid fat at the same temperature is practically the same. The total expansion