The author's thanks are due to Dr. Satya Prakash for his very kind interest in this work.

Chemical Laboratories, S. P. MUKHERJI.
The University, Allahabad,
December 2[illegible], 1948.

1. [illegible], 1945, **14**, 200; 1946, **15**, 250; *Nature*, 1946, **154**, 96. 2. [illegible], *J. Ind. Chem. Soc.*, 1924, **6**, 587.

CHEMICAL INVESTIGATION OF THE SEEDS OF *JATROPHA CURCAS* LINN.

Jatropha curcas is well known for its seeds which have purgative properties. It is also used in the case of Rheumatism and Itch. The juice of the plant is also reported to contain some colouring matter. As the plant is common in the Tropics, the juice and seeds have already been examined by various investigators.[1] The analyses of two indigenous samples from Malabar and Dharwar have been reported (*loc. cit.*, Alimchandani and Menon). The plant is common throughout the country, but its seed-oil is not utilised for any industrial purpose. In Gujarat, the forest areas abound in these plants, so the seeds were collected from Rajpipla State and the oil and other constituents are being investigated in this laboratory with a view to find the suitability of the oil for industrial use for paint and textile purpose and whether the constituents contain any alkaloid.

The seeds were extracted with carbon tetrachloride for their oil content. The extract after complete removal of the solvent gave bright yellow oil, with not unpleasant smell, which was examined chemically. The yield is 44 per cent.

Jatropha curcas *obtained from Rajpipla State (Gujrat). Constants of Oil.*

Sp. Gr. at 29° C.	0·9440
Refractive Index at 27·5° C.	1·470
Saponification value	2[illegible]·8
Acetyl value	16·5
Iodine value (Wijs')	88·0
Acid value	2·6
Acid value in terms of Oleic Acid	1·307
Unsaponifiable matter	1·1%
B.R. Reading at 40° C.	55·0
R.M. value	0·9
P. value	0·1
Constants of Mixed Acids	
Iodine value	94·7
Saponification equivalent	287·7
Constants of Solid Acids	
Iodine value	2·9
Saponification equivalent	276·7
Constants of Liquid Acids	
Saponification equivalent	291·3
Iodine value	111·0

Per cent. of Saturated Acids is 26·5

Per cent. of Unsaturated Acids is 73·5

The further work as regards fractionation of different fatty acids methyl esters, the suitability of the oil for industrial purpose and the isolation of the alkaloids, if any, is in progress.

Chemistry Department, C. M. DESAI.
M.T.B. College, M. T. VYAS.
Surat,
December 16, 1948.

1. Alimchandani and others, *J. Univ. Bom.*, 1945, **14**, 31; Kartha and Menon, *Proc. Ind. Acad. Sci.*, 1943, **18**, 160; Cruz and West, *J. C. S. I.*, 1937, **31**, 4518; Kataku, *Ibid.*, 1933, **27**, **1**, 1532; Adriaens, *Ibid.*, 1936, **30**, 5140; Felke, *Ibid.*, 1914, **8**, 531.

THE DINITRATION OF META-CHLORACETANILIDE

In connection with our studies of the factors involved in the elimination of the nitro-group during the diazotisation of certain nitranilines, it became necessary to prepare a pure sample of 4 : 6-dinitro-3-chlor aniline in quantity. This compound has been described by Nietzki and Schedler[1] and later by Fries and Roth[2] who both obtained it by the same method, *viz.*, the action of alcoholic ammonia on 4 : 6-dichlor-1, 3-dinitro benzene as yellow needles melting at 174° C. (Nietzki and Schedler) or 178° C. (Fries and Roth). Later, Nietzki and Zänker[3] claimed to have prepared it from 5-chlor-1, 2, 4-trinitro benzene by the same method. Since the methods mentioned above require the preparation of the intermediates themselves by the chlorination or nitration of suitable benzene derivatives, it was considered to be a more convenient and simple process to start with *m*-chloracetanilide and dinitrate it in one step to the required compound by suitable means.

In an earlier publication[4] it was mentioned that *m*-chlor acetanilide, when treated with a mixture of potassium nitrate and sulphuric acid was nitrated mainly in the 4-position (Cl = 3) whilst the use of nitric acid as such resulted in an isomeric mixture of 4- and 6-mononitro-chloracetanilides which was extremely difficult to separate. Further nitration of either the isomeric mixture, or of the pure mononitro compound with the same but fresh reagent failed to give the desired dinitro compound.

According to Kehrmann and Stanoyevitch[5] when *m*-chlor acetanilide was added in small amounts to a well-stirred mixture of one part of nitric acid (1·52 *d.*) to three parts of