NOTES.

The Mechanism of the Oxidation of Laudanosine. By VINAYAK KESHAV BHAGWAT, DOUGLAS KINLEY MOORE, and FRANK LEE PYMAN.

THE oxidation of laudanosine by manganese dioxide in sulphuric acid gave, in addition to the main products laudaline and veratraldehyde, a small quantity of a saturated substance, $C_{14}H_8(OMe)_4$, which crystallised from acetone in colourless plates, m. p. 231° (corr.) (Pyman, J., 1909, **95**, 1266). The constitution of this substance was not determined, but it was presumed to result from the decomposition of veratryl alcohol. It has now been identified as 2 : 3 : 6 : 7-tetramethoxy-9 : 10-dihydroanthracene, which is described by Mrs. G. M. Robinson (J., 1915, **107**, 267) as colourless needles (from benzene), m. p. 227°. The compound from either source was found to crystallise from moist acetone in plates, containing $\frac{1}{2}H_2O$, and from benzene in needles, containing $\frac{1}{2}C_6H_6$ [Found : loss at 105°, 11·4. Calc. for $C_{14}H_8(OMe)_4,\frac{1}{2}C_6H_6$: C_6H_6, 11·5%].

Preparations from the two sources and a mixture all melted at 227° after being dried at 100°. Gadamer (*Arch. Pharm.*, 1915, **253**, 274) isolated the same compound from the products of the oxidation of laudanosine with mercuric acetate. He assumed that it was tetramethoxydibenzyl—in spite of the analytical results—and deduced from this faulty assumption that free dimethoxybenzyl groups, which subsequently unite in pairs, are formed in the oxidation of laudanosine. The identification of the substance, recorded above, counteracts his view of the mechanism of this oxidation.—MUNICIPAL COLLEGE OF TECHNOLOGY, UNIVERSITY OF MANCHESTER. [*Received, December 4th*, 1930.]

The Preparation of Aromatic Acid Amides. By C. H. KAO and SHAO-YUAN MA.

THE method for the preparation of benzamide (J., 1930, 2788) has been applied to a number of substituted benzoic acids, with in most cases very satisfactory results. The quantities of aromatic acid and 95% acetic acid taken in each case were 100 g. and 150 c.c. respectively.

Acid.	$(NH_4)_2CO_3$, g.	Acid recovered, g.	Crude amide, g.	M. p. after purification.
p-Nitrobenzoic	90	30	60	200°
m-Nitrobenzoic	90	30	58	143
p-Chlorobenzoic	60	14	79	180
Benzilic	90	0	77·5	153 (from $CHCl_3$)
,, ...	60	18	71	
Phthalic (anhydride)	60	0	90 (imide)	232

o-Nitrobenzoic acid gave only about 15 g. of amide, and salicylic acid gave none. Phenylacetic and β-phenylpropionic acids were

completely converted into the amides, which were partly dehydrated to the nitriles.

Acid.	$(NH_4)_2CO_3$, g.	Crude amide, g.	Nitrile, g.	M. p. of purified amide.
Phenylacetic	90	83	0	156°
„	60	73	14	
β-Phenylpropionic	90	65	25	103
„	60	54	32	

Cinnamic acid (100 g.) gave only 20 g. of the amide (average yield of 8 trials).

Succinimide can be prepared by this process. After the removal of acetic acid, the residue is distilled. The portion, b. p. 280—288°, is collected as the imide (yield, 71 g. from 100 g. of the acid). After recrystallisation from acetone, it melts at 124°.—National Tsing Hua University, Peiping, China. [*Received, December 29th*, 1930.]

The Nitration of 6-*Methoxy*-m-*toluic Acid. A Correction.* By John Lionel Simonsen.

It was stated (J., 1918, **113**, 781) that 6-methoxy-*m*-toluic acid on nitration gave, in addition to 5-nitro-6-methoxy-*m*-toluic acid, 6-nitro-*o*-tolyl methyl ether. A repetition of the experiment has shown this to be incorrect, the neutral product being 5-nitro-*o*-tolyl methyl ether, m. p. 69—70°. Reference to the original notes shows that the melting point, 63°, previously recorded (J., 1915, **107**, 834) for this substance was wrongly transcribed and should have been 68°. The constitution of the methyl ether was proved by its hydrolysis to the nitro-cresol, m. p. 95—96°, and by its oxidation to the corresponding methoxy-acid, m. p. 161°.

I desire to thank Mr. E. A. Jones for his assistance in these experiments.—University College of North Wales, Bangor. [*Received, January 13th*, 1931.]

4-*Nitro*-4′-*methoxystilbene. A Correction.* By J. T. Hewitt and William Lewcock.

Professor F. Richter has drawn our attention to the melting point of 162° ascribed to 4-nitro-4′-methoxystilbene by Hewitt, Pope, and Lewcock (J., 1912, **101**, 608). The same compound has been described by von Walther and Wetzlich (*J. pr. Chem.*, 1900, **61**, 184) and Pfeiffer (*Ber.*, 1915, **48**, 1778), these authors giving the melting point as 133° and 132—134° respectively.

On repeating the preparation, we find that a twice recrystallised specimen melts at 132° (uncorr.). The melting point recorded in our paper appears to be due to an error in transcription (the earlier specimen and notes are no longer available).—[*Received, January 23rd*, 1931.]