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THE NEAR ULTRAVIOLET ABSORPTION SPECTRA OF *M*-and *P*-METHYL ANISOLES

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The near ultraviolet absorption spectra of meta- and para methyl anisoles were investigated in the vapour, liquid and solid phases.

m-Methyl anisole. In vapour absorption about 45 bands were measured and the intense band at 2773.3 Å (36048 cm^{-1}) was taken as the (0, 0) band. The spectrum could be interpreted on the basis of seven fundamental frequencies in the upper state (210, 676, 824, 952, 1092, 1164 and 1228 cm^{-1}) and two fundamentals in the ground state (206, and 725 cm^{-1}). There is agreement with Raman data reported by Reitz and Ypsilanti (1935).

In liquid absorption four bands were obtained and the intense band at 2807 Å (35615 cm^{-1}) was taken as the (0, 0) band. The spectrum could be interpreted on the basis of one upper state fundamental 911 cm^{-1}.

In solid absorption three bands were obtained and the intense band at 2805 Å (35640 cm^{-1}) was taken as the (0, 0) band. The spectrum could be interpreted on the basis of one upper state fundamental 926 cm^{-1}.

p-Methyl anisole. In vapour absorption about 32 bands were measured and the intense band at 2824.1 Å (35399 cm^{-1}) was taken as the (0, 0) band. The spectrum could be interpreted on the basis of six fundamentals in the upper state (379, 480, 544, 789, 1176 and 1259 cm^{-1}) and two fundamentals in the ground state (530 and 839 cm^{-1}). There is agreement with Raman data reported by Reitz and Ypsilanti (1935).

In liquid absorption two bands were obtained and the intense band at 2869 Å (34845 cm^{-1}) was taken as the (0, 0) band. The other band was interpreted as the upper state fundamental 795 cm^{-1}.

In solid absorption about ten bands were obtained and the intense band at 2872 Å (34809 cm^{-1}) was taken as the (0, 0) band. The spectrum could be interpreted on the basis of two upper state fundamentals (780 and 1229 cm^{-1}).

The details will be published shortly.

REFERENCE

Reitz, A. W. and Ypsilanti, G. P., 1935, *Monats. Fur. Chem.*, **66**, 304.