sigma phenomenon in producing the Fahraeus–Lindqvist effect.

On the basis of some measurements of A. L. Copley, Scott Blair[9] and Reiner and Scott Blair[10] have recently suggested that the rheological properties of blood can be described in terms of a theory put forward by Casson[11] for varnish and ink. This theory is applicable to substances the consistency curves of which intersect the stress axis at a yield value. However, the consistency curves which we have obtained for blood do not seem to intersect the stress axis at a finite value, but rather become non-linear below 20 dynes/cm. and point toward the origin. The lowest shear stress that was reached in Copley's measurements was 100 dynes/cm., and so the non-linearity of the consistency curves was not detected. Thus it does not appear that Casson's theory would provide a satisfactory description of the flow properties of blood at very low shear stresses if no yield value exists.

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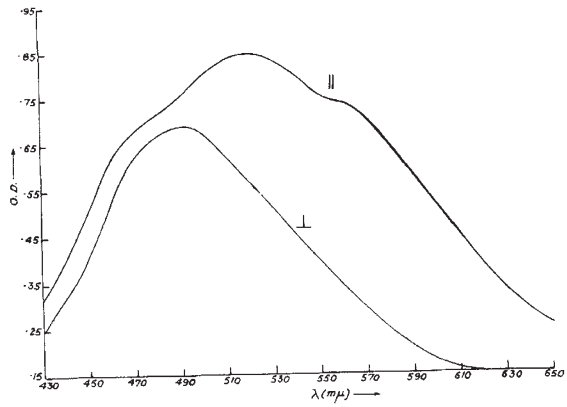

Fig. 1

transition $d_{z^2} \rightarrow d_{xy}$, then the result may mean that the z-axis of the molecular field coincides with the long axis of the crystal.

The crystal spectrum of the chloride and also of the fluoride was found to be identical with that of the bromide, indicating that the anion was outside the co-ordinating sphere and had no perturbing action on the copper d-orbitals, which is also corroborated by the chemical properties[2]. In solution, all these compounds have one broad absorption band and show no structure resembling a crystal spectrum. Further, the structure could be detected with extremely thin crystals only. As the thickness of the crystal was increased, the structure of the band became increasingly less well defined.

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CHEMISTRY

Crystal Spectrum of Copper Biguanides

IN a previous communication[1] it was shown that the absorption spectrum of a microscopic crystal of copper-ethylene-diamine-*bis*(acetylacetone) consists of three bands as predicted by the ligand field theory. Copper biguanides form transparent reddish crystals[2], very convenient for measurement in our experimental arrangement. In Fig. 1 are given the spectrophotometric optical density (*O.D.*) vs. wave-length (λ) curves for a thin crystal of copper *bis*-biguanide dibromide dihydrate with light polarized along the long axis of the crystal and at right angles to it, respectively. It is evident that the first curve consists of three bands, but the sharpness and fine structure are not as well defined as was the case with copper-ethylene-diamine-*bis*(acetylacetone). The decomposition of the curve into its component bands shows three peaks at 485 mμ, 540–550 mμ and 600 mμ. When the light was polarized at right angles to the long axis of the crystal, the absorption spectrum was found to consist of two bands, with peaks at 485 mμ and 550 mμ, the peak at 600 mμ being missing. If we associate the band of longest wave-length with the

Structure of Lithium Methoxide

RECENTLY, Bradley has proposed a theory which correlates and predicts the structures of metallic alkoxides[1]. At the moment, Bradley's theory cannot be fully developed because of the lack of direct structural information. In particular, it is not known whether lithium methoxide is ionic, as generally assumed, or whether it is a giant polymer[2]. This communication describes the structure of lithium methoxide, which is shown to be similar to that of lithium hydroxide[3]. Although the structure has some features reminiscent of a giant two-dimensional polymer, it would normally be considered ionic.

Lithium methoxide was prepared by solution of the metal in methanol. Excess methanol was pumped off, and specimens of the resultant powder transferred to thin-walled 'Pyrex' capillaries which were sealed with 'Picien' wax. All operations were carried out in a dry box. Powder photographs were taken with a 3-cm. 'Unicam' oscillation camera. The photographs showed that the unit cell was tetragonal with $a = 3{\cdot}55_2$ and $c = 7{\cdot}68_7$ Å. Systematic absences corresponded to the space group $P4/nmm$ (No. 129). The density calculated on the assumption of two formula units in the cell was 1·30 gm./c.c. The

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