various types of functions differ, however, in rapidity of convergence and in resolution of interatomic distances. The more the argument of the Fourier integral is damped, the more rapidly does the radial distribution function converge (to the ideal one), but the poorer resolution it shows. It has been customary to introduce an 'artificial temperature factor' in order to increase the convergence of the D_t, σ_t, D_n, and σ_n functions. The series of the corresponding D_v and σ_v functions converge so rapidly that the experimental function must be expected to represent a good approximation to the corresponding 'ideal' function of the system. The actual form of these functions will be calculated and discussed elsewhere.

A suggestion by Konobeevskii (1948) to use a similar procedure in the case of crystallographic X-ray investigations seems somewhat far fetched. Usually the actual thermal vibrations are large enough to give sufficient convergence of the series. If this 'natural' convergence is increased by the use of $F/\sin^2\theta$ instead of F in the Fourier syntheses, the peaks on the Fourier map will obviously be too broad to be useful for usual structure determinations.

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A correction and a supplement to a note on the crystal structure of Zeise's salt.

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The authors wish to draw attention to errors in a table of atomic co-ordinates which appeared in a note on the crystal structure of Zeise's salt (Wunderlich & Mellor, 1954). We publish below the corrected values and some additional information, namely, approximate values of the co-ordinates of the carbon and oxygen atoms.

	x	y	z
Pt	0·213	0·000	0·333
Cl(2)	0·213	0·277	0·333
Cl(3)	0·213	0·723	0·333
Cl(1)	0·428	0·000	0·529
K	0·438	0·313	0·933
C(1)	0·01	*	0·26
C(2)	0·07	*	0·99
O	0·05	?	0·58

* One relatively high but diffuse peak near $x = 0{\cdot}04$ and $y = 0$ in a 'difference synthesis' projection on (001) indicated that both carbon atoms lay close to $y = 0$.

This correction in no way alters the deductions made in our previous communication. The discrepancy factor $R(\Sigma||F_o|-|F_c||\div\Sigma|F_o|)$ at this stage of the refinement is 0·141 for the ($h0l$) zone of 134 reflexions and 0·193 for the ($hk0$) zone of 91 reflexions. The contributions of platinum, potassium and the three chlorine atoms were included in the calculation of F_c.

It is therefore evident that the length of the ethylene molecules is perpendicular (or nearly so) to the plane of the $PtCl_3$ group, the average distance between the platinum and carbon atoms being 2·2 Å and the C–C separation being roughly 1·5 Å.

Recently, Chatt (1953) has presented evidence from infra-red measurements in favour of the 'side on' arrangement and has proposed an electronic system in terms of molecular orbitals. Our crystal-structure determination also indicates a 'side on' linkage of ethylene to platinum, and is in agreement with the geometry of the molecule as imposed by Chatt's electronic model.

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