CRUICKSHANK, D. W. J. (1949). *Acta Cryst.* **2**, 65.
CRUICKSHANK, D. W. J. (1954). *Acta Cryst.* **7**, 519.
GOODWIN, T. H. & THOMSON, C. M. (1954). *Acta Cryst.* **7**, 166.
GORDON, M., STENHAGEN, E. & VAND, V. (1953). *Acta Cryst.* **6**, 739.
HUGHES, E. W. (1941). *J. Amer. Chem. Soc.* **63**, 1737.
LINGAFELTER, E. C. & JENSEN, L. H. (1950). *Acta Cryst.* **3**, 257.
MACGILLAVRY, C. H., HOOGSCHAGEN, G. & SIXMA, F. L. J. (1948). *Rec. trav. chim. Pays-Bas*, **67**, 869.
MORLEY, W. M. & VAND, V. (1949). *Nature, Lond.* **163**, 285.
MORRISON, J. D. & ROBERTSON, J. M. (1949). *J. Chem. Soc.* p. 1001.
ROBERTSON, J. M. (1943). *J. Sci. Instrum.* **20**, 175.
SIM, G. A., ROBERTSON, J. M. & GOODWIN, T. H. (1955). *Acta Cryst.* **8**, 157.
STENHAGEN, E., VAND, V. & SIM, A. (1952). *Acta Cryst.* **5**, 695.
SYDOW, E. VON (1954). *Acta Cryst.* **7**, 529, 823.
VAND, V. (1953). *Acta Cryst.* **6**, 797.
VAND, V., LOMER, T. R. & LANG, A. (1949). *Acta Cryst.* **2**, 214.
VAND, V., MORLEY, W. M. & LOMER, T. R. (1951). *Acta Cryst.* **4**, 324.

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Some lattice constants.

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During analytical work involving the identification of crystalline compounds by X-ray diffraction analysis, powder patterns were obtained with a Berthold diffractometer for compounds of high purity (generally AR grade). Since the diffractometer measures spacings with high precision, accurate lattice constants were calculated from the data available for crystals having orthorhombic or higher symmetry. These figures are reported in Table 1; powder data are being submitted to the A.S.T.M. for prospective inclusion in their *Index of Diffraction Patterns*. Some idea of the accuracy attained may be seen where standard deviations are reported.

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Table 1

Compound	Temperature (°C.)	System*	Lattice constants
$Ca(NO_3)_2$	24	*C*	$a = 7{\cdot}590 \pm 0{\cdot}006$ Å
$Pb(NO_3)_2$	26	*C*	$a = 7{\cdot}853 \pm 0{\cdot}002$ Å
FeS_2 (pyrite)	26	*C*	$a = 5{\cdot}417 \pm 0{\cdot}002$ Å
$KAl(SO_4)_2.12H_2O$	24	*C*	$a = 12{\cdot}164 \pm 0{\cdot}006$ Å
$(NH_4)Al(SO_4)_2.12H_2O$	24	*C*	$a = 12{\cdot}241 \pm 0{\cdot}006$ Å
$KCr(SO_4)_2.12H_2O$	24	*C*	$a = 12{\cdot}204 \pm 0{\cdot}007$ Å
$NaCr(SO_4)_2.12H_2O$	23	*C*	$a = 12{\cdot}12 \pm 0{\cdot}08$ Å†
$(NH_4)Fe(SO_4)_2.12H_2O$	24	*C*	$a = 12{\cdot}324 \pm 0{\cdot}007$ Å
β-Hexachlorocyclohexane	24	*C*	$a = 10{\cdot}078 \pm 0{\cdot}007$ Å
$(NH_4)H_2PO_4$	24	*T*	$a = 7{\cdot}510 \pm 0{\cdot}003$, $c = 7{\cdot}564 \pm 0{\cdot}008$ Å
$NaNO_3$	24	*R*	$a = 6{\cdot}326$ Å, $\alpha = 47°\ 17'$
$KBrO_3$	23	*R*	$a = 4{\cdot}413$ Å, $\alpha = 85°\ 48'$
$(NH_4)_2SO_4$	23	*O*	$a = 6{\cdot}000 \pm 0{\cdot}005$, $b = 10{\cdot}66 \pm 0{\cdot}02$, $c = 7{\cdot}794 \pm 0{\cdot}006$ Å
$(NH_4)NO_3$ IV	24	*O*	$a = 5{\cdot}757$, $b = 5{\cdot}451$, $c = 4{\cdot}935$ Å
$(NH_4)NO_3$ III	>32	*O*	$a = 7{\cdot}18$, $b = 7{\cdot}71$, $c = 5{\cdot}83$ Å
$AgNO_3$	23	*O*	$a = 6{\cdot}994 \pm 0{\cdot}004$, $b = 7{\cdot}330 \pm 0{\cdot}004$, $c = 10{\cdot}13 \pm 0{\cdot}01$ Å

* *C* = cubic, *T* = tetragonal, *R* = rhombohedral, *O* = orthorhombic.
† From low-angle lines only.