molar amount of tetranactin and $CuBr_2$) as dark green needles with monoclinic symmetry (No. 11). The complex formation was proved by the infrared spectra which indicated complicated shifts in ν_{C-O-C} bands, while $\Delta\nu_{C-O}$ (*ca.* 4 cm^{-1}) was rather small compared with those found in K^+ (15 cm^{-1}) and Ba^{2+} (45 cm^{-1}) complexes.

The spectral data (infrared and p.m.r.) on the free and the complexed molecules of the tetranactins will be published elsewhere.

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Acta Cryst. (1971) B**27**, 1682

The crystal structures of racemic 3-benzylamino-4-hydroxypent-2-enoic acid lactone hydrochloride and of spontaneously resolved 3-benzylamino-4-hydroxypent-2-enoic acid lactone hydrobromide.

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(*Received* 27 *January* 1971)

In *Acta Cryst.* (1970) B**26**, 1139 the compounds are erroneously named and pent-2-enoic should read pentanoic.

In a paper of the above title (Cheng, Koo, Mellor, Nyburg & Young, 1970), the compounds are erroneously named. 3-Benzylamino-4-hydroxypent-2-enoic acid should read 3-benzylamino-4-hydroxypentanoic acid throughout.

Reference

CHENG, P.-T., KOO, C. H., MELLOR, I. P., NYBURG, S. C. & YOUNG, J. M. (1970). *Acta Cryst.* B**26**, 1339.

Acta Cryst. (1971). B**27**, 1682

Refinement of the crystal structure of lithium hydroxide monohydrate.

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(*Received* 29 *April* 1971)

The crystal structure of lithium hydroxide monohydrate, $LiOH.H_2O$, has been refined from the data of Rabaud & Gay to locate the hydrogen atoms. The R value was reduced from 0·085 to 0·065 and the hydrogen atoms were shown to be ordered.

Rabaud & Gay (1957) determined the crystal structure of $LiOH.H_2O$ from three-dimensional data, using for refinement difference syntheses in two-dimensional projections. They located the hydroxyl hydrogen atom (in a special position) but could not find that of the water molecule (in a general position) and they suggested that it was disordered. However, the deuteron magnetic resonance (d.m.r.) spectrum of the compound, which has been studied in this laboratory (Clifford, Dixon & Smith, 1967; Smith & Clifford, 1971), indicates strongly that the water molecule is not disordered. The X-ray data has therefore been re-examined to resolve this discrepancy.

Experimental

Crystal data

Monoclinic, $a=7{\cdot}37$, $b=8{\cdot}26$, $c=3{\cdot}19$ Å;
$\beta=110°18'$; $Z=4$;
Space group $C2/m$ (from Rabaud & Gay, 1957).

Form factors for Li^+ and O were from *International Tables for X-ray Crystallography*, (1962), for H from McWeeny (1951). Two cycles of full-matrix least-square refinement on the lithium and oxygen atoms with anistropic temperature factors for each reduced the R value to 0·073 (Rabaud & Gay (1957) quote 0·085 as their final figure). A difference Fourier synthesis showed the largest peak in special position $i(x,0,z)$ with $x=0{\cdot}26$, $z=0{\cdot}64$, equivalent to the hydroxyl hydrogen found by Rabaud & Gay. There were two peaks of nearly equal height in general positions, but after one cycle of refinement including the first hydrogen atom, H(1), only one of these two peaks remained strong. The second hydrogen atom, H(2), was therefore added at this position and the data finally refined to $R=0{\cdot}065$. It was found necessary to damp the hydrogen atom shifts by 0·5 to avoid oscillations; of the 167 reflexions, three (400, 021, 002) showing extinction effects were given zero weight, with the rest having unit weights. The final parameters are shown in Table 1. Following the original nomenclature,