

Table 1. *Observed and calculated structure factors for YCd<sub>2</sub>*

<i>hkl</i>	$ F_o $	$F_c$	<i>hkl</i>	$ F_o $	$F_c$
001	109	-100	01 $\bar{2}$	15	14
002	177	173	01 $\bar{3}$	44	37
003	52	-49	12 $\bar{1}$	69	71
004	85	83	12 $\bar{2}$	17	11
110	201	210	12 $\bar{3}$	14	31
220	133	136	12 $\bar{4}$	21	18
330	89	83	23 $\bar{1}$	58	46
111	89	-81	23 $\bar{3}$	21	22
221	51	-55	020	20	-10
331	39	-35	101	96	84
112	159	150	021	77	70
222	99	107	102	17	12
332	65	69	022	16	11
113	46	-44	103	29	32
223	37	-33	023	35	28
114	74	76	104	26	18
224	60	59	131	34	47
11 $\bar{1}$	86	-82	132	17	8
011	130	130	133	26	21
012	30	-32	242	11	5
013	98	88	10 $\bar{1}$	106	109
210	15	-11	10 $\bar{2}$	25	-27
121	82	93	10 $\bar{3}$	70	75

Table 1 (cont.)

<i>hkl</i>	$ F_o $	$F_c$	<i>hkl</i>	$ F_o $	$F_c$
123	71	72	10 $\bar{4}$	19	-22
124	19	-22	02 $\bar{1}$	83	91
231	47	60	02 $\bar{3}$	75	67
233	51	51	24 $\bar{1}$	34	39
01 $\bar{1}$	111	99	24 $\bar{2}$	12	-11
			13 $\bar{1}$	63	62

Table 2. *Interatomic distances for YCd<sub>2</sub>*

Y-6Y	4.882 ± 1 Å	Cd-3Y	3.279 ± 3 Å
Y-2Y	3.501 ± 3	Cd-3Y	3.359 ± 3
Y-6Cd	3.279 ± 3	Cd-3Cd	2.823 ± 1
Y-6Cd	3.359 ± 3		

## References

- BRUZZONE, G. & RUGGIERO, A. F. (1962). *Atti Acc. Lincei Rend. Sci. fis. mat. e nat.* **33**, 312.  
 MICHEL, D. J. & RYBA, E. (1965). *Acta Cryst.* **19**, 687.  
 RYBA, E., KEJRIWAL, P. K. & ELMENDORF, R. (1967). Submitted to *Trans. AIME*.

*Acta Cryst.* (1968). **B24**, 463

**The structure of the *M'*-phase of YTaO<sub>4</sub>, a third fergusonite polymorph.** By G. M. WOLTEN, *Aerospace Corporation, Laboratories Division, El Segundo, California, U.S.A.*

(Received 1 January 1968).

A correction to *Acta Cryst.* (1967), **23**, 939.

An error in a computer program has caused erroneous values of the bond angles to be given in Table 3 of the article under the above title (Wolten, 1967). The numbers should read, in the order given, 133.8, 91.3, 116.6, 92.7, 96.3, 130.4. The distances of Table 3 are correct.

## Reference

- WOLTEN, G. M. (1967). *Acta Cryst.* **23**, 939.

*Acta Cryst.* (1968). **B24**, 463

**Lattice parameters and space groups of some aromatic Schiff bases.** By H. B. BÜRGI, J. D. DUNITZ and C. ZÜST, *Organic Chemistry Laboratory, Swiss Federal Institute of Technology, 8006 Zürich, Switzerland*

(Received 27 November 1967)

Lattice parameters and space groups of some aromatic Schiff bases are recorded.

In the course of our structural investigations of Schiff bases, we have prepared the compounds listed in column 1 of Table 1. The compounds were obtained by heating a 1:1 mixture of the corresponding aniline and benzaldehyde to about 100°C (with or without solvent). The solvent for recrystallization is indicated in column 2, Table 1.

Lattice parameters were derived from measurements on 30° precession photographs (Cu K $\alpha$ ,  $\lambda = 1.542$  Å). The stan-

dard deviations are approximately 0.2% of the values in columns 3-6, Table 1. The space groups (column 7, Table 1) are determined from systematic absences, in some cases backed by structural considerations. Measured densities, tabulated in column 9, were obtained by flotation in aqueous potassium iodide solutions.

Detailed structural investigations of I, X and XII are in progress.

Table 1. Crystallographic data for some Schiff's bases

Compound	Solvent	<i>a</i> (Å)	<i>b</i> (Å)	<i>c</i> (Å)	$\beta$ ( $^\circ$ )	Space group	Z	<i>D<sub>m</sub></i>	<i>D<sub>s</sub></i>
I Benzylideneaniline, C <sub>13</sub> H <sub>11</sub> N	Light petroleum	11.95	7.92	12.2	118.23'	<i>P</i> 2 <sub>1</sub> / <i>c</i>	4	1.19	1.19
II <i>p</i> -Chlorobenzylideneaniline, C <sub>13</sub> H <sub>10</sub> ClN	—	28.3	11.4	7.4	94	<i>Cc</i> or <i>C</i> 2/ <i>c</i>	8	—	1.20 (a)
III <i>p</i> -Chlorobenzylidene- <i>p</i> -chloroaniline, C <sub>13</sub> H <sub>9</sub> Cl <sub>2</sub> N	—	24.3	6.8	7.4	90	<i>Pccn</i>	4	—	1.36 (a) (c)
IV Benzylidene- <i>p</i> -bromoaniline, C <sub>13</sub> H <sub>9</sub> BrN	—	22.05	5.94	8.91	91 14	<i>P</i> 2 <sub>1</sub>	4	1.54	1.48 (b)
V <i>p</i> -Hydroxybenzylideneaniline, C <sub>13</sub> H <sub>11</sub> NO	Ether	20.05	10.8	9.46	90	<i>Pbca</i>	8	1.27	1.27
VI <i>p</i> -Hydroxybenzylidene- <i>p</i> -bromoaniline, C <sub>13</sub> H <sub>10</sub> BrNO	Ethyl acetate light petroleum	9.34	11.1	22.1	90	<i>Pbcn</i>	8	1.60	1.60
VII <i>p</i> -Nitrobenzylideneaniline, C <sub>13</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>	Ether	14.6	10.81	18.4	128 53	<i>P</i> 2 <sub>1</sub> / <i>c</i>	8	1.27	1.37
VIII <i>p</i> -Nitrobenzylidene- <i>p</i> -nitroaniline, C <sub>13</sub> H <sub>9</sub> N <sub>3</sub> O <sub>4</sub>	Glacial acetic acid	16.2	—	4.20	(120)	<i>P</i> 6	3	1.30	1.25 (d)
IX <i>p</i> -Nitrobenzylidene- <i>p</i> -methylamine, C <sub>14</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub>	Ethanol	7.03	11.7	7.47	99 04	<i>Pc</i>	2	1.27	1.31 (e)
X <i>p</i> -Methylbenzylidene- <i>p</i> -nitroaniline, C <sub>14</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub>	Aqueous ethyl acetate	27.6	6.12	14.2	90	<i>Pbca</i>	8	1.31	1.32
XI <i>p</i> -Methylbenzylidene- <i>p</i> -methylamine, C <sub>15</sub> H <sub>15</sub> N <sub>2</sub> O <sub>2</sub>	Ethanol	6.07	7.73	26.7	103 10	<i>P</i> 2 <sub>1</sub> / <i>c</i>	4	1.13	1.14
XII Benzylidene- <i>p</i> -carboxyaniline, C <sub>14</sub> H <sub>11</sub> NO <sub>2</sub>	(Sublimation)	6.66	30.84	7.603	133 37	<i>P</i> 2 <sub>1</sub> / <i>c</i>	4	1.30	1.32
XIII <i>p</i> -Carboxybenzylideneaniline, C <sub>14</sub> H <sub>11</sub> NO <sub>2</sub>	Aqueous ethanol	21.8	7.517	28.4	96 25	<i>Cc</i> or <i>C</i> 2/ <i>c</i>	16	1.27	1.29

(a) Measurements by H. Rosatzin.

(b) Measurements and preliminary structure analysis by K. Antennen.

(c) Disordered.

(d) Packing considerations would appear to favour *P*6 over *P*6/*m*; all three require disorder.(e) *P*2/*c* possible only if disordered.