

## SHORT COMMUNICATIONS

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*Acta Cryst.* (1983). **C39**, 1473

***N*-Methylacetamide hemihydrochloride: corrigendum.\*** By RICHARD E. MARSH, *Arthur Amos Noyes Laboratory of Chemical Physics, California Institute of Technology, Pasadena, California 91125, USA*

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## Abstract

The crystal structure of  $C_3H_7NO \cdot \frac{1}{2}HCl$  should be described in the orthorhombic space group *Fdd2* rather than the monoclinic *C2* reported by Jaber, Guilhem & Loiseleur [*Acta Cryst.* (1983), **C39**, 485–487].

The crystal structure derived for *N*-methylacetamide hemihydrochloride was based on the monoclinic space group *C2* with  $a = 8.454$  (4),  $b = 10.597$  (5),  $c = 11.754$  (5) Å,  $\beta = 111.09$  (8)°,  $Z = 8$  (Jaber, Guilhem & Loiseleur, 1983; JGL). The vectors  $[102]$ ,  $[100]$ ,  $[010]$  define an effectively orthorhombic unit cell with  $a' = 21.933$ ,  $b' (= a) = 8.454$ ,  $c' (= b) = 10.597$  Å,  $\alpha' = \beta' = 90$ ,  $\gamma' = 90.01$ °,  $Z = 16$ . The corresponding transformations  $x' = \frac{1}{2}z$ ,  $y' = x - \frac{1}{2}z$ ,  $z' = y$  lead to atomic coordinates that are consistent with space group *Fdd2* within their reported uncertainties. The *Fdd2* coordinates are given in Table 1.

Since the increase in symmetry from *C2* to *Fdd2* does not involve the addition of a center of symmetry, the coordinate shifts necessary to achieve the higher symmetry are no larger

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**Half-normal probability plot of 3,3'-dithiodipropionic acid.** By M. SESHASAYEE, *Department of Physics, Indian Institute of Technology, Madras 600 036, India*

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## Abstract

A half-normal probability plot comparing the reported structural parameters of 3,3'-dithiodipropionic acid,  $(SCH_2CH_2COOH)_2$ , published by two different authors is presented.

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than the formal e.s.d.'s (Schomaker & Marsh, 1979) and the molecular dimensions as found in *C2* (JGL) remain essentially unchanged; all molecular units become equivalent by symmetry.

Table 1. *Atom coordinates* ( $\times 10^4$ ) (space group *Fdd2*)

The *C2* coordinates (JGL, Table 1) have been averaged according to the symmetry of *Fdd2*; numbers in square brackets are shifts necessary to achieve this symmetry, and numbers in parentheses are averaged e.s.d.'s in the original values.

	$x'$	$y'$	$z'$
Cl (1,2)	0	0	5012 [0] (1)
C (1,4)	788 [2] (1)	3730 [4] (3)	3143 [3] (3)
N (1,2)	988 [0] (1)	2342 [0] (2)	3836 [2] (2)
C (2,5)	1560 [1] (1)	1995 [4] (2)	4029 [0] (2)
O (1,2)	1970 [1] (1)	2916 [3] (2)	3614 [2] (2)
C (3,6)	1714 [0] (1)	533 [1] (3)	4745 [0] (2)

## References

- JABER, M., GUILHEM, J. & LOISELEUR, H. (1983). *Acta Cryst.* **C39**, 485–487.  
SCHOMAKER, V. & MARSH, R. E. (1979). *Acta Cryst.* **B35**, 1933–1934.

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Results of the crystal structure analysis of the title compound published by two different authors (Prout, 1982; Appa Rao, Seshasayee, Aravamudan, Nageswara Rao & Venkatasubramanian, 1982) have been compared by a half-normal probability plot (Abrahams & Keve, 1971) (Fig. 1):

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$\delta p_i = \frac{|p(1)_i - p(2)_i|}{[\sigma^2 p(1)_i + \sigma^2 p(2)_i]^{\frac{1}{2}}}$ , where  $p(1)_i$  and  $p(2)_i$  are the two sets of parameters refined in the structure analysis and the  $\sigma$ 's are the corresponding standard deviations.

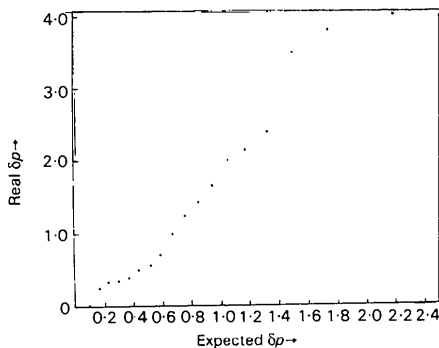


Fig. 1. Half-normal probability plot with real  $\delta p$  and expected  $\delta p$  as ordinate and abscissa.

A least-squares straight-line fit of the plot ignoring two points (16th and 17th in the figure) gave a slope of 1.83 (4) and an intercept of  $-0.16$  (3). The non-zero intercept indicates systematic errors in the data. The slope of the straight line deviates from the ideal value of 1 by 0.85 indicating that either the  $\Delta p_i = p(1)_i - p(2)_i$  are large or the corresponding standard deviations  $\sigma(p_i)$  are small. The near linearity of the plot excludes the first possibility since for  $\Delta p_i$  to be large  $p(1)_i$  and  $p(2)_i$  must differ from the true value in opposite directions. The second possibility is more likely, which could arise if both sets of data are refined by least squares to a greater degree than warranted by the accuracy of the data.

#### References

- ABRAHAMS, S. C. & KEVE, E. T. (1971). *Acta Cryst.* **A27**, 157–165.  
 APPA RAO, G. V. N., SESHASAYEE, M., ARAVAMUDAN, G., NAGESWARA RAO, T. & VENKATASUBRAMANIAN, P. N. (1982). *Acta Cryst.* **B38**, 2852–2855.  
 PROUT, K. (1982). *Acta Cryst.* **B38**, 338–340.

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### Chemical nomenclature

The attention of authors is drawn to the following recommendations of the IUPAC Commission on Nomenclature of Organic Chemistry: *The Designation of Non-Standard Classical Valence Bonding in Organic Nomenclature* [*Pure Appl. Chem.* (1982), **54**, 217–227], *Revision of the Extended Hantzsch–Widman System of Nomenclature for Heteromonocycles* [*Pure Appl. Chem.* (1983), **55**, 409–416]; and to the following recent recommendations of the IUPAC–IUB Joint Commission on Biochemical Nomenclature: *Symbols for Specifying the Conformation of Polysaccharide Chains* [*Eur. J. Biochem.* (1983), **131**, 5–7], *Abbreviations and Symbols for the Description of Conformations of Polynucleotide Chains* [*Eur. J. Biochem.* (1983), **131**, 9–15].

Authors are reminded that, wherever possible, chemical nomenclature in the Union's journals should conform to IUPAC rules. Basic rules for the nomenclature of inorganic chemistry are given in *Nomenclature of Inorganic Chemistry* (1970) ('The Red Book'), London: Butterworths and, for organic chemistry, in the two volumes *Nomenclature of Organic Chemistry, Sections A, B, C, D, E, F, & H* (1979) ('The Blue Book'), Oxford: Pergamon Press and *Biochemical Nomenclature and Related Documents* (1978), London: Biochemical Society. For additional details on nomenclature requirements see p. 179 of *Notes for Authors* [*Acta Cryst.* (1983), **A39**, 174–186].

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