

(3) The prior information (observed magnitudes $|E'|$ and structure factors E'_p) does not change cycle by cycle in *SIR* and can be considered as a set of fixed pivots of the phasing process. In *DIRDIF* the quantities $E_r(\mathbf{k})$ and $E_r(\mathbf{h}-\mathbf{k})$ (which play in the process the role of prior information) are changed cycle by cycle both in modulus and in phase.

Besides the above points there are further peculiar opportunities offered by *SIR* to the user:

(a) a multisolution technique is always used in accordance with the good grounds described by CGS (*DIRDIF* uses symbolic addition techniques and sometimes single solutions are obtained);

(b) the phase expansion according to CGS is secured via a special weighting scheme which is based on functions depending on the fixed (once and for all) prior information;

(c) specialized figures of merit are used for finding the correct solutions taking into account prior information.

It is now unquestionable that *DIRDIF* and the CGS contributions share almost only the final purpose of recovering the complete from a partial structure, but have to be considered quite different from one another because they are based on different probabilistic backgrounds, work on

different sets of reflexions, have quite different starting sets, estimate phase reliabilities by different formulae, find different pathways for phase expansion, employ different tangent weighting schemes, find the correct solutions by different figures of merit, and the one uses difference structure factors and the symbolic addition technique while the other works by structure factors and a multisolution technique (we want to say: *vive la différence!*).

The supposition by Beurskens that the CGS contribution, even if important, shows only that the *DIRDIF* method is justified by formula (G.21) of Giacovazzo (1983) reveals a serious misconception of the various theoretical and practical aspects here discussed and has to be resolutely rejected.

References

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Acta Cryst. (1987). **A43**, 286

Theory and computation of optical rotatory power in inorganic crystals. Erratum. By V. DEVARAJAN and A. M. GLAZER, *Clarendon Laboratory, University of Oxford, Parks Road, Oxford OX1 3PU, England.*

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Abstract

Equation (10) of Devarajan & Glazer [*Acta Cryst.* (1986). **A42**, 560–569] appearing on p. 561 should read

$$\alpha_s^{-1} \mathbf{p}_s = \sum_{s'} \mathbf{p}_{s'} \left\{ \sum_{l'} a(\mathbf{r}_s^l - \mathbf{r}_{s'}^{l'}) \exp[-i\mathbf{k} \cdot (\mathbf{r}_s^l - \mathbf{r}_{s'}^{l'})] \right\}. \quad (10)$$

All relevant information is given in the *Abstract*.

Acta Cryst. (1987). **A43**, 286

Isomorphous replacement: effects of errors on the phase probability distribution. Erratum. By THOMAS C. TERWILLIGER and DAVID EISENBERG, *Molecular Biology Institute and Department of Chemistry and Biochemistry, University of California, Los Angeles, California 90024, USA.*

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Abstract

In the paper by Terwilliger & Eisenberg [*Acta Cryst.* (1987). **A43**, 6–13], equation (18) should read

$$\bar{F}_{PH} \equiv \frac{1}{2}(|\mathbf{F}_{PH}^+| + |\mathbf{F}_{PH}^-|) \doteq |\mathbf{F}_{PH}|. \quad (18)$$

All relevant information is given in the *Abstract*.