

Fig. 3. Projected benzene ring of phenanthridine from weighted reciprocal-lattice section hk0.

of 0.03 Å there is a close resemblance between the trends of the bond lengths. Theoretical calculations by Dewar & Gleicher (1966) indicate an identical trend. The C(6)–C(7) bond is a 'contact bond' linking the two benzenoid rings, and is longer than the normal aromatic C-C distance (1.396 Å), a characteristic feature of aromatic molecules containing a phenanthrenoid arrangement of rings.

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#### References

Busing, W. R., Martin, K. O. & Levy, H. A. (1962). ORFLS. ORNL-TM-305. Oak Ridge National Laboratory, Tennessee.

International Tables for X-ray Crystallography (1969). Vol. I. Birmingham: Kynoch Press.

DEWAR, M. J. S. & GLEICHER, G. J. (1966). J. Chem. Phys. 44, 759-773.

### **Notes and News**

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).

# International Union of Crystallography Tenth General Assembly and International Congress of Crystallography. Preliminary Announcement

At the invitation of the Stichting voor Fundamenteel Onderzoek der Materie met Röntgen- en Elektronenstralen the Tenth General Assembly and International Congress of Crystallography of the International Union of Crystallography will be held at the R.A.I. Congress Centre, Amsterdam, The Netherlands, 7–15 August 1975.

The first formal announcement will appear in *Acta Crystallographica* at the end of 1973 or early in 1974 and will give the address from which copies of the *First Circular* can be obtained. In addition, copies of this *First Circular* will be sent to all National Committees for Crystallography.

## Inter Congress Symposium on Intra- and Intermolecular Forces Pennsylvania State University, U.S.A. 14-16 August 1974

An Inter-Congress Symposium on Intra- and Intermolecular Forces, sponsored by the International Union of Crystallography, will be held immediately before the meeting of the American Crystallographic Association at the Pennsylvania State University, University Park, Pennsylvania, on 19–24 August 1974. The topics of the symposium are (i) theoretical and experimental determination of nonbonded interactions, (ii) models for calculation of molecular conformation, (iii) molecular and ionic packing in crystals, (iv) vibrational and spectroscopic analyses, (v) nonbonded interactions in polymers and (vi) conformational calculations for proteins and other biological macromolecules. It is intended that the programme will appeal to non-crystallographers with an interest in intra- and intermolecular forces, as well as to crystallographers. Copies of the *First Circular* and further information may be obtained from Professor D. E. Williams, Chemistry Department, University of Louisville, Louisville, Kentucky 40208, U.S.A.

## Conference on Applications of X-ray Analysis Denver, 22–24 August 1973

The 22nd Annual Denver Conference on Applications of X-ray Analysis will be held on 22, 23 and 24 August 1973 at the Brown Palace Hotel, Denver, Colorado, U.S.A. Further information may be obtained from the Program Chairman, Dr C. O. Ruud, Metallurgy and Materials Science Division, University of Denver, Denver, Colorado 80210, U.S.A.