

Gd(2) has

1 Al(1) at 3·10, 1 Al(2) at 3·14, 2 Gd(3) at 3·46,
2 Gd(3) at 3·66, and 1 Gd(1) at 3·69 Å.

Gd(3) has

2 Al(1) at 3·32, 2 Gd(2) at 3·46, 2 Gd(2) at 3·66, and
2 Gd(3) at 3·84 Å.

Al(1) has

1 Al(1) at 2·90, 1 Gd(2) at 3·10, 1 Gd(1) at 3·14,
2 Gd(1) at 3·15, and 2 Gd(3) at 3·32 Å².

Al(2) has

1 Al(2) at 2·45, 1 Gd(2) at 3·14, 1 Gd(1) at 3·22,
1 Gd(1) at 3·23, and 2 Gd(3) at 3·45 Å².

Estimated standard deviations in the Gd–Gd and Gd–Al distances are 0·01 Å; in Al–Al distances, 0·015 Å.

Peterson & Rinn (1961) reported cell parameters and a possible space group for Zr₃Zn₂ based on diffractometer data. Intensities of 35 indexed lines of this phase calculated using the Gd₃Al₂ parameters give a discrepancy factor of 17%. Hence, Zr₃Zn₂ is isostructural with Gd₃Al₂.

The structures of Gd₅Ge₃ and Dy₅Ge₃ were determined by a combination of single-crystal and powder diffraction methods. The hexagonal cell dimensions

(Dy₅Ge₃: $a = 8·438 \pm 0·007$, $c = 6·336 \pm 0·005$ Å;
Gd₅Ge₃: $a = 8·546 \pm 0·002$, $c = 6·410 \pm 0·002$ Å)

indicated on *hk0* and *hkl* precession films were confirmed by indexing the powder diagrams. The agreement of calculated intensities based on the Mn₅Si₃ structure type (*Strukturbericht*, 4, 24) and those observed for Dy₅Ge₃ and Gd₅Ge₃ confirmed the isostructural nature of these phases.

Powder diagrams of DyAl₃ were indexed with a hexagonal unit cell: $a = 6·097 \pm 0·009$, $c = 9·534 \pm 0·008$ Å, $Z = 4$. Intensities calculated on the basis of Ni₃Ti parameters (*Strukturbericht*, 7, 14) gave good agreement with the observed values.

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References

- BAENZIGER, N. C. & MORIARTY, J. L. JR. (1961). *Acta Cryst.* **14**, 948.
EDSHAMMER, L.-E. (1962). *Acta Chem. Scand.* **16**, 22.
PETERSON, D. R. & RINN, H. W. (1961). *Acta Cryst.* **14**, 328.

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 General Secretary of the International Union of Crystallography (D. W. Smits, Rekencentrum der Rijksuniversiteit, Grote Appelstraat 11, Groningen, The Netherlands). Publication of an item in a particular issue cannot be guaranteed unless the draft is received 8 weeks before the date of publication.

International Union of Crystallography Change of Address of General Secretary

The General Secretary of the Union, Dr D. W. Smits, has recently been appointed Head of the new Computing Center of the State University of Groningen. As from 1 April his new address is:

Rekencentrum der Rijksuniversiteit
Grote Appelstraat 11
Groningen, The Netherlands.

International Conference on Electron Diffraction and Crystal Defects, Melbourne, 1965

The Australian Academy of Science is cooperating with the International Union of Crystallography and the International Union of Pure and Applied Physics in arrangements for an International Conference to be held in Melbourne, 16–21 August 1965.

The scientific programme will consist of two simultaneous symposia:

- (i) A symposium on 'Electron Diffraction', and
- (ii) A symposium on 'The Nature of Defects in Crystals'.

In the first symposium the emphasis will be on developments in the theory and techniques for electron scattering rather than on applications of established

techniques to particular problems. Similarly, in the second symposium, the emphasis will be on the nature of defects in crystalline solids and the evidence for their existence rather than on their influence on the properties of solids.

The First Circular for the Conference is now available and copies may be obtained on request from Secretaries of National Committees of Crystallography and National Committees of Pure and Applied Physics, or from the Chairman of the Conference Organizing Committee, Dr R. I. Garrod, Aeronautical Research Laboratories, Box 4331, G.P.O., Melbourne, Victoria, Australia.

International Colloquium on Semi-Metal Compounds

A 'Colloque International sur les Dérives Semi-Métalliques' will be held in Paris from 27 September to 2 October 1965, under the sponsorship of the Centre National de la Recherche Scientifique. The subjects of the Colloquium will be the structural, physical, thermodynamic, and chemical properties, and the nature of the bonding, in combinations of elements 22–28, 40–46, 57–78, and ≥ 89 with one or more of the following elements: H-B-S, Se, Te-N, P, As, Sb, Bi-C, Si, Ge, Sn. Further information may be obtained from André Michel or Pierre Lecocq at Centre d'Orsay, Faculté des Sciences de Paris, Orsay, Seine et Oise, France.