

$z=0$  ou  $z=\frac{1}{2}$  dans les groupes  $Cmcm$  et  $C2cm$  pour ne pas aboutir à un empêchement stérique et enfin l'emploi des fonctions minima (Buerger, 1967), ont permis d'interpréter les cartes vectorielles représentant la fonction de Patterson à différentes sections.

Nos résultats montrent que Gay appartient au groupe spatial  $Cmcm$  avec

- 2 atomes Ga(1) et Ga(6) en position 4(c)
- 1 atome Ga(3) en position 8(f)
- 3 atomes Ga(2), Ga(4) et Ga(5) en position 8(g).

Les coordonnées atomiques, déterminées à partir des fonctions minima, sont affinées par une méthode de moindres carrés (Busing, Martin & Levy, 1962). Le coefficient de validité de structure

$$R = \frac{\sum |F_o| - |F_c|}{\sum |F_o|}$$

se stabilise à 0,09 après quatre cycles d'affinement portant sur les facteurs d'échelle, les facteurs de température isotropes et les coordonnées atomiques. En remplaçant les facteurs de température isotropes par des facteurs anisotropes (Levy, 1956), le coefficient  $R$  s'abaisse à 0,057 après deux cycles d'affinement. Les coordonnées atomiques et leur écart-type, ainsi que les facteurs d'agitation thermique  $\beta_{ij}$ , sont donnés dans le Tableau 1.

La structure de Gay – bien plus complexe que celle d'une autre phase métastable Ga $\beta$  (Bosio, Defrain, Curien & Rimsky, 1969) – est représentée sur la Fig. 1 où sont également indiquées les distances des plus proches voisins; l'unité asymétrique est constituée par un groupe de 6 atomes indépendants.

Le gallium  $\gamma$  est avec le plutonium  $\alpha$  (Zachariasen &

Ellinger, 1957) l'un des rares éléments où les atomes ont, dans la même structure cristalline, des nombres de coordination différents comme le montre le Tableau 2.

Tableau 2. Nombre de liaisons dans le gallium  $\gamma$

	Nombre de liaisons comprises entre:			
	2,60 et 2,66 Å	2,72 et 2,77 Å	2,85 et 2,96 Å	3,03 et 3,19 Å
Ga(1)	2	0	1	6
Ga(2)	2	2	2	1
Ga(3)	2	3	1	4
Ga(4)	3	0	2	3
Ga(5)	3	0	2	3
Ga(6)	2	2	3	0

### Références

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## International Union of Crystallography

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#### Reference

- STEWART, J. M., KUNDELL, F. A. & BALDWIN, J. C. (1970). *The X-ray System, version of 1970*. Chemistry Department Univ. of Maryland, College Park, Maryland 20740, U.S.A.

### 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

##### Supplement to Acta Crystallographica, Section A

The Abstracts of the Communications to the Ninth International Congress of Crystallography to be held in Japan in August/September 1972 are being published as part S4 of *Acta Crystallographica*, Section A and are being distributed free of charge not only to subscribers to Section A, but also to those subscribers to Section B and to the *Journal of Applied Crystallography* who do not subscribe to Section A.

#### Conference on Applications of X-ray Analysis Denver, Colorado, 2-4 August 1972

Contributed papers for the 1972 Denver Conference on Applications of X-ray Analysis have been selected. The technical emphasis of the conference this year is on environmental, biomedical, and forensic applications of X-ray and related radiation (production, bombardment, absorption, and scattering). The invited co-chairman is L. S. Birks of the Naval Research Laboratory in Washington, D.C. The subjects of the six sessions are as follows: 1. Invited (part I), Competing Techniques in Environmental and Biomedical Studies. 2. *A* - Invited (part II), X-ray Applications in Environmental, Biomedical, and Forensic Research and *B* -

Soft X-ray Studies and Photoelectron Spectrometry. 3. Specific Environmental, Biomedical, and Forensic Applications. 4. Fluorescence and Diffraction Studies. 5. Instrumentation and Automation. 6. Stress and Lattice Parameter Determinations. Further information on the conference can be obtained from Dr C. O. Ruud, Metallurgy and Materials Science Division, Denver Research Institute, University of Denver, Denver, Colorado 80210, U.S.A.

#### Metalloenzymes Conference Oxford, England, 3-7 September 1972

This conference is organized jointly by the Molecular Enzymology Group of the Biochemical Society and the British Biophysical Society, and will be held at Magdalen College. The following sessions will be included; B<sub>12</sub> enzymes, Haem proteins, Nitrogenase and other Fe/S and Mo systems, Cu enzymes and cytochrome oxidase. Apart from the main lectures, which will be partly in the nature of reviews, sessions will be arranged on an informal basis, at the discretion of chairmen, with some opportunities for additional contributions but with long periods for free discussion. For further information write to Miss D. E. Herriott, The Biochemical Society, 7 Warwick Court, High Holborn, London WC1R 5DP, England.