which indicates that this phase is energetically favorable. Such a procedure may be named a valence model for metallic phases. An example of such a model has been proposed[8] and applied to several alloy systems.[16]

Summary

A crystal-structure type may be characterized by the phase first found to belong to this type (prototype designation). Several symbol kinds have been developed to give a partial type description; they have a mnemotechnical function supplementary to the prototype designation. The merits of the different symbol kinds are apparent, so that a standardization of one of them would appear premature. The main problem of classification of metallic phases and structures lies in the search for a procedure to attribute to each phase a bonding type which indicates that the phase is energetically favorable.

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Standard-State Pressure

We would like to add the following comment to the note by Dr. L. H. Bennett [*Bull. Alloy Phase Diagrams, 5*(2), 132 (1984)], which is concerned with the selection of a standard-state pressure in thermodynamic calculations.

The *Bulletin of Alloy Phase Diagrams* has adopted the bar $(10^5 Pa)$ as the unit for the presentation of pressure data, but no decision has yet been made with respect to the choice of the standard-state pressure, that is, either 1 bar or 1 atm.

As pointed out by R. D. Freeman, whose paper has appeared in the meantime [*J. Chem. Eng. Data, 29*, 105-111 (1984)], the standard-state pressure should be selected such that it is unity in terms of the pressure units employed. If the pressure is expressed in bar, but the standard-state pressure is defined as 1 atm (1.01325 bar), the simple relationship between pressure values and equilibrium constants will be lost, and the required conversions might be a continuous source of numerical errors.

It appears that, in the long run, the IUPAC recommendation to define 1 bar as the standard-state pressure is the only sensible solution.

Above remarks by
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Editor's response: I agree. Unless there are serious objections raised, it is my intention to adopt the IUPAC recommendation in future *Bulletin* assessments.

We invite your comments on these or any other topics.

— *Editor*

Addenda

Melting Point of Vanadium

The value for the melting point of V, 1910 °C (2183 K) [81Smi], supersedes the earlier value listed in the chart on "Melting Points of the Elements," *Bull. Alloy Phase Diagrams, 2*(1), 145-146 (1981). (See the Editor's Corner, *Bull. Alloy Phase Diagrams, 3*(2), 133 (1982) for details.)

Reference

81Smi: J. F. Smith, "The V (Vanadium) System", *Bull. Alloy Phase Diagrams, 2*(1), 40-41 (1981).

Melting Point of Iron

The value for the melting point of Fe, 1538 °C (1811 K) [82Swa], supersedes the earlier value listed in the chart on "Melting Points of the Elements", *Bull. Alloy Phase Diagrams, 2*(1), 145-146 (1981). (See the Editor's Corner, *Bull. Alloy Phase Diagrams, 3*(2), 133 (1982) for details.)

Reference

82Swa: L. J. Swartzendruber, "The Fe (Iron) System", *Bull. Alloy Phase Diagrams, 3*(2), 161-165 (1982).