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Alloys of Titanium with the Platinum Metals

Phase diagram information is crucial to the understanding and the application of alloys, and over the years many attempts have been made to survey the literature on alloy phase diagrams and to compile the known data in a useful and readily available form. Some four years ago the *Bulletin of Alloy Phase Diagrams* was launched as one part of a joint programme by the American Society for Metals and the U.S. National Bureau of Standards to provide evaluated phase diagrams and associated structural, lattice parameter and thermodynamic data.

Two recently available issues have included contributions by Dr. Joanne L. Murray of the Center for Materials Research at the National Bureau of Standards who, having surveyed the literature up to and including 1981, has evaluated the binary systems of titanium with iridium, osmium and ruthenium (*Bull. Alloy Phase Diagrams*, 1982, **3**, (2), 205-212, 212-216 and 216-221, respectively) and more recently with palladium, platinum and rhodium (*ibid.*, 1982, **3**, (3), 321-329, 329-335 and 335-342, respectively).

The phase diagrams presented are labelled "provisional" which is not meant to indicate quality, but only to record that they have been published as soon as possible, to stimulate comment and criticism before they are made available in a more permanent form. Efforts are now being made to calculate phase diagrams from thermodynamic models, and hence to

extrapolate data to temperatures and compositions for which there are no measurements. In some instances Murray has used thermodynamic calculations to test uncertain phase boundaries and both thermodynamic calculated and assessed diagrams are presented, so increasing the value of these most useful surveys.

Cancer Chemotherapy

The fourth international symposium on platinum co-ordination complexes in cancer chemotherapy was held at the University of Vermont, Burlington, U.S.A., during June. The purpose of the meeting was to consider new developments in the biology, chemistry, clinical aspects, pharmacodynamics and toxicology of platinum complexes as they relate to cancer therapy. Twenty-one invited papers were read, and the programme provided time for observation and discussion of over eighty poster presentations.

The search for new drugs having less toxicity and at least comparable activity to the established drug cisplatin is continuing, and a number of alternative platinum complexes are presently undergoing clinical trials.

A review of this important and highly successful meeting, which was attended by over 180 delegates from 12 countries, will be given in the January 1984 issue of this journal, while the full proceedings will be published by Martinus Nijhoff in early 1984.