Editorial

Academic and technical literature offers a bountiful source for gaining and correlating information, and it is from a study of the literature combined with verification by experiment that ideas for new products and processes are derived.

As far as knowledge on gold and its derivatives is concerned *Gold Bulletin* makes its own small and we hope significant contribution to this fund of literature.

From work in the editorial office over the past two and a half years it is clear that there are many interesting and stimulating recent publications on gold covering a wide range of technical fields and topics, but it has also become apparent that in some areas research investigations are underdeveloped and that the status of knowledge on some gold derivatives is consequently lacking compared with that for the other precious metals. This is particularly true for gold catalysts and their use, since statements in the review literature dating from the 1970s had lead to a general impression that gold was inferior to other precious metals, and that gold was useful only when employed as an alloy to modify the activity of other precious metals.

Recent work has, however, demonstrated that gold is a catalytic metal in its own right and in some reactions is more active than other precious metals. Recent articles published in *Gold Bulletin* have demonstrated that this is the case for the oxidation of carbon monoxide and the hydrochlorination of acetylene, and the former in particular could form the basis for new applications in the control of gaseous emissions. This demonstrates that it is not only necessary to read the literature but to constructively challenge the conclusions drawn from experimental work.

The current status of catalysis by gold was reviewed at the IPMI conference in Toronto in June and a preliminary account of all the gold papers presented at this meeting is included in this issue. Both the IPMI Meeting and the Eurométaux

conference held in Florence last year (see *Gold Bulletin* 1998, 31, 33) have provided opportunities for reviewing the current status of precious metals technology and its applications, particularly with respect to gold in comparison with the platinum group metals.

Articles in this issue include Part II of Professor Burke's description of the electrochemistry of gold, this time describing the unusual aspects of the electrocatalysis of gold in aqueous media. There are two metallurgical articles - one on the thermodynamic modelling of gold alloys and the other on the origin and effects of impurities in high purity gold. Then there is a report on original research into luminescent gold compounds for use in optical sensors. Some of the results published in this issue are first reports of experimental work and we wish to continue to emphasize this aspect of our publication policy.

A handwritten signature in cursive script that reads "David Thompson".

David Thompson
Technical Editor