Electrochemistry, Volume 9 (Senior reporter: D. Pletcher), *A Specialist Periodical Report of the Royal Society of Chemistry*, London, 1984, xi + 290 pages, £63.00 ($113.00), ISBN 0-85186-077-X.

This volume contains six chapters: two of these, "The Electrochemistry of Transition-metal Complexes" (C.J. Pickett; 298 refs.) and "Organic Electrochemistry—Synthetic Aspects" (J. Grimshaw; 140 refs.), review the literature from the end of 1981 to the end of 1982, and provide both a fairly comprehensive coverage and a critical insight of the papers published during that period. These fill the classical role of the Specialist Periodical Reports, and do so admirably.

The remaining four chapters cover specific aspects of electrochemistry, namely the electrochemistry of flow-through and three-phase porous electrodes (N.A. Hampson and A.J.S. McNeil; 329 refs.), semiconductor electrochemistry (L.M. Peter; 323 refs.), spectroelectrochemistry (J. Robinson; 359 refs.), and solid-state gas sensors and monitors (D.E. Williams and P. McGeehin; 143 refs.). These four reviews describe their areas from the inception of the field up to the end of 1982. The senior reporter (D. Pletcher) has selected areas of prime importance to modern chemistry, and is to be congratulated upon achieving such an excellent balance between annual reviews and in-depth surveys.

The article on semiconductor electrochemistry was written in the knowledge that an excellent textbook by S.R. Morrison ("Electrochemistry at Semiconductor and Oxidised Metal Electrodes", Plenum Press, New York, 1980) exists, and Peter's review here complements, supplements and up-dates this work. Robinson's review of spectroelectrochemistry is written by an author with a keen appreciation of the difficulties and pitfalls of this incredibly important subject, and the article contains a nice balance between experimental detail and literature coverage. The articles on porous electrodes and gas sensors are also first-class, but I will not dwell upon these, since they possess much less relevance to organometallic chemists.

Electrochemistry is a subject of growing importance to both organometallic and coordination chemists, and this volume highlights how, in the 1980's, systems of real interest to the synthetic chemist are being studied. Indeed, it is fast becoming a standard weapon in the armory of physical methods used for studying complexes routinely, and this volume should be in the libraries of all industrial laboratories and universities where synthetic chemistry is practised. The price of the volume is high (more than twice the average cost per page of the 'average' research text), but the quality of the articles is such that it can still be given an unreserved recommendation. Indeed, to the inorganic chemist, the articles by Robinson and by Pickett are almost worth the money in their own right!

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