

“[8] Annulene derivatives of actinides and lanthanides” (A. Streitwieser, Jr. and S.A. Kinsley; 38 pages, 90 refs.), “Actinide hydrocarbyl and hydride chemistry” (T.J. Marks and V.W. Day; 43 pages, 90 refs.), “Organoactinide complexes containing classical ligands” (J. Takats; 35 pages, 95 refs.), “Frontier elements: connections with *f*-elements” (J.H. Teuben; 33 pages; 61 refs.), “Electronic structure and optical spectroscopy of f^n ions and compounds” (N. Edelstein; 48 pages; 48 refs.), “NMR spectroscopy of organo-*f*-element and pre-lanthanoid complexes: some current trends” (R.D. Fischer; 50 pages; 141 refs.), “Photoelectron spectroscopy of *f*-element organometallic complexes” (I.L. Fragalà and A. Gulino; 34 pages; 39 refs.), “*f*-Element Photochemistry” (P. Bergamini, S. Sostero and O. Traverso; 25 pages; 40 refs.), and “New perspectives of lanthanides in catalysis” (M. Bruzzone and A. Carbonaro; 14 pages; 42 refs.). It is to the detriment of this volume that the much vaunted industrial component comprises one fourteen page article (the shortest in the book), less than 4% of the total.

The quality of the articles contained in this volume is high, the content is as expected from the titles and the authors (although Teuben's article is perversely concerned largely with the organometallic chemistry of titanium) and the book gives a clear overall picture of the current state-of-the-art of *f*-block element organometallic chemistry. It is to the credit of the editors and the contributors that this volume has appeared within a year of the conference, which gives the work the added value of being up-to-date, and also conveys the excitement of a new and rapidly advancing field. Much less to the editors credit is the still-born index, which is little more than a contents list, being arranged by chapter and page number rather than by subject matter. With modern word processors, it would have been little trouble to have compiled a useful lexically arranged index which would have considerably enhanced the value of the book. However, despite this drawback and the rather mixed quality of the camera-ready copy (when will publishers realize that single-spaced typescript is unsuitable for chemical manuscripts involving subscripts and superscripts?), the book represents good value for money, and should be a part of personal as well as institutional libraries. It is an invaluable compendium for all workers in the field.

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Inorganic Syntheses, Volume 23; edited by S. Kirschner, Wiley-Interscience, New York, Chichester, Brisbane, Toronto, Singapore, 1985, xiii + 257 pages, £40.90. ISBN 0-471-81873-9.

Some speakers, it is said, need no introduction and some books appear to need no review. The volume under consideration here is the twenty-third in a long, successful, well-established and well-respected series. The mix is as before: the chapter headings (organometallic compounds, compounds of biological interest, stereoisomers, bridge and cluster compounds, and the ubiquitous and evergreen “unusual ligands and compounds”) continue their now beloved woolly tradition, camouflaging their hidden gems. For who

would have guessed that splendid preparations of MoOCl_4 and WOCl_4 were concealed in "unusual ligands and compounds", that an attractive and convenient preparation of $[\text{Mo}(\text{H}_2\text{O})_6]^{3+}$ was described in "bridge and cluster compounds", and that an extremely convenient preparation of 5,10,15,20-tetra(4-pyridinyl)porphyrin was lurking under "compounds of biological interest". When John Newlands proposed his perceptive periodic table in 1865, some critics suggested he would have had better success in systematizing chemistry if he had arranged the elements in alphabetical order. One cannot help but feel there has to be a better way to organize *Inorganic Syntheses*: its saving grace is that the subject and formula indices are so carefully and clearly arranged.

In a short review of this type, one can only highlight the most interesting and generally useful preparations to organometallic chemists, and in this volume these syntheses include $[\text{Cr}(\text{CO})_5\text{L}]$ (L = substituted thioureas), nitrosyl {tris(3,5-dimethylpyrazolyl)hydroborato} molybdenum(III) complexes, diisocyanide complexes of molybdenum(0) and tungsten(0), cobalt η^5 -pentamethylcyclopentadienyl complexes, SnPh_2Br_2 , C_6F_5 derivatives of cobalt(I) and cobalt(II), $[\{\text{M}(\text{CO})_5\}_2(\mu\text{-H})]^-$ (M = Cr or W), $[\text{Mn}_2\text{X}_2(\text{CO})_8]$, $[\text{Nb}(\text{CO})_6]^-$ and $[\text{ReX}(\text{CO})_5]$ (X = Cl, Br or I). There are also intriguing preparations of $[\text{Re}_2\text{Cl}_8]^{2-}$, dimeric and trimeric aqua ions of molybdenum-(II), -(III), -(IV) and -(V), $\text{Cl}_2\text{PCH}_2\text{CH}_2\text{PCl}_2$, a range of lanthanide complexes with chelating ligands and crown ethers, a number of heteropolytungstates with unsaturated heteropolyanions, and a general synthesis for gold(I) complexes. This volume also contains a special hazard notice, warning of serious accidents which have occurred during the synthesis of $\text{Me}_2\text{P}(\text{S})\text{P}(\text{S})\text{Me}_2$ (usually prepared en route to $\text{Me}_2\text{PCH}_2\text{CH}_2\text{PMe}_2$).

One cannot overvalue a source of reliable synthetic routes to interesting compounds and reagents. The whole series is to be found in all respectable chemical libraries (indeed its absence would raise serious questions concerning the priorities of the institution's librarians!), and this volume will join its predecessors in becoming one of the most dog-eared books on the shelves (or, more likely, missing from the shelves — maybe this series should be purchased in duplicate; one set for reference, one for the laboratory bench). This volume is dedicated to the memory of Earl Muettterties, a former editor of the series.

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Electrochemistry, Volume 10 (Senior Reporter: D. Pletcher), A Specialist Periodical Report of the Royal Society of Chemistry, London, 1985, x + 214 pages, £66.00 (\$119.00). ISBN 0-85186-087-7.

It must be said that, after the excellent articles which were found in Volume 9 of this series, Volume 10 is going to come as rather a disappointment to the organometallic chemist. This is not a criticism of the articles themselves (vide infra), but a reflection upon the drift in the centre of interest of their