Experientia Supplementum VII. XVIth International Congress of Pure and Applied Chemistry. (Paris, 18-24, VII, 1957. Main Congress Lectures.) Birkhäuser Verlag, Basel, Switzerland, 1957. 355 pp., 36.0 Sw. Fr.

This book brings together the texts of the main lectures delivered at the 16th International Congress of Pure and Applied Chemistry held in Paris in July, 1957. Each lecture is printed in the language in which it was delivered, seven each in English and French and four in German.

The Centenary Lecture of the "Société chimique de France" delivered by Sir Cyril Hinshelwood, entitled "Réflexions sur la cinétique chimique" appears first, followed by the Inaugural Lecture by G. Natta called "Catalyse stéréospécifique et polymères stéréo-isomériques. Preparation de fibres, matières plastiques et élastomères nouvaux". This lecture by Professor Natta occupies some 39 pages and gives an excellent account of the variations that can be effected in the polymerisation processes of the α -olefines, a subject to which he has made such a great contribution.

Then follow five lectures delivered to the Physical Chemistry Section. The lecture by Glenn T. Seaborg on the transuranium elements includes a dramatic account of the discovery of element 101, mendelevium, speculations on further transuranium elements and an outline of the heavy-ion linear accelerator at Berkeley. The text is illustrated by figures and three photographs, which give an idea of the immense size of the Berkeley accelerator. Altogether this lecture succeeds admirably in conveying the atmosphere in the Berkeley laboratory during the discovery of the new elements. Other lectures to this section are by R. G. W. Norish, R. M. Barrer, S. R. de Groot and C. Ouellet.

The lectures to the Inorganic Chemistry Section are by H. Haraldsen, E. Wiberg, A. G. Maddock, H. Nowotny and A. Wittmann, and an account by Leo Brewer of "High Temperature Chemistry. A Pioneering Field," which opens up a fascinating new field.

The Organic Chemistry Section contains the following lectures: V. Prelog, "Untersuchungen von transanularen Eliminationen und Substitutionen mit Hilfe von Isotopen"; P. D. Bartlett, "The Initiation of Organic Chain Reactions"; G. Wittig, "Komplexbildung und Reaktivität in der metallorganischen Chemie"; T. Nozoe, "Chemistry of Natural Tropolone and Allied Compounds"; L. Marion, "Structure de quelques alcaloides du delphinium"; and A. Terenin, "Photoréactions électroniques des colorants organiques", which is mainly concerned with the chlorophylls and other tetrapyrrol pigments.

The book is well produced and is pleasant to read. It is difficult, however, to know for whom it is intended, since the material it contains ranges over an enormous field and it would appear that most of the lecturers were reviewing their subjects rather than presenting new data or ideas. The value of these lectures as a starting point for further reading is rather variable, as some of the lecturers have provided no references to the original literature while others have given extensive lists. Perhaps such collections as this, written by authors from all over the world, are valuable, and the juxtaposition of lectures in English, French and German may stimulate English readers to try their hand at foreign languages; nevertheless one may perhaps question whether the present day passion for indiscriminately printing, in full, the proceedings of innumerable congresses, symposia and meetings of all sorts really serves the ends of science. It is doubtful if many individuals will feel that they must possess this volume, although it is certain that everyone will find one or two of the lectures most interesting.

S. P. DATTA

J. FERGUSON: Bibliotheca Chemica, Vol. 1. Derek Verschoyle Academic and Bibliographical Publications Ltd.; Pergamon Press Ltd., London, 1954. xxi + 487 pp., £5. 5s.

This unique book goes back to James Young (1811–1883), the Scottish industrial chemist whose discovery of the production of paraffin oil by distillation of Scotch bituminous shales made him a wealthy man. He established a library of early chemical works and after his death his family entrusted the cataloguing of the library to John Ferguson, Regius Professor of Chemistry in the University of Glasgow, and a distinguished historian of chemistry. The knowledge accumulated by Ferguson in many years of study of the writings of early chemists went to the making of this author catalogue

of Young's collection. It was published in 1906 in an edition limited to 250 copies paid for by Young's descendants; for at that time there was little interest in the history of chemistry in Britain. It proved to be the most important bibliography ever compiled in this field and became an indispensable reference for historians of chemistry. It is the only book of its kind to supply pagination and full titles of the items catalogued.

To the non-specialist the main attraction of the work lies in the pawky thumbnail biographies of authors. Of Gioseppe Francesco Borri (d. 1695), Ferguson says that he lived at Amsterdam "in great magnificance—upon his wits; when these were exhausted he departed to Hamburg." We are warned against confounding—as if one would—John Case (Johannes Casus) of Oxford (d. 1600) with Giovanni della Casa (d. 1557) of Benevento "who might have been a cardinal had not the church had a fit of the morals." Edward Kelley (1555–1595) of Worcester "was trained as an apothecary so that he had some familiarity with chemistry ... He was an unscrupulous adventurer, not to say a thorough-going scoundrel. He was therefore a man of ability without any moral restraint."

These lives show much of the ups and downs of human fate. Georg Fikenscher (d. 1686) was in high favour at the court of Beyreuth for ten years because it appeared he could convert mercury into gold and silver—but he was eventually detected and executed—"While it was his intention to fix mercury, the result was just the opposite, for it was he who was in the fix."

In the Introduction we find Ferguson in another mood. Commenting on how alchemical theories have perished, he points out that those of the modern scientist will suffer the same fate: "Let not the modern student of science imagine that he and his work will escape the universal doom. His discoveries, his theories, the most recent, the most comprehensive and progressive, sooner or later will become mere archaeological data." Solemn but true.

The present edition is by a photo-lithographic process from the original Vol. 1, which covers from A to K. The publishers have done the history of chemistry a great service in making this famous reference work widely available and the publication of the remainder of the catalogue will be eagerly awaited.

T. S. WHEELER

ERRATA

- 1. R. F. HUTTON and F. H. WESTHEIMER, *Tetrahedron* 3, 73 (1958). The wording in line 30 on p. 76 should read "structure I" and not "structure II".
- A. HEUSNER and K. ZEILE, Tetrahedron 3, 312 (1958). The arrow between formulae II and III should point from left to right. The first two words of the eighth line on p. 313 should read "vorstehende Mitteilung".
- 3. R. ANEJA, S. K. MUKERJEE and T. R. SESHADRI, *Tetrahedron* 4, 256 (1958). p. 263, Table 3: the formula at the bottom of the column "Substituents", in the first part, of this table should have been centred between compounds "Pimpinellin" and "Psoralene".

p. 268, Reference 43: this reference should read "Tetrahedron 3, 230 (1958)".
p. 269, Experimental Section: the second line in this section should refer to ref. 45, not 46 as shown.

4. "Papers to be published in future issues", *Tetrahedron* 5, 103-104 & 354 (1959). The paper listed as "A. J. BIRCH, H. SMITH and T. M. B. WILSON: The steric course of addition of some electrophiles to enolate anions derived from polycyclic systems" should not in fact have appeared. We apologise to the authors for any inconvenience caused by this oversight.