chapter on the biochemical action of steroid hormones at the subcellular level concludes the book. Lists of references for further reading are given at the end of each chapter.

One can find little wrong with this book. Perhaps mention and a diagram of the formation of the isoprene unit and a brief description of the biosynthesis of cholesterol are out of place in the chapter on Structure and Nomenclature, since these are covered in detail in the next chapter. It is also regrettable that in a diagram dealing with steroid structures, that for cholestane is in error and contains only 26 carbon atoms. In another chapter, discussing the effects of corticosteroids on transaminases, one of the products, *p*-hydroxyphenylpyruvate, from tyrosine

and  $\alpha$ -oxoglutarate, is given as 'p-phenyl pyruvate'. Can free corticosterone really be called a metabolite of corticosterone and free  $6\beta$ -hydroxycortisol one of  $6\beta$ -hydroxycortisol? This occurs in one of the tables. Some terms well known to steroid biochemists, such as 'carrier steroids', 'solvolysis' and 'Porter—Silber chromogens' should be explained for the benefit of those new to the subject.

These are minor criticisms and the editor and contributors should be congratulated on the high standard maintained throughout and the clarity of presentation and illustrations.

H. Braunsberg

Chemical Induction of Cancer

by J. C. Arcos and M. F. Argus Academic Press Inc.; New York, 1974 Vol. IIA, xv + 387 pages. £20.75 Vol. IIB, xv + 379 pages. £20.45

These two volumes are the second and third of a projected six volume reference work on all aspects of chemical carcinogenesis. A staggeringly complete review of the literature of this field is promised in the provisional lists of contents, to include discussion of carcinogen testing, structure—activity relationships, carcinogen metabolism, tissue interactions, cocarcinogenesis and mechanisms of tumour induction. The chemistry, biological activities and metabolic transformations of polycyclic aromatic hydrocarbons are covered in volume IIA; IIB deals with the recently expanded field of aromatic amine carcinogenesis.

The major problem confronting authors of a work of this kind in a multi-disciplinary, rapidly expanding area of research must be the combination of comprehensiveness and appeal to the non-specialist, with immediate relevance to the specialist or research worker. In an attempt to overcome this problem, the text is peppered with 'suppletory notes' and 'notes added after the completion of the text'. Note 2

following section 5.1.1.6.4 (!), for example, explains the physics of n.m.r., while, the use of radioactive tracer techniques in biological studies is described in suppletory note 2 appended to section 5.1.1.5. Clearly the format of the text has been sacrificed to the authors' attempt to appeal to such a wide potential readership. These are unattractive books and are often tedious to read. However, the work is well researched and referenced (up to 1973 in some of the added notes), and is certainly thorough. In these two volumes alone, 291 numbered compounds, mostly without trivial names, are discussed. There is no doubt that these will be useful source books for the specialist.

On the dust jackets of these two books, the publishers predict that 'they will be indispensible to both established investigators and newcomers to chemical oncology'. I suspect that they are almost half right.

D. J. Williams