

laser fusion projects are as expensive as the large magnetic machines.

Despite much activity in this field, it has taken ten years for the first book to appear dealing with the whole range of physics involved. *Inertial Confinement Fusion* gives a commendably comprehensive coverage of the subject dealing for instance with the thermonuclear reactions themselves, plasma physics, hydrodynamics, lasers, particle beams and reactor problems. The book is very thorough on the different driver systems and describes high power lasers, relativistic electron beams, and both light and heavy ion drivers. In dealing with such diverse topics the book will inevitably leave many readers dissatisfied with particular details. For instance the section on laser plasma interaction fails to deal adequately with the important areas of stimulated Raman and Brillouin scattering, and the problem of symmetry of compression is barely touched upon. It would also have been invaluable to have examined the reasons for the failure of laser fusion to fulfil its early promise.

Several factual errors have crept in through an apparent zeal for making the information as up to date as possible; some ICF facilities are declared to be in existence when they have yet to obtain full financial approval. The book is generally very readable, however, and has its lighter moments — for instance the definition of “anomalous” as meaning inadequately understood, and the reference to “the thrilling days of yesteryear” in relation to heavy ion fusion where the high cost of experimental hardware has so far shielded the theory and computational predictions from the rigours of reality.

Aside from these criticisms the book fills a large gap in providing graduate research workers with an up-to-date description of a wide ranging field. There is a large number of references, although these are mostly to work in laboratories in the United States, and perhaps too large a fraction are to internal laboratory reports which might not be widely available.

“The power of the stars” may not yet be with us, but at least Duderstadt and Moses have confronted us with most (though not all) of the problems of the inertial confinement approach to fusion. □

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### Archaeoastronomy

Papers presented at the archaeoastronomy symposium held in September last year at Queen's College, Oxford (reported by Aubrey Burl in *Nature* 293, 335; 1981) have been published in book form by Cambridge University Press. The proceedings have been divided between two companion volumes, *Archaeoastronomy in the New World* (edited by A.F. Aveni) and *Archaeoastronomy in the Old World* (edited by D.C. Heggie). Prices are £16, \$29.95 and £20, \$37.50 respectively.

## Gell and Coombs for the nineteen eighties

Fred S. Rosen

*Clinical Aspects of Immunology*, 4th Edn. Two volumes, pp.1,751. Edited by P.J. Lachmann and D.K. Peters. ISBN 0-632-00702-8. (Blackwell Scientific: 1982.) £90, \$195.

IMMUNOLOGY started as a clinical science two centuries ago in rural Gloucestershire. A hundred years later Pasteur gave the subject renewed impetus by his studies in chickens. In recent decades the greatest progress in illuminating the arcana of the immune response has come from the study of inbred strains of mice, and the clinical aspect of immunology has almost become a quiet backwater of the subject. So this revised and expanded edition of “Gell and Coombs” classic work is welcome addition to the slim space on library shelves devoted to the clinical aspects of immunology.

The first volume consists of 744 pages of basic immunology and the second of 1,006 pages of the clinically relevant applications of immunology to disease entities. Because of the nature of the subject matter the first volume is the more cohesive and satisfying of the two. It starts with six succinct chapters on the relevant globulins and cells of the immune response. The illustrations and diagrams are copious and germane to the text and each chapter ends with a useful list of references, features which remain consistently good throughout the work.

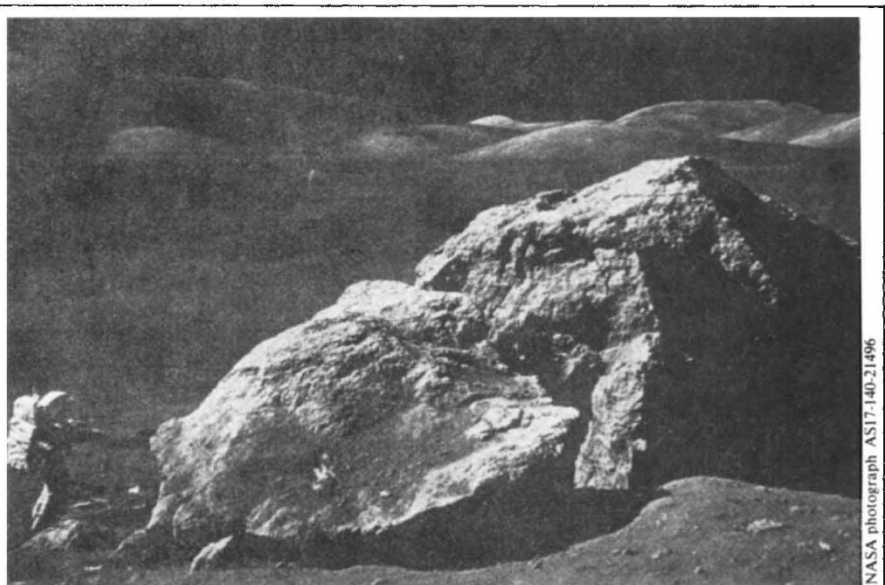
The second section in Vol. 1 is devoted to a discussion of cellular interactions and contains a unique contribution from J. H. Humphrey on the fate of antigens. Two further sections are concerned with technology that is clinically relevant, such as radioimmunoassays, rosette-forming

reactions, detection of immune complexes, tissue typing and monoclonal antibodies, and with the limited approaches to suppressing or stimulating the immune response. The final section of the first volume ends with a presentation of the pathophysiology of allergy and immune injury. Special praise is due T.A.E. Platts-Mills for his comprehensive, if not exhaustive, presentation of immediate hypersensitivity. This contribution is a mini-textbook on its own and the best current presentation of the subject matter that I know of.

The first volume is a hard act to follow, but although Vol. 2 is more uneven it in the main sustains the high quality of its companion. It deals with organ-specific immunologically-mediated disease, rheumatology, transplantation and infection. Although the text is purported to be written in English, jargon such as “. . . patients with NPC have high titres of anti-D, and certain patients with BL have high levels of anti-R” leave the reader groping to decipher the meaning.

This text, like all scientific and medical works these days, is expensive but it is well worth the cost to all those who practise clinical immunology. It is more current and broader in its coverage than the two other multi-volume competitors in the field. In an arena of rapidly expanding information, Lachmann and Peters have done a superb job of comprehensively assembling the diverse subject matter that constitutes the clinical aspects of immunology. □

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Harrison Schmitt in the valley of Taurus-Littrow during the Apollo 17 mission to the Moon. During their 22 hours of exploration Schmitt and Eugene A. Cernan investigated the major geological formations in the valley and collected 110 kg of rock and soil samples, including a 3m core — material which among other things provided new data on the early crustal history of the Moon. The picture is taken from *The Solar System and Its Strange Objects*, edited by Brian J. Skinner, a new addition to the series *Earth and Its Inhabitants: Readings from American Scientist*. The book is published by William Kaufmann, price £8.40, \$11.95 in paperback.