

In brief, this is a very useful book and is one that should rank high with students of human embryology.

CARL L. DAVIS

*Department of Anatomy, School of Medicine
University of Maryland, Baltimore*

Radioisotope Techniques. Vol. I. Medical and Physiological Applications. Proceedings of the Isotope Techniques Conference, Oxford, July 1951, sponsored by the Atomic Energy Research Establishment. H. M. Stationery Office, London, 1953. vi + 466 pp. Illus. + plates. £2 10s.

This conference was held at Oxford, July 16–20, 1951, for the purpose of bringing together the people who use isotopes in varied biological studies. The participants were chiefly British and French, with a sprinkling of men from Scandinavia, West Germany, Switzerland, Italy, Portugal, and Canada. The 98 papers presented were divided into a total of 30 separate sections under the broad headings of "Therapy and Diagnosis," "Biochemistry and Metabolic Studies," and "Plant Biochemistry." Only 10 papers were devoted to the latter, but all were extraordinarily interesting.

The general plan of each session was to have the first paper describe the scope and theory of the phase under consideration; one to four more shorter papers then dealt with special applications.

Since the data represent the state of advancement as of July 1951, it is difficult to pass any sound opinion on their present usefulness. Obviously, they are valuable from a historical point of view for those reviewing the subject or for those reading to revise the orientation of their experiments. Insofar as memory serves, the papers indicate that we in the United States were probably ahead of our British and Continental colleagues in instrumentation, in breadth of exploration of the over-all field, and in a few certain isolated applications. They, on the other hand, were well into the basic aspects of many problems, which, as reported in collected form here, it is a pleasure to read.

H. D. BRUNER

*Department of Physiology, Emory University
Emory, Georgia*

Magnetic Cooling. C. G. B. Garrett. Harvard Univ. Press, Cambridge, Mass.; Wiley, New York, 1954. 110 pp. Illus. \$4.50.

This book provides the first treatment of the subject of magnetic cooling since the appearance in 1940 of the celebrated monograph by Casimir. It is, in effect, a revised edition of the latter, with an entirely new chapter on cooperative effects and a thorough, if condensed, coverage of the experimental work done between 1940 and 1952 on both paramagnetics and other materials at temperatures below 1°K.

Garrett has favored the descriptive, or "physical," approach throughout, and his chapter on cooperative

effects is especially interesting. As the publishers point out, "the author stresses those aspects of the subject with which he has been most closely associated," but fortunately these aspects are sufficiently numerous to maintain a reasonable balance. The section dealing with experiments on "other materials" below 1°K is probably shorter than the title of the book would suggest, although the author, by skillful abstraction of the essential features, has succeeded in covering in a short space the majority of the important experiments reported by late 1952. As a result, the reader is provided with a clear picture of the diversity of such researches and of the current rapid development in the field.

One notices a number of minor errors and points for criticism but few that warrant mention, especially in a brief review. Of the limited space available in a monograph, rather too much has been devoted to a discussion of the "purely academic" question of what is the correct expression for the energy of a magnetized specimen, and the important question of the validity of heating by gamma rays in calorimetric determinations is dismissed by a brief mention of the objection that has been lodged against the method. Absolute temperature determinations made in the millidegree region by different methods show wide disagreement (the latest work on potassium chromic alum provides a graphic example), and a short critical examination of possible causes would have been of value.

In summary, *Magnetic Cooling* is extremely "readable," timely, and useful to both students and research workers, especially so by reason of the provision throughout of a wealth of references to original publications. It should convey to the general reader a clear impression of a fascinating and rapidly expanding field and stimulate a wider appreciation of the potentialities of the temperature region below 1°K.

R. P. HUDSON

*National Bureau of Standards
Washington 25, D.C.*

Hypnotism: An Objective Study in Suggestibility. André M. Weitzenhoffer. Wiley, New York; Chapman & Hall, London, 1953. 380 pp. \$6.

Since the publication in 1933 of C. L. Hull's classical study, *Hypnosis and Suggestibility: An Experimental Approach*, more than 500 reports and books related to the subject have been published. During this interim, new techniques have been devised and old techniques have been revised; much information formerly based on inconclusive experiments or personal history can now be recorded and evaluated in the light of accepted present-day research standards, and the applications of hypnosis have made apparent the need for a thorough, factual appraisal and integration of the data relevant to the basic phenomena of hypnosis and suggestibility.

André Weitzenhoffer's book successfully presents "a critical and integrated compilation and appraisal