proteins by neoplastic tissues, and these topics are discussed authoritatively.

This little book should be of considerable interest to all those persons interested in the basic biochemistry of the cancer cell. The coverage is definitely limited, but the treatment is generally good.

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A Full Spectrum

Joseph Priestley. Selections from his writings. Ira V. Brown, Ed. Pennsylvania State University Press, University Park, 1962. x + 343 pp. $5.50.

Joseph Priestley, one of the most prolific writers in a century noted for its prolixity (one need only think of Gibbon), is known today primarily for his discovery of oxygen and a number of other "airs," but his work on gases was only a part of his prodigious activity. To his contemporaries, he was noted as a dissenting preacher whose talent for becoming embroiled in bitter sectarian battles was extraordinary. In his search for the truth, Priestley constantly trampled somewhat tactlessly upon the beliefs of the most influential people of the day and then wondered why they attacked him. It must be said in justice to him that he accepted these attacks calmly and even welcomed them. He had an uncommonly strong belief that the truth would, indeed, prevail and that the duty of the honest pursuer of it was to start as many arguments as possible, for only then would all points of view have a chance to be presented. If one adds to this love of argument a keen mind and a universal curiosity, some of Priestley's literary productivity can be accounted for. The rest followed from the fact that, bursting with ideas as he was, he never took time to rewrite anything. From the theological pamphlet to the history of electricity, everything was composed at white heat and delivered to the printer. Thus it was inevitable that careless errors and contradictions crept into his work, but this fact is compensated for by the feeling, as one reads, that here, literally, is a man at work before you.

From the Priestley collection in the Pattee Library at Pennsylvania State University, Ira V. Brown has selected a representative sample of Priestley's writings. The volume begins with Priestley's autobiography and closes with a moving section on his views of the One True Church. Priestley's scientific work is represented by selections from *The History and Present State of Electricity* and *Experiments and Observations on Different Kinds of Air.*

Brown has done his editorial work well. The selections represent the full spectrum of Priestley's mind. Each section is introduced by a modest paragraph or two, including basic bibliography, which serves to place what follows in the perspective of Priestley's total achievement.

The book is handsomely produced and may be strongly recommended as an introduction to the mind of one of the most interesting individuals of the 18th century.

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Polish Translation

Introduction to Set Theory and Topology. Kazimierz Kuratowski. Translated from the revised Polish edition by Leo F. Boron. Pergamon, London, 1961; Addison-Wesley, Reading, Mass., 1962. 283 pp. Illus. $6.50.

This elegant volume is an English translation of the revised Polish edition of the author's basic textbook on set theory and topology. These two related subjects permeate all of modern mathematics, and training in them is an indispensable part of the education of every mathematician. As an introduction to these subjects, this book is an excellent text for advanced undergraduates or beginning graduate students.

The first eight chapters deal with set theory. The material covers elementary propositional calculus, the algebra of sets, functions, the power of a set, cardinal numbers, ordering relations, and ordinal numbers. The first approach is that of naive set theory, but in due course the axioms of set theory are introduced. The emphasis, however, is on the facts of set theory, not on its foundations. Proofs are given for all but the most sophisticated theorems of set theory.

The fundamental ideas of general and algebraic topology are included in the remaining 14 chapters. With an eye to the important applications of topology to analysis, the author restricts himself to the study of metric spaces, although some of his definitions apply to spaces of greater generality. After defining metric spaces, he discusses limits, convergence, and the properties of closure, open and closed sets, dense sets, and Borel sets. Next come the ideas of continuity and homeomorphism.

Beginning with chapter 13, the treatment is gradually restricted to more specific spaces, such as separable, complete, compact, connected, and locally connected spaces. American readers should note that *compact* means *sequentially compact* and that *bicompact* is used for spaces with a finite covering. Since the author is dealing primarily with metric spaces, however, there should be no confusion. Chapter 19 is a brief introduction to dimension theory.

Algebraic topology appears in chapters 20 and 21, in which the essentials of polyhedral homology are developed. Applications include the Brouwer fixed point theorem and an existence theorem in differential equations. Chapter 22 treats separation properties of the plane, and it includes a detailed proof of the Jordan curve theorem.

Applications to analysis appear in most chapters, and there is an excellent supply of exercises.

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Nuclear Physics

Rutherford Jubilee International Conference. *Proceedings*. J. B. Birks, Ed. Academic Press, New York, 1961. 856 pp. Illus. $32.

The Rutherford Jubilee International Conference was held at Victoria University (Manchester, England) from 4 to 8 September 1961 to commemorate Rutherford's 50-year-old discovery of the atomic nucleus and the formulation of the Rutherford scattering law. The 22 invited papers and 197 contributed papers cover topics of current interest in nuclear structure, scattering, dynamical reactions, and radioactive decay. This volume will be of primary interest to nuclear physicists, but several of the