the standard of service rendered to the zoological profession. In spite of wartime difficulties the Commission was able between 1942 and the end of 1945 to issue between 70 and 80 separate publications on various questions of zoological nomenclature. The extremely scanty funds at its disposal made it inevitable that the Commission should charge a relatively high price for the publications so issued. The Commission has always regretted that this should have been necessary, since it holds the view that fundamental publications of this kind should be issued at prices sufficiently low as to be within the financial means of all interested workers. It has therefore always set itself the aim of reducing the prices charged for its publications as soon as its financial resources rendered this practicable.

The Commission has recently reviewed the general position in the light of the encouraging financial results obtained in the year 1945 (full particulars of which, together with the accounts for 1945, will shortly be published by the Commission in its *Bulletin of Zoological Nomenclature*). As the result of this survey, the Commission has decided to cut by 30 per cent the scale of charges for all publications issued after 1 February 1946. This decision involves a considerable financial risk to the Commission. However, it is a wise decision and one which will be widely welcomed by zoologists generally. It is a matter of particular interest to American zoologists, some of whom have been urging the Commission for some time to take action on these lines.

FRANCIS HEMMING 83 Fellows Road (Garden Flat), London, N. W. 3

Scientific Independence in Russia

In his reply to Dr. Asmous on Russia, Mr. Gaposchkin (Science, 1946, 103, 404) appears to evade all of the issues completely. He starts out by saying that it is surprising that in 1946 a letter such as that of Dr. Asmous could appear in a scientific periodical. To support that thesis he suggests that Dr. Asmous' life and the lives of all other Americans have been saved by Russia. That statement, even if it were true, would be quite beside the point. Dr. Asmous, in his letter, repeated the charge already made by K. Sax that "science (in the USSR) must conform to political philosophy." Mr. Gaposchkin says not a word in answer to that charge. He remains silent regarding the question of the circumstances surrounding the death of N. Vavilov, a question which has for some time caused, and continues to cause, much mental distress among the latter's scientific colleagues in all parts of the world. While the case of N. Vavilov is a single instance, does it not constitute a symptom of a serious disorder? Can scientists, or indeed any other citizens of democracies, afford to overlook that symptom or the ailment to which it points? Is it too much to expect of those who wish to hold a brief for the independence of science and scientists in the USSR that they either satisfy their colleagues that such charges are unfounded or that the basis for them has ceased to exist?

P. J. OLSON Division of Plant Science, University of Manitoba

Book Reviews

Essentials of general chemistry. B. Smith Hopkins and John C. Bailar, Jr. Boston: D. C. Heath, 1946. Pp. v + 520. (Illustrated.) \$3.50.

In the freshman course in general chemistry the teacher must attempt to accomplish much more than to start the training of specialists. In addition to future chemists, those enrolled in the course will include both students who have studied chemistry in high school and those who have not; students preparing for such diverse professional fields as engineering, medicine, nursing, home economics, and agriculture; and students for whom the beginning course in chemistry will be their only contact with scientific thought in their entire college program. Enrollment in the general chemistry course may be as large as 3,000 in many of the state universities, and the teacher may be required to pass all but a small percentage of these. The writing of a successful textbook for such an audience requires great skill and experience, and it is to the credit of the authors that they have succeeded so well.

By the inclusion of a greater amount of descriptive chemistry than is usual for textbooks at this level they attempt to make up for the deficiencies of students with poor preparation; and by the skillful introduction of modern theory and using it to explain and correlate the descriptive material throughout the book, they make their treatment sufficiently interesting and alive to stimulate the attention of the better-prepared students with professional aims. The care with which the content has been chosen is reflected in the list of "references for further reading" at the end of each chapter. These have been selected from the large mass of chemical books and magazine articles, with the maturity of the freshman student in mind, and include items published just before the book went to press. By means of this extensive and well-chosen bibliography the student is encouraged to start his acquaintance with the vast literature of chemistry and to enlarge his knowledge beyond the scope of the textbook.

The treatment of modern chemical theories is thoroughly up to date. This is not surprising, since the authors have been at the forefront in the recent renaissance of inorganic chemistry in this country. The atomic bomb, however, has received what is probably the least hysterical account ever published on the subject. The topic upon which so many millions of words have been published since 6 August 1945 has been accorded fewer than 400! One may surmise that these were interpolated into the galleys at the last moment and that in future editions there will be some expansion of this revolutionary topic.

It is hoped that this book will receive the wide acceptance that it deserves as, it represents a genuine advance in textbooks for the general college course.

LAURENCE S. FOSTER

Research Laboratory, Watertown Arsenal Watertown, Massachusetts