"Cellular radiobiology" (Powers); "Biochemical effects of ionizing radiations" (Holmes); "Vertebrate radiobiology (lethal actions)" (Bond and Robertson); "Vertebrate radiobiology (pathology)" (Lushbaugh); "Radiochemical separations by ion exchange" (Kraus and Nelson); "Equipment for high-level radiochemical processes" (Garden and Nielsen).

This reviewer was struck by the distribution of references in the volume and, perhaps apropos of nothing at all, made a count of these in each article. (He hastens to add that this is *not* an accurate count; *no* analysis of covariance was made, and *nothing* is to be inferred about the statistical significance of this "survey".) The result: The six physics articles had about 2.6 ± 1.4 literature references per page of text, with no real differference between the two kinds of physics specialties. (Credit was given for references which appeared only in several extensive tables of data.) The six other articles had about 10.0 ± 3 literature references per page of text. High score went to "Radiochemical Separations", with over 14 references per page; low score to the excellent "Hyperons" with less than 1 reference per page. The area of the book devoted to biology and chemistry is something like 30% of the total; this 30% contains some 1050 literature citations while the remainder (physics) contains about 850 citations.

This makes rather spotty reading for a biophysicist. The physics articles are discursive enough so that a "classical" nuclear physicist can read "Hyperons" leisurely, with pleasure and profit, gather motivation for experiments that have been done, and actually learn something. The other papers necessarily contain much less information per word, and sometimes become a series of rather disconnected sentences, or short paragraphs with not much more information than a bare listing of the titles to the original articles. Once it has been decided (as evidently it has) that all of these articles properly belong in a single volume on "nuclear science" then the editors should allocate enough space so that these borderline subjects become as readable as the articles on straight nuclear physics. As it is, it is not clear that the book is worth its price to a biologist. At the same time the biological papers are certainly not lucid enough for a nuclear physicist who is interested in educating himself about the work of his colleagues in a vaguely allied field of science.

Soviet Education for Science and Technology. By Alexander G. Korol. 513 pp. The Technology Press of Mass. Inst. of Technology & John Wiley & Sons, Inc., New York, 1957. $8.50. *Reviewed by Fay Ajzenberg-Selove, Haverford College.*

Mr. Korol has written a well-documented and important account of the Soviet educational system as it is directed towards the training of scientists and technicians. The book gives both a clear and an interesting description of the academic and administrative setup of Soviet education.

Soviet Education is divided into three main parts: the precollege years, college education, and graduate training. As far as scientific training is concerned the two important preparatory school systems are the so-called ten-year schools and the technicums (which are somewhat similar to our vocational high schools but which have an appreciably more advanced terminal level). Mr. Korol discusses the organizations of the schools, the curricula (giving details on contents of courses and time spent on each subject), the level of instruction, examination questions, and the preparation of the teachers. The ten-year curriculum in the sciences is not appreciably different from that of outstanding US "technical" high schools, but it differs greatly, of course, from the minimum requirements for graduation from an average high school. In particular the lack of electives in the Soviet system is in striking contrast with ours. The two basic types of institutions of higher education are the universities and the various kinds of institutes which are geared to specific requirements of a particular type of industry (food and fishing, textiles, etc.) or a particular specialty (medicine, economics, etc.). Mr. Korol discusses the administration of these institutions, the selection of students, the awarding of scholarships, the steering towards needed specialties, the curricula, and the facilities for higher education in terms of faculties, books, and equipment. In particular, the author makes a detailed comparison of the curricula in physics at a Soviet university and at MIT: in the first four years the required courses in physics and mathematics for Soviet students involve approximately fifty percent more class hours than do those for MIT students. Finally, placement of graduates and graduate training facilities are briefly assessed. The text is supplemented by 56 tables, 15 appendices, and a detailed bibliography.

X-Ray Microscopy and Microradiography: Proceedings of Symp. (Cavendish Lab., Cambridge, England, Aug. 1956). Edited by V. E. Cosslett, Arne Engström, H. H. Pattee, Jr. 645 pp. Academic Press Inc., New York, 1957. $16.50. *Reviewed by Cyril Stanley Smith, Institute for the Study of Metals.*

The symposium which gave rise to this book was sponsored by the International Union of Pure and Applied Physics with financial support of Unesco. Dr. Cosslett, the secretary for the symposium, contributes a fine summary of the whole field, and his name appears on no fewer than five of the detailed contributions. There are papers describing the design of tubes for microradiography by contact or projection, on reflection microscopy, on the theory of the various techniques, on microdiffraction, and on scanning methods. These papers on the principles of the method and apparatus design will probably remain generally useful when the papers dealing with results in various fields have been supplanted, yet it is amazing to see the wide range of problems to the solution of which microradiography has already contributed significantly. These range from botany, zoology, and medical research to