THE PRONUNCIATION OF BACTERIOPHAGE

IN view of the fact that in many places *phage* by itself and in its combinations, as in *bacteriophage,* is being pronounced *fäzh* (*a* as in *art*), I think it not out of place to call attention to the fact that Webster's International Dictionary, 1935 edition, gives the pronunciation as *fāj*; and Dr. Frank Vizetelly for the Standard Dictionary states, "The pronunciation of *phage* is *fēj*—*e* as in *prey.*"

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REPORTS

ANNUAL TABLES OF CONSTANTS AND NUMERICAL DATA

Now is the time for all good chemists, and physicists, too, to come to the aid of international effort for a permanent solution of the problem of numerical data in the physical sciences. Ten years ago, at a very heavy cost and with the generous financial support of several foundations, scientific societies, research institutes and many industrial organizations, the United States put forth her effort in the compilation of International Critical Tables. That effort met a generous response on the part of scientists, and several thousand sets of the eight volumes eventually found distribution among the scientific public. Daily, since then, these tables have been used, and citations from them, in the scientific literature here and abroad, are a constant feature, month by month. They have thus justified the time and money and effort which their preparation entailed.

International Critical Tables do not, unfortunately, supply a permanent solution of the problem of physical and chemical data. Newer and better data are constantly replacing the older data. The critical judgment of a decade ago is not necessarily the best or a final judgment. Nor does science stand still. Looking back over a decade of scientific work we see the branches of modern science that were not known when I.C.T. were published. If we think, for example, of deuterium chemistry with all the intensive developments of the last five years, with its effects on organic chemistry, on reaction kinetics, on biochemistry, on nuclear physics, on molecular structure, Raman spectra, none of these newer data of our sciences are to be found in I.C.T. Think, too, of the neutron, the positron, the proton, the deuton and the influence they have exercised on chemistry and physics, with new isotopic species, radioactive and non-radioactive, and the data that have correspondingly accumulated. New techniques in thermodynamics, with entropy data from spectroscopic sources, from low temperature heat capacity measurements, improved techniques of thermochemical measurement by combustion, hydrogenation and electromotive force data—all these have advanced at an accelerated pace in these last ten years; and, what is more important, the application of these data to important industrial developments has been correspondingly intensified. Ten years ago, for example, the application of thermodynamics in the petroleum industry was necessarily of the most elementary nature. To-day it is literally true that the modern aviation fuel will be brought to a higher pitch of perfection, necessary to modern needs, thanks to the entropy, heat capacity and thermochemical data recently accumulated by newer approaches, experimental and theoretical. X-ray analyses of industrial materials, electron diffraction studies of organic compounds, dielectric constants and molecular spectra, all are yielding data on bond distances and bond energies that make our knowledge of molecular structure more intimate and more profound. To keep I.C.T. abreast of this pace of progress, it would require a new edition or new supplements at least every five years. The organization that brought I.C.T. into existence no longer exists. It can not be reestablished without a prohibitive cost. We are forced, therefore, to inquire how, most efficiently, and with the least delay, it can be replaced.

The opportunity to achieve this objective is at hand, and it is imperative that the most serious consideration should be given to the steps necessary to a permanent solution of the problem of numerical constants and data, continually up-to-date. The International Union of Chemistry and the International Council of Scientific Unions have, for many years already, sponsored the publication of Annual Tables of Constants and Numerical Data. An International Commission with a managing board, with headquarters in rue Pierre Curie in Paris, has supervised this work. The aim was originally to publish, each year, the accumulated data of the preceding year in science. The Great War and financial difficulties caused this effort to lag. The Annual Tables have been several years behind schedule. Thanks largely to the generosity of the French Government, with additional financial assistance promised but not yet implemented from other national sources, a strenuous effort has been made in the last two years to bring Annual Tables up to date. Volume XI, Part I, of these tables, just about to appear (McGraw Hill and Co., distributors for U.S.A. and Canada), embodies material for 25 sections of data from the years 1931–34 and material for a few sections of data from the years 1931–36. Volume XI, Part II, and Volume XII will complete the data in the remaining fields up to 1936. These volumes, in active preparation, should appear before the end of 1938 or early in 1939.