"Further Evidence of Sex Variations in Utilization of Iron by Anemic Rats," and states that the findings of the authors, Drs. Louise Otis and Margaret Cammack Smith, "were previously established by Dr. Helen Hubbell and reported in the *Journal of Nutrition* in January, 1938, Vol. 15, pp. 91–102." In this connection we would like to point out that in the course of an investigation using hundreds of rats, begun in 1935 in our Arizona laboratories on the hematopoietic value of foodstuffs, a marked difference in the response of male and female rats was consistently noted. At that time it was current practice in other laboratories to use male and female rats interchangeably, which gave conflicting results. Our findings were reported in a paper by Smith and Otis entitled "Sex Variations in the Utilization of Iron by Anemic Rats," which appeared in SCIENCE in January, 1937, Vol. 85, pp. 125–6, which was almost a year before the paper by Rose and Hubbell appeared. Also, a paper by Smith and Otis entitled "Hemoglobin Regeneration in Anemic Rats in Relation to Iron Intake," which included a discussion of their findings concerning sex difference, was published in the *Journal of Nutrition,* Vol. 13, pp. 557–82, in June, 1937.

We regret that in our third paper, entitled *"Further Evidence* of Sex Variation in Utilization of Iron by Anemic Rats," which is the paper to which Dr. Rose refers, no mention was made of the excellent paper of Rose and Hubbell. It would, of course, have been included in any complete review of the literature on the subject, but a review of any length is not permitted in SCIENCE. A more complete description of our iron studies is soon to appear elsewhere.

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SUGGESTIONS REGARDING A PROPOSED STANDARDIZATION OF OSMOTIC PRESSURE AS A TERM

THE proposal to standardize osmotic pressure as a term made recently in these columns[1] should meet with sincere approval. We believe, however, that such a standardization should, if possible, transcend the limits of one field of science. This is particularly necessary from a pedagogical standpoint.

As pertinent to this suggestion we would call attention to the desirability of considering osmotic pressure as the pressure that must be exerted on the solution in order to make the escaping tendency of the solvent from the solution equal to the escaping tendency of the pure solvent at the same temperature. One needs further to point out that (*a*) the addition of a solute to a solvent in general lowers the escaping tendency of the solvent molecules and (*b*) the application of an external pressure in general increases the escaping tendency of the solvent. This treatment of osmotic pressure is quite generally found in the better elementary text-books of chemistry, in the physical chemistry texts and in advanced texts.[2]

It will be observed that the suggested standardization includes the two generalizations regarding the influence of solute concentration and pressure. We propose (1) that the definite relation between these generalizations and the osmotic pressure be pointed out and (2) that reference be made to some generalized term such as "escaping tendency."

We suggest that such an amplification would improve the treatment of the term by increasing the range of applicability and by relating the phenomenon under consideration to others, such as vapor pressure effects, etc.

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SCIENTIFIC BOOKS

LIFE ON OTHER WORLDS

Life on Other Worlds. By H. SPENCER JONES. New York: The Macmillan Company. 1940.

FOR centuries man has wondered and speculated about the possibility of life on other worlds. Nowadays probably no question is put more frequently to the astronomer by the layman than "Are there men on Mars?" Percival Lowell at the close of the past century thought he had evidence for the existence of intelligent life on Mars. Alas, the modern astronomer can not concede Lowell's point. H. Spencer Jones, Astronomer Royal of England, in his recent book, "Life on Other Worlds," brings a timely and authoritative account of many aspects of the problem of the existence of life elsewhere in the universe.

Regardless of whether or not life does exist on the other planets, life can be directly observed only on the Earth. Life as we know it must therefore furnish a working definition of what shall constitute life. Complex molecules containing carbon have been found to form the basis of the structure of all living organisms on Earth. From the prevalence of the same physical

[1] H. C. Eyster, SCIENCE, 92: 171–2, 1940.

[2] The following list includes an example from each of the classes mentioned: Herman T. Briscoe: "An Introduction to College Chemistry," p. 257. Houghton Mifflin Company. W. H. Rodebush and E. K. Rodebush: "An Introductory Course in Physical Chemistry," p. 188. D. Van Nostrand Company. G. N. Lewis and Merle Randall: "Thermodynamics and the Free Energy of Chemical Substances," p. 213. McGraw-Hill Book Company.