and Applied. The extensive and international character of the book is evidenced by the subjoined list of some of those who have already promised contributions:

United States: E. G. Acheson, W. D. Bancroft, Carl Barus, M. H. Fischer, W. D. Harkins, H. N. Holmes, G. A. Hulett, D. D. Jackson, G. F. Kunz, R. S. Lillie, D. T. MacDougal, S. E. Sheppard, A. Silverman, E. B. Spear, E. W. Washburn, A. W. Thomas, H. A. Gardner. England: E. F. Armstrong, Henry Bassett, W. M. Bayliss, E. F. Burton, W. B. Hardy, F. G. Donnan, F. E. Lloyd, A. E. Dunstan. Germany: H. Bechhold, G. Bredig, A. Fodor, H. Handovsky, A. Lottermoser, Lüppo-Cramer, R. Höber, W. Ostwald, H. Plauson, E. Stiasny, G. Tammann, H. Schade. Austria: C. Doelter, W. Pauli. Jugoslavia: M. Samec. Holland: H. R. Kruyt. Sweden: Sven Oden. Mexico: A. L. Herrera.

Many unusual experimental facts and practical applications of colloid chemical principles are unpublished, and the object of this letter is to ask any one in any field of science or experience who may have information of interest to send me a brief statement for inclusion in the book.

Contributions may consist of a paragraph, a page, or several pages, and will (unless contrary request is made) be duly acknowledged. If possible they should be submitted in English and duplicate copies will be appreciated. Authors should state their full names and titles.

The editors of scientific, technical and cultural publications in all countries are asked to disseminate this appeal.

JEROME ALEXANDER

50 East Forty-first Street, New York City

DR. PAUL WAGNER

On the seventh of March, the noted German agricultural chemist and investigator, Dr. Paul Wagner of Darmstadt, will complete his eightieth year, at which time his numerous friends and pupils in Germany will hold a celebration at Darmstadt in his honor.

Fifty years ago, Dr. Wagner became director of the Experiment Station at Darmstadt, which had just been founded, and has since won for this institution a world renown, through his investigations on plant foods. He certainly deserves to receive great commendation for hav-

ing, with the help of his own method of pot experiments, substantially extended and firmly established the foundation for the use of commercial fertilizers.

He was the first to recognize and correctly estimate the fertilizing effect of the Thomas phosphate or basic slag. By a steady improvement in the methods of fertilizer experiments in the field, he succeeded in making of these field experiments a practical means of exact investigation.

Dr. Wagner, furthermore, has clearly shown the results of his investigations in the vegetation house, field and laboratory to the practical farmer, both in articles which are easily understood and in inspiring lectures; and in this way he has contributed in an enormous degree toward the proper use of commercial fertilizers in agriculture.

Here in the United States, many of Dr. Wagner's articles are known, having been translated or summarized by numerous writers to the great advantage of American agriculture.

H. A. H.

SIGMA XI LECTURES

The following public lectures were given before the Iota Chapter of the Society of Sigma Xi, University of Kansas:

Dr. Henry B. Ward, professor of zoology, University of Illinois: January 10, "The struggle of man with the life of the wilderness in North America," and "The factors which control and direct the migration of the Pacific salmon."

Dr. A. Sommerfeld, professor of mathematical physics, University of Munich, at present holding the Karl Schurz memorial professorship at the University of Wisconsin: Jan. 20, "Atomic structure and periodic system of elements."

Officers of Iota Chapter are:

President, F. B. Dains, professor of chemistry. Vice-president, W. S. Hunter, professor of psychology.

Secretary, Guy W. Smith, assistant professor of mathematics.

Treasurer, H. E. Jordan, assistant professor of disseminate this appeal.

In a visit to the University of Oklahoma Dr. Henry B. Ward, national president of Sigma Xi, addressed the local Sigma Xi Club on the evening of January 11 on "The struggle of man with the life of the wilderness in