

In recent years he was intensely interested in the mechanism of sulfonamide action. He investigated the effect of the hydrogen ion concentration on the activity of sulfonamides *in vitro* and found an interesting correlation between the acidic dissociation constants of the sulfonamides and the effect of the pH upon their activity. The conclusion could be drawn from the data collected by him and his associates that the anionic form of sulfonamide is a great deal more active than the undissociated sulfonamide molecule and that the activity of the latter is negligible in comparison. The activity of sulfanilamide, in particular, was found to be greatly enhanced by the adjustment of the pH. The activity of sulfanilamide at the optimal pH, although not directly measured, was calculated to be greater than that of any other known sulfonamide. The practical conclusion was drawn that the local chemotherapy for wound infections should be carried out with sulfanilamide and a buffer.

He was a strong advocate of the theory that sulfonamide activity is due to the blocking of the *p*-aminobenzoic acid receptor in an enzyme system, and on the basis of this theory he and his associates synthesized various *p*-aminobenzoic acid derivatives, some of which showed a typical sulfonamide activity, that is, anti-bacterial activity which could be reversed by *p*-aminobenzoic acid. He realized the practical importance of inactivating the *p*-aminobenzoic acid which is the antagonist of sulfonamide in local chemotherapy and he worked intensely on the study of the use of *N,N'*-dichloroazodicarbonamide for this purpose.

Since Pearl Harbor, he has concentrated all his efforts on the medical aspects of the war. He developed an ingenious treatment of burns, using a membrane which contains buffered sulfanilamide as a chemotherapeutic agent.

Franz Schmelkes' interest was not limited to science but embraced political, social and economic problems. He had beliefs and convictions for which he was

always ready to fight. His greater interest was in his fellowmen, many of whom he helped when in need. He was a member of many scientific societies and was popular at the Chemists' Club. One of his favorite sports was golf. His guiding spirit and stimulating influence will long survive among his friends and associates who will miss him greatly.

L. REINER

RECENT DEATHS

DR. EDGAR ALLEN, professor of anatomy and head of the department at the Yale University School of Medicine, died on February 3 at the age of fifty years.

DR. EARLE RAYMOND HEDRICK, a member of the faculty of the Brown University Graduate School in Advanced Instruction and Research in Mechanics, formerly vice-president of the University of California at Los Angeles, died on February 3 at the age of sixty-six years.

DR. LEONARD MAGRUDER PASSANO, professor emeritus of mathematics of the Massachusetts Institute of Technology, died on January 30 in his seventy-seventh year.

DR. J. FRANK FRASER, consulting dermatologist at the Memorial Hospital for the Treatment of Cancer and Allied Diseases and other New York hospitals, has died at the age of seventy-two years.

MISS CAROLINE HARRISON, better known to her friends as "Carrie Harrison," died at her home in Washington, D. C., on about January 19. She entered the government service in the division of botany of the Department of Agriculture in 1887. The division later became a part of the Bureau of Plant Industry. Miss Harrison gave special attention to tannin-bearing plants. She was an enthusiastic rosarian, and was an active member of the American Rose Society up to the time of her death. She retired from government service in April, 1926.—F.A.W.

SCIENTIFIC EVENTS

THE BRITISH NEW YEAR HONORS LIST¹

THE following names of scientific men and others associated with scientific work appear in the British New Year honors list:

Baron: Sir Charles Wilson, president of the Royal College of Physicians.

Baronet: W. M. Goodenough, chairman of the Nuffield Trust for the University Medical School, Oxford.

G.B.E.: Sir Henry Dale, lately director of the National Institute for Medical Research, president of the Royal Society.

¹ From *Nature*.

K.C.B.: Sir Wilson Jameson, chief medical officer, Ministry of Health and Board of Education.

Knights: Professor J. H. Clapham, president of the British Academy; Professor F. Clarke, professor of education, University of London; Dr. A. C. G. Egerton, professor of chemical technology, Imperial College of Science and Technology, and joint secretary of the Royal Society; Jhanendra Chandra Ghosh, director of the Indian Institute of Science, Bangalore; S. H. Howard, inspector-general of forests and president of the Forest Research Institute, Dehra Dun; Pestonji Rustom Masani, lately vice-chancellor of the University of Bombay; W. A. Stanier, chief mechan-