AWARD OF THE DAVY MEDAL OF THE ROYAL SOCIETY TO DR. DAKIN

AT the anniversary meeting of the Royal Society at Burlington House on December 1, the Davy Medal was presented to Dr. Henry Drysdale Dakin, of Scarsborough, New York. Sir Henry Dale in making the presentation spoke as follows:

Dakin began his researches in the field of biochemistry early in the present century. At that time, in comparison with knowledge of the end-products of metabolism, relatively little was known about the chemical activities of the living cells of the animal body. His work has made very important additions to knowledge of the intermediary changes produced by these activities, and also of the chemical structure of natural components of the tissues.

One side of Dakin's work has dealt with enzymes of the animal organs. He was the first to show that such an enzyme will attack at different rates the two optical isomers in a racemic mixture. With Kossel he discovered the enzyme arginase, with its important rôle in the production of urea from arginine. Later he discovered the enzyme glyoxalase, the wide distribution of which in the tissues must indicate some important though still undefined function in carbohydrate metabolism.

In connection with the intermediary metabolism of fatty acids, Dakin produced the first convincing evidence of oxidation at the β-carbon atom as the first stage of their utilization by the body, and showed that this type of oxidation can even be reproduced *in vitro* by the action of hydrogen peroxide.

Dakin's work on the chemistry of the proteins has included a method of partial racemization, bringing subtle differences of molecular pattern into view, which could be related to specific antigenic differences. He also introduced a method of separation which enabled new hydroxy-amino acids to be recognized, and raised much nearer to unity the proportion of a protein molecule accounted for as known amino-acids. At a wide interval of years, Dakin has made two notable contributions to the chemistry of hormones. In 1905, he was responsible for the first published artificial synthesis of a hormone, adrenaline. In 1936 he described the isolation from liver of a substance which is, at least, a principal factor in the important effect of liver extracts on pernicious anemia.

Working in France during the War of 1914–18, Dakin introduced the use of a buffered hypochlorite solution for irrigating infected wounds. Later, on a ship bringing the sick and wounded from Gallipoli, he made a similar solution by direct electrolysis of sea-water. Another war is reviving the use of such preparations to meet the same and other needs.

Though Dakin has worked in a private laboratory, with but rare collaboration and no pupils, his work has exercised a wide and powerful influence on the growth of biochemistry and on the strengthening of its links with organic chemistry.

SCIENTIFIC NOTES AND NEWS

THE Charles Reid Barnes life membership of the American Society of Plant Physiologists has been awarded to Dr. Benjamin M. Duggar, of the University of Wisconsin, "in recognition of his outstanding contributions in the field of plant physiology." The award was presented at the annual dinner held during the eighteenth annual meeting of the society at Dallas.

THE Thomas Burr Osborne Medal in cereal chemistry of the American Association of Cereal Chemists has been awarded to Dr. Ross Aiken Gortner, chief of the division of biochemistry of the University of Minnesota, "for distinguished services in conducting research and training students." The medal will be presented at the annual meeting of the association next May.

DR. G. MARSHALL KAY, assistant professor of geology, Columbia University, has been awarded the George Frederick Kunz Prize for 1941 of the New York Academy of Sciences for his paper on the "Development of the Northern Allegheny Synclinorium and Adjoining Regions." Dr. Otto H. Haas, research associate in paleontology at the American Museum of Natural History, will receive one of the A. Cressy Morrison prizes of $200 for his paper, "The Vernay Collection of Cretaceous (Albian) Ammonites from Angola."

THE Atwood award of $500 for research in physical geography was granted to Dr. George B. Cressey, chairman of the department of geology and geography at Syracuse University, at the annual meeting of the Association of American Geographers in New York City. Dr. Cressey's project calls for a study of land forms in New York State, and is the outgrowth of a National Research Council Committee working on larger aspects of the problem.

The News Edition of the American Chemical Society states that Dr. Fritz Hofmann, director of the Silesian Institute for Coal Research, has received the Goethe Medal for Arts and Sciences in recognition of research relating to production of synthetic rubber.

DR. GARY N. CALKINS, professor emeritus of protozoology at Columbia University, was recently honored by his former graduate students. A representative group, headed by Professor L. L. Woodruff, of Yale University, made a surprise visit to his Scarsdale home to present gifts and greetings. One of the gifts was a handsomely bound volume of letters containing