

apparatus of the uterus, at Guy's Hospital; Dr. J. L. Rosedale: The chemistry of normal and pathological tissue with special reference to the protein and nuclein constituents, at St. Thomas's Hospital Medical School, London; Mr. R. Hilton: The study of the blood gases in various stages of pulmonary collapse produced by artificial pneumothorax; the condition of the circulation in the collapsed lung, at the Lænnec Hospital, Paris, and at St. Bartholomew's Hospital; Mr. A. St. G. J. M'C. Huggett: The investigation of the function of the placenta in relation to the passage of gases and other substances from the mother to the foetus and the cause of foetal apnoea, at the Sherrington School of Physiology, St. Thomas's Hospital, and at the Brown Animal Institution at Vauxhall; and Mr. V. D. Allison: The investigation of the nature and properties of a hitherto undescribed substance which has a strong bactericidal, bacteriolytic and bacterio-inhibitory action—named lysozyme, at the Institute of Pathology and Research, St. Mary's Hospital. Fourth year fellowships of the annual value of £400 have been awarded to Dr. D. Keilin: The life-histories of protozoa pathogenic to insects; the life-history, anatomy and physiology of insects, at the Monteno Institute for Research in Parasitology, Cambridge; and Mr. I. de B. Daly: Auriculo-ventricular block, at the Institute of Physiology, University College, London. The trustees of the Beit Scientific Research Fellowships have re-elected Mr. H. L. Riley and Mr. W. A. P. Challenor to fellowships for the year commencing September, 1922, and elected Mr. H. W. Buston to a fellowship for the same period. All the fellows are required to carry out their research at the Imperial College of Science and Technology. Mr. Riley will continue his research on "The Atomic Weight of Silver, and the Dielectric Constants of Dry Gases" in the chemistry department, and Mr. Challenor will continue his work on "Ring Formation in the Aromatic and Aliphatic Series of Organic Chemistry" in the chemistry department, both under the direction of Professor H. B. Baker. Mr. Buston will carry out investigations on "Nitrogenous Metabolism in Plants" in the biochem-

istry department under the supervision of Professor J. B. Farmer.

#### THE SECOND NATIONAL HIGHWAY CONFERENCE

PLANS for a second national conference for the study of highway engineering and highway transport education are being prepared by the Highway Education Board, of which Dr. John J. Tigert, U. S. commissioner of education, is chairman. Teachers of highway engineering and highway transport, officials in charge of highway construction programs, members of the automotive industry and kindred fields, together with representatives from other countries, are being invited to attend. The conference will be held in Washington from October 26 to 28 inclusive, and, according to the tentative program, this period will be devoted to the intensive study of highway and engineering problems.

According to a statement of the program committee, the object of the conference is "To review the field of highway engineering and highway transport education in the light of expanding state and federal highway programs and the rapidly increasing social and commercial use of the highways; to discuss general and special courses in undergraduate and graduate curricula; and to exchange views on educational trends arising from these developments in the national transportation system."

Members of the program committee charged with the duty of arranging an adequate program are: Professor T. R. Agg, professor of highway engineering, Iowa State College; Professor Arthur H. Blanchard, professor of civil engineering, University of Michigan; Professor C. J. Tilden, professor of engineering mechanics, Yale University; Professor Lewis W. McIntyre, professor of civil engineering, University of Pittsburgh; H. G. Shirley, chairman of the Virginia State Highway Commission, Richmond, and Dr. Walton C. John, U. S. Bureau of Education, Washington, D. C., chairman.

Seven principal committees will function as the chief activities of the conference, but a program of unusual and exceptional merit, it is said, is being arranged. Tentatively the com-

mittees will be assigned to the study of the following problems: (1) Undergraduate and elective courses in highway engineering; (2) Undergraduate and elective courses in highway transport; (3) Graduate work in highway engineering and highway transport; (4) Short courses in highway engineering and highway transport; (5) Introductory general course in highway engineering and highway transport; (6) Vocational training for non-professional highway personnel, and, (7) Highway traffic regulation and safety.

Information with regard to the conference may be obtained from the Highway Education Board, Willard Building, Washington, D. C.

### SCIENTIFIC NOTES AND NEWS

At the meeting of the British Association, which begins at Hull on September 6, for the first time, special lectures are being arranged for children in the secondary schools. These will be given by Professor H. H. Turner, on "The telescope and what it tells us"; Professor J. Arthur Thomson, on "Creatures of the sea"; and Mr. F. Debenham, on "The Antarctic."

THE ninetieth annual meeting of the British Medical Association was held in Glasgow, Scotland, from July 25 to 28, under the presidency of Dr. David Drummond, of Newcastle-on-Tyne. Sir William Macewen, Glasgow, was elected president for the year 1922-1923. Mr. Charles P. Childe, Southsea, is president-elect for the annual meeting to be held in Portsmouth in 1923.

SIR WILLIAM POPE has been elected president of the International Union of Pure and Applied Chemistry for the ensuing three years. The next meeting of the union will be held at Cambridge in June, 1923.

THE physicists, Professor H. K. Onnes, of Leyden, Professor P. Zeeman, of Amsterdam, and Dr. N. Bohr, of Copenhagen, have been elected corresponding members of the Berlin Academy of Sciences.

H. LE CHATELIER, professor of chemistry at the Sorbonne, Paris, has been presented with a gold medal on the completion of his fifty years of teaching and of service to France.

COLONEL ARTHUR S. DWIGHT, president of the American Institute of Mining and Metallurgical Engineers, and Charles F. Rand, chairman of the Engineering Foundation, have been made Chevaliers of the Legion of Honor.

THE honorary degrees conferred by the University of Edinburgh on July 21 included the doctorate of laws on M. Roger, dean of the faculty of medicine in the University of Paris; Sir Charles Scott Sherrington, professor of physiology in the University of Oxford; Mr. John Bretland Farmer, professor of botany at the Imperial College of Science and Technology, London, and William Somerville, professor of rural economy at Oxford.

DR. VIRGIL SNYDER, professor of mathematics at Cornell University, received, at the seven hundredth anniversary celebration of the University of Padua, the honorary degree of doctor of the University of Padua.

THE Rio de Janeiro Academy of Medicine has conferred the Sampaio prize this year on the pharmacist, P. Seabra, for his work on an electric process for producing nitric acid.

DR. GERALD L. WENDT resigned on July 1 as associate professor of chemistry at the University of Chicago to join the staff of the Standard Oil Company of Indiana in the direction of research.

THE Cross of the Legion of Honor has been awarded to Dr. A. E. Kennelly, professor of electrical engineering at Harvard University and the Massachusetts Institute of Technology, for distinguished services as exchange professor in engineering to the French Republic. Dr. Kennelly will be succeeded as American exchange professor by Dean John Frazer of the University of Pennsylvania, now in France. The French representative to the American institutions, Professor J. Cavalier, director of the University of Toulouse, has returned to France and will be succeeded by Dr. M. E. de Margerie, director of the Geological Service of France.

DR. FREDERICK ROBERT ZEIT, for more than twenty years professor of pathology at Northwestern University Medical School, at his request has been relieved of active duty in the medical school. He plans to spend next year