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JOSEPH C. GILMAN,
Secretary-Treasurer

THE PENNSYLVANIA ACADEMY OF SCIENCE

THE fourteenth annual meeting of the Pennsylvania Academy of Science was held at Bucknell University, Lewisburg, Pennsylvania, on Friday and Saturday, April 15 and 16. Much of the success of the meeting may be accredited to the hospitality of the university and the untiring efforts of its scientific staff, particularly Professor N. H. Stewart. About one hundred members attended. The program opened on Friday morning, at which time twelve papers on diverse topics were read. On Friday afternoon, the meetings split into two simultaneous groups for biology and geology. At the former, sixteen papers and at the latter also sixteen papers were listed. The meetings continued on Saturday morning. A zoological session included eleven titles, and at the same time a symposium on the teaching of science was held at which ten papers were listed. While the academy was in session, the junior academy assembled under the direction of Professor K. F. Oerlein. About one hundred and twenty-five members attended these meetings.

The annual dinner took place on Friday evening in the university dining hall. Both senior and junior academy members participated. After dinner, the entire group adjourned to Vaughan Literature Auditorium for the presidential address by Dr. George H. Ashley. Dr. Ashley spoke on "How Old is Man?" After tracing man's early history as revealed by fossil remains, Dr. Ashley commented upon man's relation to the last glacial retreat from Europe and North America and propounded reasons to show that the retreat was not necessarily simultaneous on both sides of the Atlantic Ocean.

At the regular business meeting the following officers were elected for the current year:

President: Dr. L. K. Darbaker, University of Pittsburgh.

Vice-Presidents: Jaques Cattell, Science Press; Professor E. A. Vuilleumier, Dickinson College.

Secretary: Dr. V. Earl Light, Lebanon Valley College.

Assistant Secretary: Charles E. Mohr, Reading Public Museum.

Treasurer: Professor H. W. Thurston, Pennsylvania State College.

Editor: R. W. Stone, Pennsylvania Topographic and Geologic Survey.

Press Secretary: Dr. Bradford Willard, Pennsylvania Topographic and Geologic Survey.

Junior Academy: Professor K. F. Oerlein, Indiana State Teachers College.

It has been decided to hold the 1939 meeting at Pennsylvania State College, and the 1940 meeting at Washington and Jefferson College. The summer meeting for 1938, the date to be announced, is to take place at West Chester to visit the serpentine barrens, famous equally for their peculiar botany, zoology and geology.

BRADFORD WILLARD,
Press Secretary

SPECIAL ARTICLES

ELECTROPHORESIS OF IMMUNE SERUM

ELECTROPHORETIC analysis of serum has indicated the existence of four definite protein components of different mobilities (albumin and globulin α , β and γ).¹ In rabbit antisera to crystalline egg albumin the antibody was found in the slowest migrating (γ) component.¹ Since antibodies formed in the horse and in the rabbit differ greatly in molecular weight,² a correlation of ultracentrifugal and electrophoretic studies seemed advisable.

Potent horse and rabbit Type I antipneumococcus

¹ A. Tiselius, *Biochem. Jour.*, 31: 1464, 1937.

² M. Heidelberger and K. O. Pedersen, *Jour. Exp. Med.*, 65: 393, 1937; E. A. Kabat and K. O. Pedersen, *SCIENCE*, 87: 372, 1938.

sera, in which 20.7 and 18.6 per cent., respectively, of the total nitrogen was specifically precipitable, were dialyzed against buffer containing 0.02M phosphate and 0.15M NaCl and studied in the Tiselius electrophoresis apparatus.³ The scale and Toepler "schlieren" methods were used for optical observation. The experiments were repeated under identical conditions with samples of the same sera from which the antibody had been removed by addition of the homologous type specific polysaccharide or by a heavy suspension of Type I pneumococci.⁴

The results were strikingly different in the sera of

³ A. Tiselius, *Trans. Faraday Soc.*, 33: 524, 1937.

⁴ M. Heidelberger and E. A. Kabat, *Jour. Exp. Med.*, 63: 737, 1936.