

Bering Strait, and Dr. D. C. McPherson gave an account of the formation of air spaces in the root cortex of maize. Professor R. B. Thomson discussed the phylogeny of the cone structure of the yew, and Professor A. H. Hutchinson and Miss Helen Farley described ovule development in alfalfa hybrids. The malting quality of varieties of barley was considered by Dr. J. A. Anderson, of the National Research Laboratories, while Dr. R. Darnley Gibbs described seasonal changes in the composition of white birch trees. A group of papers from the Banting Institute was devoted to researches relating to silicosis. Dr. D. A. Scott reported the preparation of nickel-insulin crystals. The zinc, like protamine, prolongs the action of insulin. Drs. C. H. Best and D. Y. Solandt have been studying coronary thrombosis, while Dr. P. J. Moloney reported investigations of "The Detoxifying Action of Human Bile," showing that this material renders diphtheria toxin harmless. Drs. W. R. Campbell and M. I. Hanna submitted an account of the proportions of the various proteins in the blood plasma of human beings in health and disease. A benign tumor produced by accidental injection of a plant hormone into the human hand was described by Dr. J. H. W. Willard.

E. HORNE CRAIGIE

UNIVERSITY OF TORONTO

THE VIRGINIA ACADEMY OF SCIENCE

THE Virginia Academy of Science held its sixteenth annual meeting on May 5, 6 and 7 at the Virginia Polytechnic Institute with a registration of more than 400 and a reported membership of 809.

All the factors were present for an enjoyable and successful meeting: perfect weather, a beautiful campus, complete preparations, an interesting program.

About 70 members attended the Academy Conference Thursday night, which is an open forum for the presentation of reports and the discussion of any matters pertaining to the work of the academy. All day Friday and Saturday forenoon were given over to sectional meetings, during which 28 papers were presented in the Section of Astronomy, Mathematics and Physics; 34 in Biology; 45 in Chemistry; 14 in Education; 23 in Geology; 22 in Medical Sciences; and 10 in Psychology—a total of 176.

The guest speaker Friday night was Professor John F. Dashiell, of the University of North Carolina and president of the American Psychological Association, who spoke on "Revisions of Our Conception of Learning Demanded by Recent Experimental Findings."

At this meeting Dr. J. Shelton Horsley, Sr., chairman of the research committee presented the academy prize of \$50 to Dr. S. G. Bedell, of the University of Virginia, for a paper entitled "Observations on the

Lateral-Line Organs of Living Amphibian Larvae with Special Reference to Orange Colored Granules of the Sensory Cells," and the Jefferson Gold Medal to Mr. H. M. Phillips, of the University of Virginia, for a paper entitled "Karyology and the Phyletic Relationships in the Plumbaginaceae."

The following officers were elected for the year 1938-39: Dean Earle B. Norris, of the Virginia Polytechnic Institute, *President*; Professor Ruskin S. Freer, of Lynchburg College, *President-Elect*; and Major W. Catesby Jones, of the Virginia Department of Agriculture, *member of the council*.

The new officers of sections are as follows:

Astronomy, Mathematics and Physics:

Chairman, Charles H. Wheeler, III, of the University of Richmond.

Secretary, A. N. Vyssotsky, of the University of Virginia.

Biology:

Chairman, G. M. Shear, of the Virginia Polytechnic Institute.

Sub-Chairman, W. E. Bullington, of Randolph-Macon College.

Secretary, Lena Henderson, of Randolph-Macon Woman's College.

Chemistry:

Chairman, W. E. Trout, Jr., of Mary Baldwin College.

Secretary, W. J. Frierson, of Hampden-Sydney College.

Education:

Chairman, C. E. Myers, of the Virginia State Board of Education.

Secretary, J. A. Rorer, of the University of Virginia.

Geology:

Chairman, Ernest W. Sniffen, of Hampton, Va.

Secretary, William M. McGill, of the Virginia Geological Survey.

Medical Sciences:

Chairman, Walter B. Martin, of Norfolk, Va.

Secretary, I. D. Wilson, of the Virginia Polytechnic Institute.

Psychology:

Chairman, R. H. Henneman, of the College of William and Mary.

Secretary, W. M. Hinton, of Washington and Lee University.

At the business meeting the following resolution was unanimously passed by the academy:

Recognizing the very great importance of the proper use of animals in research, in the production and testing of therapeutic agents and in the development of surgical procedures indispensable for human welfare, be it

Resolved, that the Virginia Academy of Science gives its unqualified indorsement to the California Society for Medical Research in its efforts to prevent the passage in California of the so-called "State Humane Pound Law"—a measure whose enactment would cripple seriously scientific research into the causes and cures of disease, and be it

Further Resolved, that the Secretary of the Virginia Academy of Science transmit this action to the California Society for Medical Research.

Following the meeting there were two field trips, one for biology and one for geology. The academy will meet next year in Danville, Virginia, during the first week-end in May.

E. C. L. MILLER,
Secretary

THE TENNESSEE ACADEMY OF SCIENCE

FOR the convenience of members residing far from Nashville one of the meetings of the academy each year is held in East or West Tennessee and in the springtime in order to favor field trips. The spring meeting of 1938 was held on May 6 and 7 in Knoxville. Three fourths of the members attending the meeting were from East Tennessee. The program of papers was limited to Friday, the second day, Saturday. In addition to the general sessions on Friday papers were by representatives of thirteen schools of day, being reserved for field trips. Four fifths of the day, there was in the afternoon a symposium on the "Biology of the Great Smoky Mountains National Park" by A. J. Sharp, Stanley A. Cain, H. M. Jennison and A. C. Cole, of the faculty of the University of Tennessee, and Arthur Stupka, Willis King and Charles S. Grossman, of the National Park Service.

The Knoxville Science Club was host at a luncheon during the noon hour at the Andrew Jackson Hotel. Bowen S. Crandall, of the Division of Forest Pathology, United States Department of Agriculture, presided, and Dr. C. D. Sherbakoff, of the Department of Plant Pathology, University of Tennessee Agricultural Experiment Station, spoke on "Genetics." In the evening the academic dinner was held at the Andrew Jackson Hotel. Dr. H. H. Walker, of the Department of Public Health, University of Tennessee, introduced by President Shaver, delivered an illustrated address on "Natural Color Photography."

Three field trips were offered for Saturday: (1) All-day biological field trip to Ramsey Cascade, Greenbrier, Great Smoky Mountains. (2) Half-day field trip to Norris Dam and vicinity. (3) All-day geological field trip.

Trip No. 1 was taken by twenty-two persons under the guidance of Arthur Stupka, park naturalist. The last 2.5 miles was covered by walking through an undisturbed forest of great beauty, in which many trees of great size were observed, notably the tulip poplar and the black cherry. The waterfall is regarded by some as the most spectacular in the Great Smoky Mountain National Park area.

For Trip No. 2, the announcement was made that the activities of the Wild Life Division would be inspected under the leadership of Dr. A. R. Cahn, and the engineering features of the dam would be discussed by N. W. Dougherty. One may surmise that the announcement was intended to dodge questions socialistic, economic, chemical, physiological, political suggested to the curious by the Norris village, stored energy of the dam, the dead fish in the waters of the lake and the minerals underneath.

Trip No. 3 was taken by a group of ten under the leadership of Berlen C. Moneymaker, of the Tennessee Valley Authority. A drive of eighty miles brought them by way of Tellico Plains, noted in the history of the Cherokees, and over the Unaka Mountains to the dam under construction in the Hiwassee River twenty-two miles below Murphy, North Carolina. While the lake formed, having a short line of 150 miles, will not be so large as the Norris reservoir, the dam will have an approximate height from the lowest excavation to the roadway across it of about 300 feet, the highest of a dam anywhere, one of the geologists informed me. There remains yet to the Tennessee Valley Authority adjustment with the owners of the value of the original water power, of the many tracts of land that will be overflowed and the unseen but prospective minerals underneath. The Ducktown Basin through which the party next passed was formerly a flourishing forest. Now it is a desert of about twenty square miles, blasted, denuded, corroded by the gases formed in the manufacture of copper, for a number of years allowed to escape into the air. The metamorphic geology along the Ocoee River, the Parksville Dam and the Cartersville fault were objects of interest to the geologists on their way from Ducktown down the Ocoee to Benton and back to Knoxville by Etowah and Athens.

JOHN T. MCGILL,
Secretary

SPECIAL ARTICLES

ANAPHYLAXIS IN THE LIVERLESS DOG, AND OBSERVATIONS ON THE ANTI- COAGULANT OF ANAPHYLACTIC SHOCK

THE recognition of the important rôle of the liver in the phenomenon of anaphylaxis in the dog dates from

the observations of Manwaring.¹ The most characteristic feature of canine anaphylaxis is the tremendous engorgement of the liver. While some investigators consider the hepatic changes to represent the most

¹ W. H. Manwaring, *Zeits. Immunitätsforsch.*, 8: 1, 1911.