been signed by the chief of the Forest Service and the trustees of the camp for the use of certain areas as the headquarters experimental tract of the Federal research men. This will be one of a number of centers of field work which will be developed in time by the Allegheny Experiment Station in New Jersey, Pennsylvania, Delaware and Maryland. The Camp Ockanickon tract consists of about 500 acres, owned jointly by the county Y. M. C. A.'s of Burlington, Camden, Gloucester and Monmouth. On it are two artificial lakes, one of which already has been developed for recreational purposes. The agreement gives the experiment station the use for a period of years of the land lying back from the lakes.

UNIVERSITY AND EDUCATIONAL NOTES

DR. R. C. WALLACE, professor of geology and mineralogy in the University of Manitoba, will take up his work as president of the University of Alberta on September 1. Dr. Wallace succeeds Dr. H. M. Tory.

DR. R. S. MULLIKEN has been appointed an associate professor in the department of physics at the University of Chicago.

HENRY E. STARR, assistant professor of psychology at the University of Pennsylvania, has been appointed professor of psychology at Rutgers University.

RECENT promotions at Harvard University include that of Dr. H. H. Plaskett to be associate professor of astrophysics, Dr. E. D. Churchill to be associate professor of surgery, Dr. I. J. Walker to be clinical professor of surgery, and Dr. Channing Frothingham to be associate clinical professor of medicine.

DR. EDWIN P. LEHMAN, of the Washington University Medical School, St. Louis, has been appointed head of the department of surgery and gynecology in the University of Virginia.

EDWARD ANDERSON, instructor in steam and gas engineering at the University of Wisconsin, has been appointed assistant professor of mechanical engineering in charge of courses in metallography and heat treatment at the University of Nebraska.

DR. E. A. POHLE, of the University of Michigan, has been appointed head of the department of radiology at the University of Wisconsin.

DR. JOHN F. NORTON, associate professor in the department of hygiene and bacteriology of the University of Chicago, has resigned.

T. C. VANTERPOOL has been appointed assistant professor of biology at the University of Saskatchewan.

M. E. FAURÉ-FREMIET has been appointed professor of comparative embryology in the Collège de France to succeed the late M. Henneguy.

BARON DR. KITASATO, dean of the Keio Medical College and chief of the college hospital, has retired and is to be succeeded in the college by Dr. T. Kitashima.

DISCUSSION

AN X-RAY EXAMINATION OF THE ANHYDROUS Na_2SO_4–$Al_2(SO_4)_3$ SYSTEM

THERE has been some discussion recently as to nature of the anhydrous product, commonly called sodium aluminium sulfate, that is obtained by the high temperature evaporation of an aqueous solution containing equal molar proportions of sodium and aluminium sulfates. The product is said to differ considerably from a mechanical mixture of anhydrous sodium and aluminium sulfates, especially in that it is less hygroscopic. It became of interest to determine whether this difference was due to different physical conditions, such as particle size, to the solid solution of one salt in the other, or to actual compound formation.

A sample of the substance in question was prepared by evaporating to dryness a solution containing equal molar quantities of the two salts and heating the resultant solid to 400° C. During the evaporation the temperature was kept near the boiling point so that there was no possibility of alum formation. An X-ray diffraction pattern made of the powdered substance with molybdenum Kα radiation was entirely different from those of the anhydrous sodium or aluminium sulfates and showed no lines characteristic of either. A series of ten samples were prepared in the same manner, using various proportions of the two salts. Those considerably richer in aluminium sulfate than the first showed lines of aluminium sulfate superimposed on the pattern of sodium aluminium sulfate. The positions of the lines of the latter were unaltered. Those samples containing an excess of sodium sulfate gave the pattern of sodium aluminium sulfate together with some new lines not due to sodium sulfate. The position of the sodium aluminium sulfate lines was again unchanged. It was noted also that the position of the new lines was independent of the relative concentrations of the two components.

These observations seem to establish conclusively that sodium aluminium sulfate is a definite compound and not a mechanical mixture or a solid solution of one salt in another. A mechanical mixture of the two substances would have given the pattern of one superimposed upon the other. A solid