

THE NATIONAL ACADEMY OF SCIENCES

At the autumn meeting, held at Cornell University, Ithaca, N. Y., the scientific program was as follows:

MONDAY, NOVEMBER 12

Morning Session

Welcome by President Farrand.

Some unexpected results of the heteroplastic transplantation of limbs: ROSS G. HARRISON.

The structure of the eye as an index of developmental deficiencies: CHARLES R. STOCKARD.

Some seasonal variation of vitamins: GEORGE W. CAVANAUGH (introduced by L. H. Bailey).

The effect of X-rays on the linkage of Mendelian characters: JAMES W. MAYOR (introduced by W. E. Castle).

Electrical resistance and thermo-electric power of the alkali metals: C. C. BIDWELL (introduced by Ernest Merritt).

Evening Session

Public Lecture, under the joint auspices of the Academy and the Alpha Chapter of the Society of Sigma Xi. *The origin and distribution of Andean bird life:* FRANK M. CHAPMAN.

TUESDAY, NOVEMBER 13

Morning Session

Biographical notice of Henry Marion Howe (by title): GEORGE K. BURGESS.

Stereoisomeric styryl derivatives of some 4-quinazoline alkyl iodides and their bearing upon the problem of photosensitizing dyes: M. T. BOGERT and HELEN CLARK.

The expansion of a frequency function and some comments on curve fitting: EDWIN B. WILSON.

Note on an experimental problem of the late A. G. Webster: F. L. HITCHCOCK (communicated by Edwin B. Wilson).

On the wave-lengths of scattered X-rays: GEORGE L. CLARK and WILLIAM DUANE.

Unimolecular films of adsorbed gases: HUGH S. TAYLOR (introduced by G. A. Hulet).

Germanium: L. M. DENNIS (introduced by W. D. Bancroft).

Halogenoids: A. W. BROWNE (introduced by W. D. Bancroft).

Substantive dyes: T. R. BRIGGS (introduced by W. D. Bancroft).

Structural colors in beetles: C. W. MASON (introduced by W. D. Bancroft).

Afternoon Session

Retarded effectiveness of introduced parasites: L. O. HOWARD.

A theory as to long-time pandemic cycles of influenza: OTTO R. EICHEL (introduced by Raymond Pearl).

Metallic luster: W. D. BANCROFT.

WEDNESDAY, NOVEMBER 14

Morning Session

Presentation of Scientific Papers.

Biological studies of the Bremidae (by title): THEODORE H. FRISON (introduced by Stephen A. Forbes).

The paleobotany of the island of Trinidad. A preliminary announcement: EDWARD W. BERRY.

An aberrant F_2 ratio for the starchy-sugary endosperm factor pair in maize: R. A. EMERSON (introduced by L. H. Bailey).

The photo-luminescence of flames: EDWARD L. NICHOLS.

The effect of temperature on X-ray absorption coefficients: H. S. READ (introduced by Ernest Merritt).

Resistance temperature coefficients of thin platinum films obtained by cathodic sputtering: F. W. REYNOLDS (introduced by E. L. Nichols).

THE AMERICAN CHEMICAL SOCIETY

DIVISION OF CHEMISTRY OF MEDICINAL PRODUCTS

SYMPOSIUM: *The Chemistry of Glandular Products:* E. C. KENDALL, *Thyroxin*; T. B. ALDRICH, *Adrenalin*; H. A. SHONLE, *Insulin*; FRANK O. TAYLOR, *Pituitary extract*.

A study of the sodium salts of nucleic acid: ADRIAN THOMAS. The sodium nucleates were prepared from a nucleic acid obtained from wheatgerms. The acid was dissolved in solutions of sodium hydroxide and precipitated by pouring into alcohol, to which had been added some neutral sodium acetate to prevent emulsification. Sodium nucleates were prepared containing as a maximum eight atoms of sodium, assuming the molecule to contain four atoms of phosphorus. If potassium acetate is used in place of the sodium acetate some of the sodium is replaced by potassium. Upon using ammonium acetate instead of sodium or potassium acetate a decrease in the sodium content of the salt is found, but only a part of the sodium which is lost is replaced by ammonium. Apparently a hydrogen-sodium-ammonium salt is formed.

Butesin picrate, a new type of anesthetic-antiseptic: F. K. THAYER. Butesin picrate is the picric acid salt of butyl paraminobenzoate. There is combined in a definite chemical compound both antiseptic and anesthetic action. In an aqueous solution with a concentration of 1 part in 1,400 it produces immediate and complete anesthesia upon the eye, which lasts from ten to twenty minutes. It exerts antiseptic action and, in many cases, germicidal action against various common bacteria, in concentrations of 1:400 to 1:800. Butesin picrate is non-toxic and not irritating to the most sensitive surfaces. Incorporated into an ointment it is useful in the treatment of painful, denuded skin areas, particularly in cases of burns.

The synthesis of new cinchophen (atophan) types and incidental compounds (by title): MARSTON T. BOGERT and F. P. NABENHAUER. Cinchophens containing the quinazoline nucleus have been synthesized as follows: (1) o-aminoacetophenone to o-acetamino acetophenone, to acetyl isatinic acid, to 2-methylquinazoline-4-carboxylic acid; (2) isatine to benzyl isatinic acid, to 2-phenylquinazoline-4-carboxylic acid (A); (3) o-phthaloylamino acetophenone to phthaloyl isatinic acid, to 2-(o-carboxyphenyl) quinazoline-4-carboxylic acid (B). Of these, (A) is strictly analogous structurally to Cinchophen, except that it carries the Ph and COOH groups