

melted at 204°, the melting-point of the cinchonine salt of glucuronic acid as reported by Neuberg.¹⁰

We have hydrolyzed the alginic acid from *macro-cystis*, following exactly the method of Schmidt and Vocke, and have obtained a substance having the properties of a hexonic aldehyde acid. Its cinchonine salt melts at 152°. The acid is, therefore, not glucuronic. That this is the case is also indicated by the fact that on oxidation with bromine or nitric acid no saccharic acid was obtained.

The absence of mucic acid in the oxidation products also excludes galacturonic acid as the structural unit of the original material.

Glucuronic and galacturonic acids are the only aldehyde sugar acids hitherto found in nature.

We are continuing work on the chemistry of plant gums and the acidic portions of the algae, and will report more fully in a short time.

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SOCIETIES AND ACADEMIES

THE THIRTY-EIGHTH ANNUAL MEETING OF THE OHIO ACADEMY OF SCIENCE

THE thirty-eighth annual meeting of the Ohio Academy of Science was held at the University of Cincinnati, Cincinnati, O., on Friday and Saturday, April 6 and 7, 1928, under the presidency of Dr. Harris M. Benedict, of the University of Cincinnati. The attendance was good, the atmosphere notably congenial, the programs well balanced, the public lectures and sectional papers highly satisfying, and the hospitality of the City of Cincinnati generous and winning. The central theme of the meeting was the relation between physics and biology, as emphasized by the presence and notable lecture of Dr. William T. Bovie, of the Medical College, Northwestern University, on "The Relation of Physics to Biology," the lecture by President Schneider on results from the Basic Laboratory of the University of Cincinnati, the lecture by Dr. S. J. M. Allen on the use of the X-ray as a means of investigating the structure of protoplasm, the lecture by Dr. Albert P. Mathews on some aspects of the problem of coagulation of the blood, and the lecture by J. B. Kelly, of the Bell Telephone Laboratories of New York, on "Recent Researches in Audition." In addition, there were some 85 or 90 papers read before sectional meetings.

The officers elected for the coming year were: *President*, James S. Hine, Ohio State University; *vice-presidents*, zoology, Annette Braun; botany, E.

Lucy Braun; geology, Charles H. Behre, Jr.; medical sciences, Albert P. Mathews; psychology, Samuel Renshaw; physical sciences, E. H. Johnson; *secretary*, William H. Alexander; *treasurer*, A. E. Waller; *elective members of the executive committee*, R. C. Osburn and Stephen R. Williams; *trustee research fund*, George D. Hubbard.

Fellowship was bestowed upon the following members: Chas. H. Behre, Jr., Fred A. Hitchcock, Robt. A. Moore, Katharine Dooris Sharp, John P. Visscher and Frank J. Wright, and some 60 or more new members were elected.

The academy went on record as unanimously in favor of H. R. 6091, Seventieth Congress, first session, by Mr. John McSweeney, M. C.

WM. H. ALEXANDER,
Secretary.

SIGMA PI SIGMA CONVENTION

SIGMA PI SIGMA, national honorary physics fraternity, held its convention at Davidson College, Davidson, N. C., April 10 and 11. The reports of the national officers and the delegates from the various chapters showed growth in the strength of the fraternity and an increasing interest in its work. Chapter representatives were present from Davidson College, Duke University, the Pennsylvania State College, Furman University, Centenary College and the College of William and Mary. All the officers and members of the Executive Council were present, as follows: *President*, R. W. Graves; *vice-president*, Marsh W. White; *secretary-treasurer*, H. E. Fulcher; *councilors*, J. M. Douglas, W. N. Mebane and C. C. Hatley.

At the conclusion of the business session on the afternoon of April 10 Professor R. C. Young, of the College of William and Mary, presented a paper on "The Use of the Vacuum Tube Oscillator in Making Laboratory Measurements."

At an open meeting at 7:30 P. M. Professor J. M. Douglas gave a short talk on "The Aims and Ideals of Sigma Pi Sigma." Professor McConnel, of Davidson College, welcomed the fraternity upon behalf of the faculty and the administration of the college. The principal address of the evening was given by Dr. Marsh W. White, of the Pennsylvania State College, upon the subject: "The Energy Relations in X-ray Tubes."

Officers were elected at the business sessions on April 11 as follows: *President*, Professor C. C. Hatley, of Duke University; *vice-president*, Professor R. C. Young, of the College of William and Mary; *secretary-treasurer*, Professor Marsh W. White, of the Pennsylvania State College; *councilors*, Professors J. M. Douglas and W. N. Mebane, of Davidson College.

¹⁰ *Ber.*, 33, 3317, 1900.