# North Dakota Arademy of Science

## Thirty-second Annual Meeting State Agricultural College Fargo, North Dakota



Friday and Saturday, April 25-27, 1940 SESSIONS AT 9:00 A. M. AND 1:30 P. M. ROOM 22, ENGINEERING BUILDING

### PROGRAM

#### FRIDAY, APRIL 26, AT 9:00 A. M.

#### Room 22, Engineering Building

Following custom, all papers are limited to 15 minutes, and all speakers are expected to strictly conform to this limitation.

Assembly Call by President J. R. Dice.

- Warren Whitman, Herbert Hanson and Roald Peterson—Changes in Grassland Vegetation in Western North Dakota, 1932 through 1939.
- Harold Mattson—Recent Advances in Potato Breeding in North Dakota.
- 4. W. G. Westmoreland—A New Diptheroid Organism Isolated from the Blood Stream.
- 5. Mrs. Elizabeth Smith Karady—The Influence of the Alarm Reaction on Facial Edema in Rats.
- 6. Arthur D. Whedon—A Preliminary Report on a New Presomite Human Embryo.
- 7. Joe Davis-A report on Shelter Belt Plantings.
- 8. A. R. Oliver—Irrigation in the Columbia Lava Plateau. Illustrated with Kodachrome Views.

Luncheon at Ceres Hall

(Complimentary to Visitors.)

#### FRIDAY, APRIL 26, AT 1:30 P. M.

Room 22, Engineering Building

#### ANNOUNCEMENTS

- 9. Melvin E. Griffith—A Rare Springtail Insect from Sphagnum Moss.
- 10. J. A. Munro—Summerfallow as Affecting Wireworm Development.
- 11. Neal A. Weber—Comparison of the Habits of South American and Central African Ants. (Lantern.)
- Stanley Saugstad—Some Turbidity, Temperature, and pH Readings of Impounded Waters in North Dakota.
- 13. G. A. Abbott—The Determination of Fluoride in Ground Waters.
- R. A. Goodwin—Quantitative Spectroscopy: The Analysis of Soils.

- William C. Rasmussen—(Introduced by Frank C. Foley) The Probable Error of Sampling Sediments for Heavy Mineral Study.
- Melvin R. Arnold and Ralph E. Dunbar—Catalytic Dehydrogenation of Primary and Secondary Alcohols with Copper-Chromium Oxide.
- 17. Mrs. Darline Knowles—Sharp Freezing of Fruits and Vegetables.
- 18. L. R. Waldron-Some of the New Wheats.

#### FRIDAY, APRIL 26, AT 6:30 P. M.

Informal Dinner of the Academy, at Ceres Hall, featuring the address of the Guest Speaker, Dr. John S. Lundy, of the Mayo Clinic, on "The Indispensable Value of the Fundamental Sciences in the Establishment of Anesthesiology, a New Specialty in Medicine."

#### SATURDAY, APRIL 27, AT 9:00 A. M.

#### Room 22, Engineering Building

- Rae H. Harris—How New Rust Resistant Varieties of Hard Red Spring Wheat are Tested for Milling and Baking Quality.
- 20. John Johnson, Jr.—The Application of Viscosity Determinations to the Quality Testing of Wheat.
- 21. Lyle Pollock—(Introduced by A. M. Cooley)—Heat Transfer from Coils in Open Tanks.
- 22. Sterling Mitchell (Introduced by A. M. Cooley)—Submerged Combustion Evaporation of Sodium Sulphate.
- 23. John L. Hundley—The Stratosphere.
- 24. E. J. O'Brien—The Effect of Ionized Layers Above the Earth on Radio Waves.

#### BUSINESS SESSION

Reading of Minutes.

Report of Secretary-Treasurer.

Reports of Committees.

Report of A. A. A. S. Meeting.

Election of Officers.

Adjournment.

# NORTH DAKOTA ACADEMY OF SCIENCE OFFICERS

President - - - - J. R. Dice, Agricultural College

Vice President - - - - Frank C. Foley, University

Secretary-Treasurer - - - G. A. Abbott, University

Additional Members of the Executive Committee—G. N. Knight, Jamestown College; Harold C. Burdick, State Teachers College, Mayville.



### **ANNOUNCEMENTS**

The North Dakota Academy of Science is an organization of persons actively engaged in the advancement of science in the State. The Annual Meetings are held alternately at the Agricultural College and the University. All persons interested in science are cordially invited to attend these meetings.

Visiting members will be guests of the College at luncheons on Friday and Saturday, at Ceres Hall. Local members are expected to lunch with their guests.

The informal dinner of the Academy will be served at 6:30 P. M., Friday, April 26, at Ceres Hall. The previous custom of issuing complimentary tickets to visiting members has been discontinued by action of the Executive Committee, and all members and guests are expected to purchase their dinner tickets. The dinner is given in compliment to the Guest Speaker, Dr. John S. Lundy, of the Mayo Clinic, who will address the Academy on "The Indispensable Value of the Fundamental Sciences in the Establishment of Anesthesiology, A New Specialty in Medicine."

Visiting members are invited to bring their ladies who will be entertained by the ladies of the College with headquarters at Ceres Hall.

All visitors are cordially invited to inspect the various departments and activities of the Agricultural College.