

This new section for experimental cytology is composed of investigators who already belong to other scientific societies, but who are particularly engaged in experimental cytology. They are founding no new society, but have instead chosen this way of becoming associated with the International Congress of Zoologists as a section, in order to make possible an understanding of the aims, discoveries and methods of experimental cytology. This was made possible by the cooperation of the president of the tenth congress, Professor von Horváth, and the chairman of the Budapest local committee, Professor von Lenhossék.

Invitations to join the sessions of the section for experimental cytology follow, together with that to the Tenth International Congress of Zoologists. They are directed not only to those investigators who are engaged in tissue culture, but to all cytologists who have busied themselves over metazoan, metaphytic and protozoan cells and have studied these either by methods of vital staining, microdissection and tissue culture and have by these means come to any conclusions concerning living cells.

The tentative program for the session of the Tenth International Congress of Zoologists, at Budapest, in 1927, is as follows—the subjects of the lectures are merely outlined:

September 3, Saturday: Social evening of welcome.

September 4, Sunday: Opening session.

September 5, Monday. (Morning.) Joint session of section on experimental cytology with all the sections. Lecture by Professor R. G. Harrison, New Haven, "On the Status and Significance of Tissue Culture."

Afternoon. Special session of section on experimental cytology. Lecture on "The Behavior of Plant Cells in Vitro and in Vivo," by Professor E. Küster, Giessen. Other lectures on similar topics; discussion. Demonstrations particularly desirable.

Sessions of the Section on Experimental Cytology:

September 6, Tuesday. (Morning.) Session opened by Professor G. Levi, Turin: "The Structural Behavior of Living Tissues under Culture." Other lectures on similar topics.

Afternoon. Session opened by Dr. Alexis Carrel, New York: "Modern Techniques of Tissue Culture and Results." Other lectures on similar, or associated topics. Discussion and demonstrations.

September 7, Wednesday. (Morning.) Session opened by Professor Rhoda Erdmann, Berlin-Wilmersdorf; and Professor A. A. Krontowski, Kiev: "What has Tissue Culture accomplished toward the Solution of Problems in Pathology, particularly those of Cancer and Immunization?" Other lectures on similar topics.

Afternoon. Session opened by Professor N. Chlopin, Leningrad, and Professor A. Timofejewsky, Tomsk: "The Origin of Blood, Connective Tissue and Related Cell Types." Other lectures on similar subjects, with discussions. Demonstrations desirable.

September 8, Thursday. (Morning.) Session opened by Professor von Möllendorf, Kiel: "Vital Staining and Experimental Cytology." Other lectures along similar lines.

Afternoon. Subject: "Microdissection," lecturer not yet chosen. Lectures along similar or related lines; discussion. Demonstrations.

September 9, Friday. Closing session.

September 10, Saturday. Excursion to Plattensee and inauguration of the new biological station in Tihany, on the Plattensee.

September 11, Sunday. Optional joint excursion to Debrecen and the Hortobágyer Steppe.

The lectures will be given in all four official languages of the congress.

Professor Rhoda Erdmann, Berlin-Wilmersdorf, Nassauischestr. 17, II, editor of the *Archiv für experimentelle Zellforschung*, is now receiving announcements of lectures, demonstrations and any suggestions. Other questions, such as the provision of microscopes, the possibility for projection, etc., should be directed to the secretary of the local committees, Privatdozent Dr. L. Karczag, Budapest III, Klinik für innere Medizin, VIII. Ludövinumgasse 2. Hotel reservations, transportation and passports will be attended to by the local committee, to which direct applications should be made.

#### MURAL PAINTINGS OF PREHISTORIC ANIMALS AT THE FIELD MUSEUM

A SIX-YEAR program of work on a series of great mural paintings, and modeled groups of prehistoric animal and plant life, to be carried out on a larger scale and in a more complete and systematic manner than has before been attempted, has been inaugurated by the Field Museum, according to an announcement made by D. C. Davies, director of the museum.

Through the generosity of Ernest R. Graham, of Chicago, the hall of historical geology in the museum, which contains fossils showing the life of past ages, is to be enriched by a series of twenty-eight mural paintings in which the animals of the past are to be represented as they appeared in the flesh and among the strange foliage which surrounded them. In recognition of his gift, the trustees of the museum have named the hall the Ernest R. Graham Hall.

Charles R. Knight, of New York, leading artist in the delineation of prehistoric scenes, is in charge of the mural decorations. Fourteen of the twenty-eight paintings will be twenty-five by nine feet and the balance eleven by nine feet, and there will be a number of groups, which will round out the present exhibits of life of past ages.

Mr. Knight will be aided in his work by several assistants. He is now preparing designs and making

other preliminary arrangements preparatory to actual inauguration of the work.

The twenty-eight mural paintings will show the world as it appeared during past geological ages. Each picture will represent typical life and scenery of a geological period. Dinosaurs, three-toed horses, American camels, flying lizards, coral reefs and mammoths and mastodons, all are to be represented, and with them the surroundings amid which they lived.

Supplementing these paintings will be great modeled groups of animals and plants of the past in life size. While these groups will relate chiefly to the earlier geological periods, some later representations will be included.

Dr. B. E. Dahlgren, acting curator of botany of the museum, who has made notable reproductions of plant life in the Stanley Field plant reproduction laboratories, will have charge of this phase of the work. Work has already started on one geological group, which will show part of a forest of the coal period. The strange cryptogamic plants of that day, which formed forests that later became coal, will be shown in life size, and inhabited by life-sized restorations of insects and reptiles of that time.

The entire program is under the supervision of Dr. O. C. Farrington, curator of the department of geology of the museum.

#### PROPOSED NATIONAL RESEARCH INSTITUTE FOR CHEMICAL EDUCATION

ESTABLISHMENT of a National Research Institute for Chemical Education with an initial endowment of \$2,000,000 is planned by the Senate of Chemical Education of the American Chemical Society, according to an announcement by the chairman of the senate, Professor Neil E. Gordon, of the University of Maryland, at the society's national headquarters, Washington, D. C.

The institute would be located at some university which is doing work of a high order in both chemistry and education, but would be organized separately from either of these divisions.

Its sponsors contemplate that it shall be the great meeting place for the chemistry teachers of the world and that it shall enable chemical education to be of greater service to industry. The idea of the institute arose from the needs of this ever-changing science.

Details of the plan have been definitely worked out and will be publicly discussed by the senate at sessions to be held in connection with the society's spring meeting at Richmond, Va., to be held from April 11 to 16. The senate is composed of representatives of education and industry from every state.

The charter, it is planned, will provide for a board of seven trustees, a board of seven scientific advisers,

a general director, associate directors to head the departments and research assistants. Five departments, including graduate, undergraduate, industrial, high school and historical, are proposed.

The tentative budget to be presented to the senate calls for the employment of a general director and of five departmental directors at salaries of \$10,000 each. Five fellowships of \$1,000 each are proposed, and provision is made for extra summer faculty lecturers at an expenditure of \$5,000. The estimated cost of the building to be occupied by the institute is \$500,000.

#### PUBLIC LECTURES ON SCIENTIFIC TOPICS

A SERIES of illustrated lectures on important developments and discoveries in various fields of engineering will be given by members of the staff of the Harvard Engineering School during the second half-year. These lectures will be open to the public, and will be given in 110 Pierce Hall on Thursday afternoons, at 4:30 o'clock, as follows:

February 17, *The story of the incandescent lamp*, PROFESSOR H. E. CLIFFORD.

February 24, *Engines for airplanes*, PROFESSOR L. S. MARKS.

March 3, *Explosives and fertilizers from the air*, PROFESSOR GRINNELL JONES.

March 10, *Electric oscillations and radio communication* (with demonstrations), PROFESSOR G. W. PIERCE.

March 17, *The development of steel structures*, PROFESSOR G. F. SWAIN.

March 24, *The world search for metallic ores*, PROFESSOR D. H. McLAUGHLIN.

March 31, *Supplying half a billion gallons a day of drinking water*, PROFESSOR G. M. FAIR.

April 7, *Floating metals from their ores*, PROFESSOR A. E. WELLS.

April 14, *Utilization of water power*, H. M. TURNER, consulting engineer.

The Chicago Academy of Sciences announces a course of free public lectures during the winter of 1927, at the Assembly Hall on Sundays at 3:30 P. M., in accordance with the following program:

February 6, *Exploration in the Peruvian Andes*, DR. ISAIAH BOWMAN, director of the American Geographical Society.

February 13, *New explorations in Kentucky caves*, RUSSELL T. NEVILLE, Kewanee, Illinois.

February 20, *What mushroom is that?* VERNE O. GRAHAM, principal of Burroughs School.

February 27, *Vegetation and native races of E. Africa*, DR. HOMER L. SHANTZ, head of the department of botany at the University of Illinois.

March 6, *From the Mackenzie to the Yukon*, MRS. LAURIE FRAZEE, Senn High School.

April 3, *Life secrets of wild flowers*, A. C. PILLSBURY, University of California.