tions are still further complicated by the fact that they appear to show differences in chemical structure with variation of species.

To future generations of inquirers into the complexities of living matter, Dr. Levene extended this message of hope and confidence, which is quoted from the concluding lines of his acceptance address at the Willard Gibbs Medal presentation in 1931: "Step by step, one mystery of life after another is being revealed. Whether the human mind will ever attain complete and absolute knowledge of and complete mastery of life is not essential. It is certain, however, that the revolt of the biochemist against the idea of a restriction to human curiosity will continue. New discoveries in physics, in mathematics, in theoretical chemistry furnish new tools to biochemistry, new tools for the solution of old problems and for the creation of new ones. So long as life continues, the human mind will create mysteries and biochemistry will play a part in their solution."

LAWRENCE W. BASS

MELLON INSTITUTE

SCIENTIFIC EVENTS

ENGINEERING EDUCATION AT THE RENSSELAER POLYTECHNIC INSTITUTE

A NEW plan in engineering education will be put into practice at Rensselaer Polytechnic Institute this year. Through the cooperation of the General Electric Company, a large group of carefully selected students will attend for three consecutive months on the plants of the company.

This plan differs from other cooperative arrangements with industries for the education and employment training of engineering students in the fact that it permits graduation of the students within the regular four-year period, instead of making necessary an extra year in college.

The chief objection of the general cooperative plan —the extra year with its cost to the student in time and money—has been finally overcome. This will be accomplished mainly by including a classroom program to run currently in the plants with the practical experience program, and by arranging summer courses at the institute during which the students will make up what they missed in their absence. Another important feature contributing to the feasibility of this four-year plan is the fact that the outside courses will be concentrated in three consecutive months in the junior year alone rather than being split into alternating periods of several weeks each over several years.

The students selected will be juniors in the departments of mechanical engineering and electrical engineering. The courses will begin on April 1 and continue to July 1, when the students will return to the institute for the summer courses specially designed for them. Thus they will begin their senior year with three months of practical training behind them and at a time when they will be beginning to think most seriously of obtaining jobs after graduation. Much of the work of their last year can thus be interpreted in terms of what they observed in practical experience. Also they will have had three months to demonstrate and measure their abilities under the observation and counsel of prospective employers; the work of their senior year also can be interpreted and developed in terms of their discoveries in these respects. Naturally, the General Electric Company entered the plan with the hope that it would help make available men for permanent employment, but there is no employment obligation on the part of either the company or of the students. However, it is pointed out that the experience obviously would be valued by any employer.

In common with other cooperative "earn as you learn" plans, the student will receive wages while in training, thus enabling him to help pay his way through his last year. It is estimated he should save from $75 to $125 over living expenses.

EXTENSION COURSES IN AERONAUTICAL ENGINEERING OF CORNELL UNIVERSITY

IN cooperation with the Federal Government's program for national defense, Cornell University opened in Buffalo on October 7 an extension center giving advanced training in aeronautical engineering to employees of the aircraft industry. Unlike some programs set up by other institutions, under which employees must leave their jobs for a time to attend school, the Cornell plan will bring the faculty to the industries and give courses after working hours, so that production will not be curtailed at this critical time. These courses are the first ever given away from the university by the College of Engineering.

A staff from the college, under the direct supervision of Dean S. C. Hollister, will hold classes in Burgard Vocational High School, where facilities have been made available by the Buffalo Board of Education. The entire program will be financed without Federal or state funds.

Instruction will be offered especially for qualified employees of the Curtiss-Wright Corporation and the Bell Aircraft Corporation, where there has been for some time an acute shortage of aeronautical engineers. The immediate plan is to convert mechan-

ical, electrical, civil and chemical engineers into specialists in aircraft design. Initial enrolment will be approximately 160 students, with the prospect of increases in the future as the companies expand their organizations to handle defense orders from the government. An additional order for Curtiss-Wright planes to be built in Buffalo and St. Louis plants at the cost of $94,000,000 was announced recently while Dean Hollister was in Buffalo making final arrangements to start the training course.

Facing the prospect of a considerable expansion in their organizations, officials of the aircraft companies decided several months ago that it would be desirable to promote members of the present staffs if a way could be found to qualify them for more responsible positions. Most of the expansion in personnel could then take place in the lower grades. "A spontaneous solution to the problem appeared," according to the personnel director of one of the companies, "when Dean Hollister came to Buffalo to learn what Cornell University could do to help the aviation industry in national defense." The companies are supporting the program by offering inducements to qualified employees to take the work and by cooperating with the Cornell faculty in preparing courses of maximum practical benefit to those enrolled.

Among the first contingent of professors to leave Ithaca for Buffalo are Dr. Millard V. Barton, of the Sibley School of Mechanical Engineering, and Dr. Harold V. Hawkins, of the School of Civil Engineering. Their courses will cover the action of external forces on an airplane in flight, stresses in monocoque structures, properties of airplane materials and related technical subjects. Classes will run throughout the year, meeting four nights a week.

The Cornell plan, designed to fill a specific need in the nation's educational program as related to defense, was prepared in cooperation with Dr. Studebaker, U. S. Commissioner of Education, and Dr. Lewis Wilson, of the Office of Education in Albany, both of whom have given it their enthusiastic support.

FELLOWSHIPS IN THE MEDICAL SCIENCES OF THE NATIONAL RESEARCH COUNCIL

FELLOWSHIPS in the medical sciences, similar to those which have been administered by the Medical Fellowship Board of the National Research Council since 1922, will again be available for the year beginning on July 1. These fellowships, supported by grants from the Rockefeller Foundation to the National Research Council, are designed to provide opportunities for training and experience in research in all branches of medical science. They are open to citizens of the United States or Canada who possess an M.D. or a Ph.D. degree, and are intended for recent graduates who are not yet professionally established.

In addition to these fellowships the Medical Fellowship Board announces two new groups of research fellowships, made available through a grant from the National Foundation for Infantile Paralysis, Inc. The first group, open to applicants who hold either the Ph.D. or M.D. degree, is for the purpose of providing opportunities for special training and experience in the study of filtrable viruses. The second group, open only to graduates in medicine who have completed one or more years of hospital experience in clinical surgery and are planning a career in orthopedic surgery, is designed to provide opportunities for training and research in those basic medical sciences which will be of particular value in furthering progress in the field of orthopedic surgery.

Fellows will be appointed at a meeting of the Medical Fellowship Board about March 1. Applications to receive consideration at this meeting must be filed on or before January 1. Appointments may begin on any date determined by the board.

For further particulars, address the Secretary of the Medical Fellowship Board, National Research Council, 2101 Constitution Avenue, Washington, D. C.

THE MIDWEST WILDLIFE CONFERENCE

THE sixth annual Midwest Wildlife Conference will be held at Urbana on November 14, 15 and 16. Under the direction of T. H. Frison, chief of the Illinois Natural History Survey, which this year sponsors the conference, a program is being formulated that includes as speakers well-known wildlife technicians and zoologists from the East as well as from the Midwest.

The meeting will open with a general session in which Rudolf Bennitt, of the University of Missouri, will lead a panel discussion on the unification of conservation practices. Participating in the panel will be Aldo Leopold, of the University of Wisconsin; Charles G. Sauers, of the Forest Preserve District of Cook County, and other conservationists. The panel will be followed by two sessions running concurrently, one on fish and the other on waterfowl, upland game and furbearers. Special clinics on deer and prairie chicken are planned.

On the program for the second day are three concurrent sessions, one on fish, one on waterfowl and a third on upland game and furbearers. New features of the conference are two sessions of a non-technical nature, one for waterfowl hunters and the other for fishermen and upland game hunters, at which wildlife technicians will speak informally and answer questions put to them by the attending sportsmen.